NOTICE

All drawings located at the end of the document.

1995 ANNUAL WILDLIFE SURVEY REPORT

NATURAL RESOURCE PROTECTION AND COMPLIANCE PROGRAM

Rocky Mountain Remediation Services, L.L.C.

April 25, 1996

ADMIN RECORD

Best Available Copy

1/332

SW-A-004215

TABLE OF CONTENTS

EXECUTIVE SUMMARY iv

1.0 INTRODUCTION 1-1
1.1 BACKGROUND 1-1
1.2 NATURAL RESOURCE PROTECTION AND COMPLIANCE PROGRAM (NRPCP) 1-1

2.0 METHODS 2-1
2.1 RELATIVE ABUNDANCE 2-1
2.2 SITEWIDE SIGNIFICANT SPECIES SURVEYS 2-1
2.2.1 Diurnal (Daytime) Surveys 2-1
2.2.2 Nocturnal (Nighttime) Surveys 2-4
2.3 SITE-SPECIFIC SPECIAL-CONCERN SPECIES SURVEYS 2-4
2.4 MIGRATORY BIRD SURVEYS 2-4
2.5 DATA ANALYSES 2-8
2.5.1 Area Use Mapping 2-8
2.5.2 Bird Species Richness Analyses 2-8
2.5.2 Bird Density Analyses 2-8

3.0 RESULTS AND DISCUSSION 3-1
3.1 SIGNIFICANT SPECIES 3-1
3.1.1 Special-Concern Species 3-1
3.1.2 Big Game Mammals 3-4
3.1.3 Mid-Sized Mammals 3-22
3.1.4 Carnivores 3-25
3.1.5 Waterfowl (Ducks, Geese, Shorebirds) 3-25
3.1.6 Raptors 3-35
3.1.7 Upland Gamebirds 3-36
3.1.8 Herptiles (Reptiles and Amphibians) 3-36
3.2 MIGRATORY BIRDS 3-44
3.2.1 Relative Abundance 3-44
3.2.2 General Observations 3-44
3.2.3 Migratory Bird Survey Summaries 3-45

4.0 CONCLUSIONS 4-1

5.0 REFERENCES 5-1

APPENDIX A
APPENDIX B
APPENDIX C
APPENDIX D

2

FIGURES

Figure 1-1 Location of the Rocky Flats Environmental Technology Site 1-2
Figure 2-1 Locations of Relative Abundance and Bird Survey Transect Route Start Points 2-2
Figure 2-2 Grid Map of Rocky Flats Environmental Technology Site Used for Location Data Entry into the Significant Species Database 2-3
Figure 3-1 Loggerhead Shrike Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-5
Figure 3-2 Mule Deer Spring Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-15
Figure 3-3 Mule Deer Summer Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-17
Figure 3-4 Mule Deer Fall Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-18
Figure 3-5 Mule Deer Winter Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-19
Figure 3-6 Elk and White-Tailed Deer Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-21
Figure 3-7 Desert Cottontail Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-23
Figure 3-8 Other Mid-Sized Mammal Species Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-24
Figure 3-9 Coyote Use Areas Based on Combined Monitoring Data from 1993, 1994 and 1995 3-26
Figure 3-10 Carnivore Species (Excluding Coyotes) Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-27
Figure 3-11 Waterfowl Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 3-28
Figure 3-12 Raptor Spring-Summer Use Areas (March through August) Based on Combined Monitoring Data from 1993, 1994, and 1995 3-38
Figure 3-13 Raptor Fall Winter Use Areas (September through February) Based on Combined Monitoring Data from 1993, 1994, and 1995 3-39
Figure 3-14 Ring-necked Pheasant Use Areas (Upland Gamebirds) Based on Combined Monitoring Data from 1993, 1994, and 1995 3-40
Figure 3-15 Seasonal and Annual Variation of Bird Species Richness in All Habitats (1991, 1993, 1994, and 1995) 3-46
Figure 3-16 Seasonal and Annual Variation of Bird Species Richness in Riparian Shrubland Habitat (1991, 1993, 1994, and 1995) 3-48
Figure 3-17 Seasonal and Annual Variation of Bird Species Richness in Tall Upland Shrubland Habitat (1991, 1993, 1994, and 1995) 3-49
Figure 3-18 Seasonal and Annual Variation of Bird Species Richness in Xeric Mixed Grassland Habitat (1991, 1993, 1994, and 1995) 3-50

3

Figure 3-19 Seasonal and Annual Variation of Bird Species Richness in Mesic Mixed Grassland Habitat (1991, 1993, 1994, and 1995) 3-51
Figure 3-20 Seasonal and Annual Variation of Bird Species Richness in Reclaimed Grassland Habitat (1991, 1993, 1994, and 1995) 3-52
Figure 3-21 Seasonal and Annual Variation of Bird Species Richness in Riparian Woodland Habitat (1991, 1993, 1994, and 1995) 3-53
Figure 3-22 Seasonal and Annual Variation of Bird Species Richness in Wetland Habitat (1991, 1993, 1994, and 1995) 3-54
Figure 3-23 Trends in Species Richness of Neotropical Migrants 3-55
Figure 4-1. RFETS Most Frequently Used Wildlife Habitat Areas Based on Combined Monitoring Data from 1993, 1994, and 1995 4-2

TABLES

Table 2-1 Special-Concern Species Search-List for Rocky Flats Environmental Technology Site 2-5
Table 3-1 Summary of Total Observations of Significant Species During 1995 3-2
Table 3-2 Special-Concern Species Use Summary, Based on Combined Data from 1993, 1994, and 1995 3-6
Table 3-3 Bird Distribution by Habitat at Rocky Flats Environmental Technology Site . . 3-29
Table 3-4 Summary of 1995 Seasonal Waterfowl Use 3-34
Table 3-5 Summary of 1995 Seasonal Raptor Use 3-37
Table 3-6 1995 Reptile and Amphibian Observations 3-41
Table 3-7 Species Richness of Bird Communities by Habitat 3-47
Table 3-8 Densities of Selected Bird Species by Habitat 3-57

4

LIST OF ACRONYMS

EA	Extended Observation Area
BZ	Buffer Zone
DOE	Department of Energy
MBD	Migratory Bird Database
NRDA	Natural Resource Damage Assessment
NRPCP	Natural Resource Protection and Compliance Program
RFEDS	Rocky Flats Environmental Database System
RFETS	Rocky Flats Environmental Technology Site
SED	Sitewide Ecological Database
SSD	Significant Species Database
USFWS	U. S. Fish and Wildlife Service

5

EXECUTIVE SUMMARY

This report summarizes the results of wildlife surveys performed at Rocky Flats Environmental Technology Site (RFETS) from January through December of 1995 as compared with results from previous years. These surveys were performed as part of a long-term ecological monitoring program conducted under the Natural Resource Protection and Compliance Program (NRPCP). This program is essential in identifying and describing fluctuations of wildlife populations, wildlife habitat use, and changes in species using RFETS. The NRPCP provides support to the Department of Energy (DOE) in its role as Natural Resource Trustee, and provides data essential to accomplishing the goal of preserving the unique ecological values of RFETS in keeping with the Rocky Flats Vision presented in the Rocky Flats Cleanup Agreement Public Comment Draft.

Wildlife population densities vary due to natural pressures and human influences, and only long-term monitoring can verify which factors influencing wildlife populations are the consequence of natural fluctuations, and which are due to human influences. Monitoring will become increasingly important as remediation activities at RFETS increase. Wildlife monitoring should also help DOE, RFFO respond to any future Natural Resource Damage Assessment (NRDA) suits.

The wildlife monitoring described in this report provides qualitative data that give an indication of the ecological health of RFETS. Monitoring numbers, habitat affinities, and apparent health of the wildlife populations makes it possible to evaluate the overall ecological health of the site. Such data are an invaluable tool in predicting and avoiding impacts on the ecology of an area due to projected human activities. If species should dwindle in numbers or disappear, it would be an indication of a serious environmental health problem. Monitoring and surveys such as those carried out by the NRPCP can indicate trends of this sort, and act as an "early warning system" for impending ecological problems.

RFETS provides a unique refuge along the central Front Range area for a large number of bird and mammal species. The presence of this refuge is due in large part to more than two decades of protection from grazing, development, and other disturbances that the major portion of RFETS has enjoyed. The area enclosed by the 1950's Buffer Zone has experienced this singular habitat protection for over 40 years. The exclusion of grazing and development has allowed the native prairie/montane ecotonal system to rebound to a condition resembling the ungrazed, unfarmed natural conditions. Large-scale real estate development, mining, and water diversion on other large tracts of land have destroyed or degraded much of the native habitat once available along the Front Range.

Data from the past several years show an abundance and diversity of species that demonstrate the excellent ecological health of site. Even in areas designated as contaminated, wildlife species do not evidence ecological stress. The wildlife population at RFETS is vital, viable, and includes rare, unusual, and protected species. The protection and isolation of the Buffer Zone has provided essential habitat for rare species such as the American peregrine falcons, bald eagles, eastern short horned lizards, burrowing owls, loggerhead shrikes, black swifts, Baird's

sparrows, American white pelicans, grasshopper sparrows, water shrews, and Preble's meadow jumping mice found at RFETS. Many of these species are sensitive species or indicator organisms that by their presence or, more significantly, by their absence indicate the ecological health of an area.

RFETS supports a great diversity of bird species (176 species), including 19 avian predators. There are 37 mammal species (including 10 carnivores), eight reptiles, and seven amphibians at RFETS, as well as numerous arthropods and other invertebrates. This species diversity is another indicator the high quality of the habitats provided by RFETS.

The area use mapping undertaken in this report provides valuable insight into the physical locations preferred by all wildlife groups using RFETS. Area use reflects habitat preferences of wildlife, but also reflects the requirement for refuge (isolation) areas. Area use summaries confirm that the areas with the main water-courses and impoundments are the most important areas to wildlife. Areas occupied by xeric mixed grasslands are also uniformly very important. In keeping with the Rocky Flats Vision, these essential habitat areas should be taken into account by DOE, RFFO in future planning for use of the lands within the RFETS boundaries.

While wildlife species diversity has not manifested significant changes since the baseline characterization in 1991-92, some changes have been observed in habitat use, movement patterns, and numbers of individuals of some species. These changes have been due to both human activities and natural causes.

Large-scale disturbances including completion of the New Landfill and expansion of gravel mining operations by Western Aggregates, Inc. and Jefferson County in the western part of RFETS during 1995 have withdrawn more xeric mixed grassland habitat from wildlife. A secondary effect of these disturbances has been further habitat fragmentation in areas already fragmented by installation of industrial facilities and road building. The recent large-scale disturbances have destroyed about 42 acres of grassland classified by the Colorado Natural Heritage Program as xeric tallgrass prairie (a rare and imperiled plant community).

Xeric mixed grasslands are important fall breeding and winter foraging habitat for the resident mule deer herd. Additionally, xeric and mesic mixed grasslands are important breeding habitats for grasshopper sparrows (a declining prairie species) and other grassland bird species. Destruction of the habitats in this portion of the BZ has withdrawn them from availability as foraging range for deer, breeding territory for grassland bird species, and home range for the eastern short horned lizard (a former C-2 candidate, and a special-concern species). Fragmentation of the xeric grassland habitat has isolated breeding populations of the lizard in the western portion of RFETS.

The natural effects observed over the past several years have been a prairie dog population crash in 1994 due to plague, and the decline in coyote numbers at RFETS during 1994-95 apparently due to the canine distemper epizootic.

1.0 INTRODUCTION

1.1 BACKGROUND

Rocky Flats Environmental Technology Site (RFETS), is a U. S. Department of Energy (DOE) nuclear industrial facility that has been part of the nationwide nuclear weapons complex since 1951. RFETS is located in rural Jefferson County, Colorado approximately 16 miles northwest of Denver, and five miles southeast of Boulder. The site covers approximately 6,550 acres, of which approximately 6,100 acres forms an undeveloped Buffer Zone (BZ) around the industrialized central portion. The original 1951 land purchase included approximately 2,520 acres of rangeland, which was expanded by an additional 4,030 acres from private ranches in 1974. The site adjoins undeveloped rangelands that are encroached by housing developments on the northeast, east, and southeast. To the north and northwest the site is bordered by public open space lands. Figure 1-1 presents the general location of RFETS.

The original mission of this DOE facility was the manufacture of nuclear weapons components. RFETS is currently undergoing cleanup and closure. One of the goals of the Rocky Flats Vision, as stated in the Public Comment Draft of the Rocky Flats Cleanup Agreement (DOE 1996) is the preservation of RFETS' unique ecological values. Ecological monitoring is necessary to assure preservation and protection of these unique ecological resources to the maximum extent possible during cleanup and closure. The Natural Resource Protection and Compliance Program (NRPCP) provides such monitoring.

1.2 THE NATURAL RESOURCE PROTECTION AND COMPLIANCE PROGRAM (NRPCP)

The NRPCP monitors the status of wildlife and habitats to ensure that operations at RFETS remain in compliance with state and federal wildlife protection statutes. The regulatory drivers for NRPCP wildlife work include:

- The *Endangered Species Act*,
- The *Fish and Wildlife Coordination Act*,
- The *Migratory Bird Treaty Act*,
- The *Bald and Golden Eagle Protection Act*,
- The *Clean Water Act*, and
- The *Colorado Non-Game, Threatened, and Endangered Species Conservation Act.*

The NRPCP conducts routine surveys to monitor the health and populations of high-visibility wildlife groups such as migratory birds, game species, indicator organisms (e.g., raptors and neotropical migratory birds), and species afforded special protection by federal and state statutes. In this document all these groups are identified as "Significant Species" due to their ecological significance. This on-going monitoring program tracks population trends, habitat use, and species diversity from year to year, and is an important environmental management resource for DOE, and for its contractors. Data from these surveys, which are archived in databases, have been used in the preparation of environmental evaluations, remediation plans, environmental assessments, environmental impact statements, and categorical exclusions. Data held in the NRPCP databases have been integrated into the Sitewide Ecological Database (SED) which can interface with the Rocky Flats Environmental Database System (RFEDS).

8

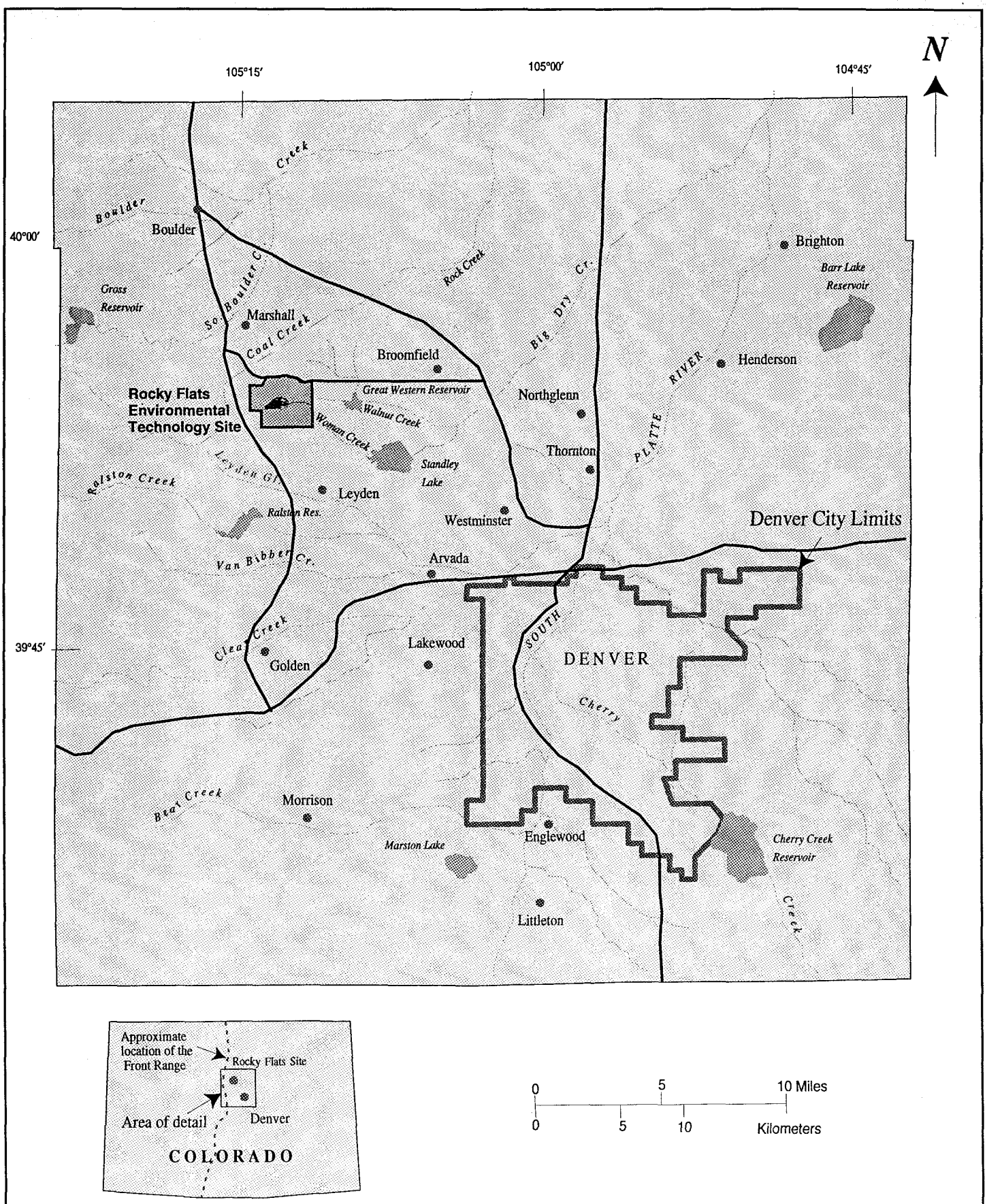


Figure 1-1

LOCATION OF THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Routine monitoring provides data on habitat affinities of sensitive species, which can then be used to predict the presence or absence of such species within planned work areas. These data are, therefore, a valuable planning tool that can help avoid conflicts between project scheduling and protective regulations. Continued monitoring of wildlife populations at RFETS will also provide valuable background data for Natural Resource Damage Assessment (NRDA) concerns in the future.

The NRPCP wildlife monitoring program also supports the identification and protection of threatened and endangered species, and addresses migratory bird protection concerns at RFETS. Performance of the NRPCP site-specific surveys before such activities as construction, mowing, assessment, remediation, and other projects are instrumental in keeping RFETS activities in compliance with the acts listed above.

A long-term ecological monitoring program such as the NRPCP wildlife monitoring program is essential in identifying fluctuations of wildlife populations, wildlife habitat use, and changes in the species using RFETS as year-round or seasonal habitat. Wildlife population densities vary due to natural pressures, and only long-term monitoring can verify which factors influencing wildlife populations are the consequence of natural fluctuations and which are due to human influences. The NRPCP also has the flexibility to add special surveys as needed for specific projects, and existing data in the databases may be queried in combination with data from such surveys to answer specific questions on ecological concerns. Availability of accurate, up-to-date ecological data is essential for planning long-term cleanup strategies.

Advance knowledge of ecological concerns helps to avoid or minimize natural resource injury, thereby reducing liability for natural resource damages.

Data on all significant species are archived in the Significant Species Database (SSD) which is maintained by NRPCP ecologists. The SSD provides an active database that may be queried for species habitat affinity, location, seasonal use, species numbers, relative abundance, unusual species, sightings of threatened, endangered, or "special-concern species," or any combination of such data. In addition to the SSD, the NRPCP ecologists maintain the Migratory Bird Database (MBD), which provides a data library of migratory bird presence, species diversity, and habitat affinity from migratory bird surveys.

Protection procedures and plans, developed and implemented by NRPCP, aid ecologists in assessing potential impacts on threatened, endangered, and special-concern species, as well as migratory birds, all of which enjoy special protected status. Surveys performed in compliance with these procedures ensure that wildlife is protected, and that state and federal wildlife and habitat protection statutes are not violated during RFETS activities.

This report summarizes the results of surveys performed from January through December of 1995 and compares the 1995 results with results from 1993 (DOE 1994a) and 1994 (DOE 1995). Many survey techniques were used to determine populations and habitat use of wildlife species at RFETS. The methods are outlined in the following section, and summaries of survey results for each major animal group monitored are presented in subsequent sections.

2.0 METHODS

Methods used to monitor the presence, habitat use, seasonal residence, species densities, breeding areas, and other pertinent wildlife data encompass several techniques. Relative abundance surveys, performed on established transects, record all wildlife observed. Sitewide surveys along established roads record all Significant Species. Site-specific project location surveys record the presence or absence of any special-concern species and confirm locations of wetlands within project areas. Migratory bird surveys record bird species along established transects. In addition to these formal surveys, fortuitous sightings of any Significant Species are recorded. Figure 2-1 presents the locations of the starting points of relative abundance and migratory bird survey transect routes.

Results of formal surveys and fortuitous sightings are entered into the SSD or MBD as appropriate. Some sightings are entered into both databases. Entries into the SSD use grid locations as illustrated on Figure 2-2, using an alphanumeric code (e.g., 11H). Migratory bird survey data is entered on the basis of a transect identification number (e.g., BS01B).

2.1 RELATIVE ABUNDANCE SURVEYS

Monthly relative abundance surveys are performed on 16 established survey routes. This allows continued data collection on survey transects included in the NRPCP databases. Monthly performance of these surveys allows collection of enough data to provide accurate characterization of habitat/area use and population densities of Significant Species year-round. Yearly, or even seasonal surveys would provide insufficient data for reasonable accuracy. Transect routes are of variable length (generally at least a mile) in all major habitat types at RFETS. The major habitats recognized at RFETS include wetlands, riparian woodland, riparian (streamside) shrubland, tall upland shrubland, mesic mixed grassland, xeric mixed grassland, and reclaimed mixed grassland. Figure 2-1 shows the locations of start points of these routes.

Relative abundance surveys are performed in accordance with procedures laid out in the *EMD Operating Procedures Manual Volume V: Ecology*; *Small Mammals* (4-27-ENV-ECOL.05) and *Large Mammals* (4-E56-ENV-ECOL.06) (EG&G 1994b). Surveys are performed by a qualified ecologist who walks established transects in specific habitats and records data for all animal species observed during the survey. Relative abundance surveys are designed to collect data on species abundance and use of habitats. Data include species, number of individuals, habitat, activities, age and sex classifications, and other pertinent information. Data are recorded as habitat use per elapsed time, providing an estimate of what habitats are used, by which species, how often, and for what purposes.

2.2 SITEWIDE SIGNIFICANT SPECIES SURVEYS

Significant Species are species of special interest due to their status as high visibility species, indicator organisms, federal and state protected species, or game species. Significant Species groups include waterfowl, big game mammals, game birds, carnivores, raptors (birds-of-prey), small game mammals, furbearers, and selected other species. A list of species currently designated as Significant Species is presented in Appendix A.

2.2.1 Diurnal (Daytime) Surveys

Sitewide Significant Species diurnal surveys are conducted along all main roads in the BZ at RFETS. During these surveys all visible individuals of Significant Species, observed during a

short time-span over the entire RFETS property, are recorded. Data from these surveys are entered into the SSD, and may be queried for specific information.

2.2.2 Nocturnal (Nighttime) Spotlight Surveys

Sitewide Significant Species nocturnal surveys are spotlight surveys conducted on the major roads in the BZ. These roads are driven by a team, or teams, of observers during the hours between dusk and midnight. This survey method provides coverage over the entire BZ in areas that can be reached with the beams of hand-held spotlights. The purpose of these nocturnal surveys is to document the presence and numbers of individuals of nocturnal species that are rarely observed during daylight hours. Data from these surveys are entered into the SSD.

2.3 SITE-SPECIFIC SPECIAL-CONCERN SPECIES SURVEYS

Special-concern species are a particular class of wildlife and plants that are of special interest at RFETS due to their protected status. NRPCP tracks presence, locations, and numbers of these species to better ensure RFETS' compliance with the Acts and regulations that provide them special protection. These species include plant and animal species that are listed by the U. S. Fish and Wildlife Service (USFWS) as threatened or endangered; species that have been proposed by the USFWS for listing as threatened or endangered; species identified by the USFWS as C-1 candidates for listing; species formerly listed by the USFWS as C-2 candidate species (now referred to as "at-risk"); and species classified under the Migratory Bird Treaty Act as migratory birds. All State of Colorado threatened, endangered, or Colorado Species of Special Concern also fall into this category. Table 2-1 presents the "search-list" of special-concern species that was used during the 1995 data collection period.

Site-specific surveys for special-concern species are performed in accordance with the ecology procedure *Identification and Protection of Threatened, Endangered, and Special-Concern Species* (1-D06-EPR-END.03) (EG&G 1994c). Site-specific migratory bird surveys are performed in accordance with the ecology procedure *Migratory Bird Evaluation and Protection* (1-G98-EPR-END.04) (EG&G 1994d). Locations for site-specific surveys are determined by the work plans for construction, assessment, and remediation projects. Data from these surveys are entered into the SSD.

2.4 MIGRATORY BIRD SURVEYS

The 20 bird survey transects at RFETS are permanently established survey routes, through all major habitats, used to record bird breeding activity and seasonal population data. Surveys of these transects are performed by a qualified ecologist who walks the established routes and records population data for all bird species during each survey. (Figure 2-1 shows the locations of these routes.) Migratory bird surveys are designed to collect habitat use and population data for all bird species encountered. Breeding bird surveys are performed at closely spaced time intervals (usually weekly) during the early summer breeding season. Monthly population surveys are performed during the remainder of the year. Migratory bird surveys are performed in accordance with the EMD Operating Procedures Manual Volume V: Ecology, Bird Sampling (4-K26-ENV-ECOL.07) (EG&G 1994b). Data from the migratory bird surveys are entered into the MBD and Significant Species recorded during these surveys are also entered into the SSD.

TABLE 2-1. SPECIAL CONCERN SPECIES SEARCH-LIST FOR THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Federal Endangered Species Known to Occur at Rocky Flats

Birds

- American Peregrine Falcon (*Falco peregrinus*)[1]
- Bald Eagle (*Haliaeetus leucocephalus*)[2]

Federal Candidate Species Known to Occur at Rocky Flats

Herptiles

- Eastern Short Horned Lizard (*Phrynosoma douglassii brevirostra*)[3] (Former C-2)[4]

Birds

- Northern Goshawk (*Accipiter gentilis*)[5] (Former C-2)[4]
- Baird's Sparrow (*Ammodramus bairdii*)[5] (Former C-2)[4]
- Western Burrowing Owl (*Athene cunicularia hypugea*)[3] (Former C-2)[4]
- Ferruginous Hawk (*Buteo regalis*)[3] (Former C-2)[4]
- Black Swift (*Cypseliodes niger*)[5] (Former C-2)[4]
- Loggerhead Shrike (*Lanius ludovicianus*)[3] (Former C-2)[4]

Mammals

- Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*)[3,6] (Former C-2)[4]
- Small-footed Myotis (*Myotis subulatus = M. ciliolabrum*)[5] (Former C-2)[4]

Colorado Species of Special Concern Known to Occur at Rocky Flats

Birds

- Long-billed Curlew (*Numenius americanus*)[5]
- Greater Sandhill Crane (*Grus canadensis tibida*)[5]
- American White Pelican (*Pelecanus erythrorhynchos*)[3]

Federal Endangered Species with Potential Habitat at Rocky Flats

Birds

- Whooping Crane (*Grus americana*)
- Least Tern (*Sterna antillarum*)
- Piping Plover (*Charadrius melodus*)

Mammals

- Black-footed Ferret (*Mustela nigripes*)[7]

Federal Threatened Species with Potential Habitat at Rocky Flats

Plants

- Ute Ladies'-tresses (*Spiranthes diluvialis*)[7]

Insects

- Pawnee Montane Skipper (*Hesperia leonardus montana*)

Federal Candidate Species with Potential Habitat at Rocky Flats

Plants

- Colorado Butterfly Plant (*Gaura neomexicana* var. *coloradensis*) (C-1)
- Bell's Twinpod (*Physaria bellii*) (Former C-2)[4]
- Tulip Gentian (*Eustoma grandiflora*) (Former C-2)[4]
- Adder's Mouth Orchid (*Malaxis brachypoda*) (Former C-2)[4]

Insects

- Regal Fritillary (*Speyeria idalia*) (Former C-2)[4]

TABLE 2-1. CONTINUED

Fish

Plains Topminnow (*Fundulus sciadicus*) (Former C-2)[4]

Birds

Western Snowy Plover (*Charadrius alexandrinus nivosus*) (Former C-3C)[4]
Mountain Plover (*Charadrius montanus*) (C-1)
Black Tern (*Chlidonias niger*) (Former C-2)[4]
Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (C-1)
White-faced Ibis (*Plegadis chihi*) (Former C-2)[4]

Mammals

Spotted Bat (*Euderma maculatum*) (Former C-2)[4]
Long-eared Myotis (*Myotis evotis*) (Former C-2)[4]
Fringed Bat (*Myotis thysanodes*) (Former C-2)[4]
Long-legged Myotis (M*yotis volans*) (Former C-2)[4]
Pale Townsend's Big-eared Bat (*Plecotus townsendii pallescens*) (Former C-2)[4]
Plains Spotted Skunk (*Spilogale putorius interrupta*) (Former C-2)[4]
Swift Fox (*Vulpes velox*)[7] (Former C-2)[4]

Colorado Species of Special Concern with Potential Habitat at Rocky Flats

Fish

Common Shiner (*Notropis cornutus*)
Stonecat (*Noturus flavus*)

Birds

Barrow's Goldeneye (*Bucephala islandica*)
Plains Sharp-tailed Grouse (*Tympanuchus phasianellus jamesi*) (S-E)[9]

Footnotes:

1) The species *Falco peregrinus* is listed as endangered wherever found in the coterminous 48 states. Some subspecies are listed separately.
2) The USFWS has down-listed the Bald Eagle to threatened status.
3) This species is resident or regularly visits Rocky Flats.
4) In February 1996, the U. S. Fish and Wildlife Service (USFWS) revised the list of candidate species to include only proposed and C-1 species. All former candidate species except C-1 species are now classified unofficially as "at-risk" and are still considered special-concern species. The search-list includes these species because they may be upgraded to C-1 species at any time.
5) The species has been observed infrequently on Rocky Flats.
6) A petition to list this species was reviewed by the USFWS. The 90-Day Finding found this petition to have merit, and the USFWS may pursue listing of the species.
7) This species was previously collected near Rocky Flats.
8) These species have historically used areas in the vicinity, and suitable feeding or residential habitat exists at Rocky Flats.
9) State Endangered (S-E)

TABLE 2-1. CONTINUED

Candidate Species

Note: Candidate species lists are under constant revision. As data are reviewed by the USFWS, species are added to and removed from this list on a year-round basis.

C-1 species are those species for which the USFWS has substantial data on file to support listing as threatened or endangered.

Former C-2 species are those species for which the USFWS has data on file to indicate that proposal for listing as threatened or endangered is possibly appropriate.

Sources:

Colorado State Species of Concern are identified in the Colorado Natural Heritage Program list of Rare and Imperiled Animals, Plants, and Natural Communities, May 1995.

Federal Register, February 28, 1996, pp. 7596-7613.

2.5 DATA ANALYSES

Prior to analysis, data entry into the SSD or MBD is verified and validated to ensure accuracy. Corrections are made to entered data as required before data are analyzed. All summary tables used for analyses are based on this quality-assured data.

2.5.1 Area Use Mapping

To determine area use frequencies by wildlife, NRPCP data records from the SSD for the years 1993, 1994, and 1995 were combined and analyzed. After observation locations for each species or group were evaluated, use areas were mapped using the Rocky Flats Grid System (see Figure 2-2).

Use levels were assigned for the more commonly observed species based on site knowledge and professional interpretation by NRPCP ecologists. Decision criteria included how common the species was, what habitats are considered "normal," what activity was observed, and general knowledge of the use patterns of each species or group. Use frequencies that were designated for mapping purposes were broken down as follows. Locations where a species is often observed, but data show low numbers of individuals observed were designated "average" use areas, locations where a species was judged to show greater affinity to the location were designated "elevated" use areas, and locations considered to indicate a critical use area due to the density of observations were designated as "heavy" use areas.

2.5.2 Bird Species Richness Analyses

The annual data in the MBD were analyzed to determine species numbers for each habitat for each year examined. Combined data files from 1991, 1993, 1994, and 1995 were used to graph species richness trends for each habitat over the period reported.

2.5.3 Bird Density Analyses

Bird densities were calculated from bird numbers per transect that had been entered into the MBD. Birds per hectare densities were calculated based on combined data from the four observation years (1991, 1993, 1994, and 1995).

18

3.0 RESULTS AND DISCUSSION

With the availability of several years' data from the NRPCP monitoring efforts, it is possible for the first time to examine trends in wildlife populations, and to map area usage at RFETS. In previous annual reports (DOE 1994a and 1995), data were rdata collection year only period only, and comparisons with other years were not made. Results and conclusions in this report will concentrate on new findings from 1995 monitoring, comparisons between 1995 data and data from previous years, and a presentation of area use frequencies based on combined data from 1993 through 1995.

Many of the data are summarized by season. Seasons are defined for the purpose of this document as Spring (March through May), Summer (June through August), Fall (September through November), and Winter (December through February). In the case of migratory bird summaries, Winter data comprises data from December of one year, and January and February of the following year.

3.1 SIGNIFICANT SPECIES

Significant Species, monitored during 1995 included special-concern species, big game mammals, mid-sized mammals, carnivores, waterfowl, raptors, and herptiles (reptiles and amphibians). A list of the species included in these groups is provided in Appendix A. Discussions in the following sections concentrate on area use frequency by the various Significant Species groups as determined from combining the nearly 6,000 records from 1993, 1994, and 1995. Table 3-1 provides a summary of Significant Species observed at RFETS in 1995. A complete 1995 data summary, similar to the raw data summaries shown in the 1993 (DOE 1994a) and 1994 (DOE 1995) annual reports, is provided in Appendix A. This data summary is a condensed version of all 1995 data entered into the SSD. A description of the SSD data entry process is also included in Appendix A.

3.1.1 Special-Concern Species

Special-concern species are described in detail in Section 2.3. While the majority of these species with potential to occur at RFETS are animal species, a few plant species are also included. NRPCP site-specific surveys are performed for plant and animal species and their potential habitats.

In February 1996 the USFWS published a new listing of candidate species that now only includes species proposed for listing and C-1 candidate species. No proposed or C-1 candidates are documented at RFETS. There are, however, 11 special-concern species documented at RFETS. In addition to the federal threatened, endangered, or former C-2 species, there are three Colorado Species of Special Concern (see Table 2-1).

During the time-frame for which data are reported in this document, there were nine species of former C-2 candidate species, as well as two threatened or endangered species, at RFETS (see Table 3-1). The former C-2 candidate species included the eastern short horned lizard (*Phrynosoma douglassii brevirostra*), the loggerhead shrike (*Lanius ludovicianus*), the western burrowing owl (*Athene cunicularia hypugea*), the northern goshawk (*Accipiter gentilis*), the Baird's sparrow (*Ammodramus bairdii*), the ferruginous hawk (*Buteo regalis*), the black swift (*Cypseliodes niger*), the small-footed myotis (*Myotis subulatus*), and the Preble's meadow jumping mouse (*Zapus hudsonius preblei*). Threatened and endangered species included the bald eagle (*Haliaeetus leucocephalus*) and the American peregrine falcon (*Falco peregrinus*).

19

TABLE 3-1. SUMMARY OF TOTAL NUMBERS OF OBSERVATIONS OF SPECIES DURING 1995

SPECIES	NUMBER OF OBSERVATIONS	EXTENDED AREA OBSERVATIONS
AMPHIBIANS		
BOREAL CHORUS FROG	134	
TIGER SALAMANDER	3	
BULLFROG	2	
NORTHERN LEOPARD FROG	1	
GREAT PLAINS TOAD	1	
REPTILES		
WESTERN PAINTED TURTLE	41	
BULLSNAKE	7	
PRAIRIE RATTLESNAKE	3	
WESTERN PLAINS GARTER SNAKE	3	
EASTERN SHORT HORNED LIZARD	2	
EASTERN YELLOWBELLY RACER	2	
MAMMALS		
MULE DEER	3394	
DESERT COTTONTAIL	175	
COYOTE	153	3
RACCOON	41	
WHITE-TAILED DEER	27	
MUSKRAT	9	
MULE DEER/WHITE-TAILED DEER HYBRID	7	
PORCUPINE	2	
BLACK-TAILED PRAIRIE DOG	1	
MOUNTAIN LION	1	
RAPTORS		
RED-TAILED HAWK	100	28
GREAT HORNED OWL	95	
AMERICAN KESTREL	67	6
NORTHERN HARRIER	50	
SWAINSON'S HAWK	34	
ROUGHLEGGED HAWK	28	24
BALD EAGLE	21	48
GOLDEN EAGLE	20	20
SHARP-SHINNED HAWK	4	
TURKEY VULTURE	4	
PRAIRIE FALCON	4	
COOPER'S HAWK	2	
BURROWING OWL	2	
AMERICAN PEREGRINE FALCON	2	
NORTHERN GOSHAWK	1	
SHORT-EARED OWL	1	
LONG-EARED OWL	1	
FERRUGINOUS HAWK	1	28
UPLAND GAMEBIRDS		
RING-NECKED PHEASANT	5	
WATERFOWL AND SHOREBIRDS		
MALLARD	960	
GANADA GOOSE	328	
AMERICAN COOT	189	

TABLE 3-1. CONTINUED

SPECIES	NUMBER OF OBSERVATIONS	EXTENDED AREA OBSERVATIONS
GREEN-WINGED TEAL	175	
RING-NECKED DUCK	163	
BUFFLEHEAD	144	
PIED-BILLED GREBE	103	
DOUBLE-CRESTED CORMORANT	72	
GREAT BLUE HERON	71	
COMMON GOLDENEYE	61	
GADWALL	61	
BLUE-WINGED TEAL	60	
AMERICAN WHITE PELICAN	55	
AMERICAN WIGEON	54	
REDHEAD	31	
LESSER SCAUP	29	
COMMON MERGANSER	17	
SNOW GOOSE	14	
BLACK-CROWNED NIGHT HERON	13	
SANDHILL CRANE	11	
NORTHERN PINTAIL	5	
NORTHERN SHOVELER	5	
CINNAMON TEAL	3	
WOOD DUCK	2	
EARED GREBE	2	
GREATER SCAUP	1	
WESTERN GREBE	1	

Colorado Species of Special Concern using RFETS included the long-billed curlew (*Numenius americanus*) and the American white pelican (*Pelecanus erythrorhynchos*). Sandhill cranes (*Grus canadensis*) frequently fly over RFETS during migration, but whether this is the greater sandhill crane subspecies listed as a Colorado Species of Special Concern has not been determined.

Areas used by the above-listed raptors are included in the area use maps shown in the general raptors section of this report (see Section 3.1.6). Baird's sparrow has been recorded only once at the site in shrubland habitat. Black swifts were recorded once over xeric tallgrass prairie. A small-footed myotis (bat) was recorded once in the entryway of a building within the Industrial Area. There is, therefore, insufficient data to present area use information for these species. Preble's meadow jumping mouse has been recorded in riparian shrubland and riparian woodland habitats along the major riparian corridors of RFETS and around pond margins. The habitat of this species is restricted to narrow belts of appropriate habitat in these areas, thus the Rocky Flats Grid System provides too coarse a scale for accurate mapping of use areas for this species. The eastern short horned lizard is recorded sporadically in xeric mixed grasslands habitat, but is uncommon and inconspicuous enough that it is rarely observed, and accurate use maps cannot be made with available data.

Figure 3-1 shows loggerhead shrike use areas at RFETS. The 3-year data summary used to create Figure 3-1 is provided in Appendix B. Table 3-2 shows a summary of combined data from 1993, 1994, and 1995 on special-concern species recorded at RFETS.

3.1.2 Big Game Mammals

The most common big game species at RFETS are mule deer (*Odocoileus hemionus*). Due to their high visibility and their status as year-round residents at the site, a total of 3,394 individual observations of mule deer were recorded in 1995. Based on data from previous years (DOE 1994a and 1995), the average population at the site is estimated to be 160 individuals. Elk (*Cervus elephus*) visit RFETS on a casual basis, but are not considered resident. A single mule deer/white-tailed deer hybrid buck (male) has been observed on the site for several years. Some does (females) that have been observed are suspected to be hybrids as well.

During 1995 the RFETS strain of "white mule deer" resurfaced after an absence of several years. This strain is not of albino animals, but an apparent recessive color phase that is a very pale version of normal coloration. The animal is about the color of coffee ice cream, with lighter highlights at the throat, rump, and belly. The eyes are brown, and the hooves are pigmented normally. From a distance the deer looks white.

Observations of white-tailed deer (*Odocoileus virginianus*) have increased during 1995 (27 observations) until records of the species mingling with mule deer are not uncommon. During the baseline characterization (DOE 1992) no white-tailed deer were recorded, and before 1995 white-tailed deer observations were uncommon. The majority of white-tailed deer observations have been in the lower Woman Creek and Smart Ditch drainages. White-tailed deer at RFETS have been most commonly observed in company with mule deer groups. This new big game population trend on the site will bear further observation.

Winter Deer Count Comparison

A sitewide survey conducted on January 24, 1996 for the purpose of obtaining a Winter population count of big game at RFETS, revealed the presence of 118 mule deer. Also present

TABLE 3-2. SPECIAL-CONCERN SPECIES USE SUMMARY, BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
SP	AMERICAN WHITE PELICAN (1)	3	R	26
SU	AMERICAN WHITE PELICAN	3	R	1
SP	AMERICAN WHITE PELICAN	3	S	1
SU	AMERICAN WHITE PELICAN	4	R	26
SU	AMERICAN WHITE PELICAN	7	P	3
SU	AMERICAN WHITE PELICAN	13	Q	9
SU	AMERICAN WHITE PELICAN	16	P	18
WI	BALD EAGLE (2)	1	R	1
WI	BALD EAGLE	2	T	1
FA	BALD EAGLE	5	T	1
FA	BALD EAGLE	6	G	2
WI	BALD EAGLE	6	J	1
WI	BALD EAGLE	7	F	1
FA	BALD EAGLE	7	L	1
WI	BALD EAGLE	9	K	2
WI	BALD EAGLE	9	R	1
FA	BALD EAGLE	10	Q	1
FA	BALD EAGLE	11	N	1
WI	BALD EAGLE	11	N	1
WI	BALD EAGLE	12	S	1
WI	BALD EAGLE	13	Q	1
WI	BALD EAGLE	13	R	1
WI	BALD EAGLE	14	G	2
WI	BALD EAGLE	14	H	1
WI	BALD EAGLE	15	J	1
WI	BALD EAGLE	15	O	1
WI	BALD EAGLE	15	T	1
WI	BALD EAGLE	16	I	1
WI	BALD EAGLE	16	J	2
WI	BALD EAGLE	17	L	3
WI	BALD EAGLE	17	P	1
SU	BLACK-CROWNED NIGHT HERON (3)	2	T	3
SP	BLACK-CROWNED NIGHT HERON	3	R	1
SP	BLACK-CROWNED NIGHT HERON	3	R	2
SU	BLACK-CROWNED NIGHT HERON	3	R	9
SP	BLACK-CROWNED NIGHT HERON	3	S	1
SU	BLACK-CROWNED NIGHT HERON	3	S	1
SU	BLACK-CROWNED NIGHT HERON	4	R	1
SP	BLACK-CROWNED NIGHT HERON	4	S	8
SU	BLACK-CROWNED NIGHT HERON	7	N	2
SU	BLACK-CROWNED NIGHT HERON	7	P	4
SU	BLACK-CROWNED NIGHT HERON	11	P	1
SP	BLACK-CROWNED NIGHT HERON	12	Q	1
SU	BLACK-CROWNED NIGHT HERON	12	Q	3

TABLE 3-2. CONTINUED

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
SU	BLACK-CROWNED NIGHT HERON	13	T	2
SU	BLACK-CROWNED NIGHT HERON	13	T	1
SU	BLACK-CROWNED NIGHT HERON	13	U	1
SP	BLACK SWIFT (4)	14	K	9
SP	BURROWING OWL (4, 5)	1	S	2
SP	BURROWING OWL	2	M	1
SP	BURROWING OWL	2	M	1
SP	BURROWING OWL	10	Q	2
FA	BURROWING OWL	15	M	1
SP	BURROWING OWL	17	O	2
FA	COOPER'S HAWK (6)	15	O	1
FA	COOPER'S HAWK	15	R	1
FA	EARED GREBE (6)	2	T	1
SP	EARED GREBE	4	R	1
SP	FERRUGINOUS HAWK (1, 4, 6)	2	S	2
SU	FERRUGINOUS HAWK	3	P	2
SP	FERRUGINOUS HAWK	4	O	1
SP	FERRUGINOUS HAWK	4	O	3
WI	FERRUGINOUS HAWK	4	Q	1
SP	FERRUGINOUS HAWK	4	S	1
SP	FERRUGINOUS HAWK	4	S	1
FA	FERRUGINOUS HAWK	5	I	1
SP	FERRUGINOUS HAWK	5	I	2
SP	FERRUGINOUS HAWK	5	P	2
SU	FERRUGINOUS HAWK	5	P	2
WI	FERRUGINOUS HAWK	10	U	1
WI	FERRUGINOUS HAWK	13	G	1
SP	FERRUGINOUS HAWK	13	G	2
FA	FERRUGINOUS HAWK	14	G	2
FA	FERRUGINOUS HAWK	14	H	1
WI	FERRUGINOUS HAWK	14	T	1
FA	FERRUGINOUS HAWK	16	J	1
SP	FERRUGINOUS HAWK	17	M	2
SU	GOLDEN EAGLE (6)	1	G	2
SP	GOLDEN EAGLE	1	R	1
SP	GOLDEN EAGLE	1	R	1
WI	GOLDEN EAGLE	1	T	1
SU	GOLDEN EAGLE	1	T	2
SU	GOLDEN EAGLE	2	F	4
SU	GOLDEN EAGLE	2	I	2
SU	GOLDEN EAGLE	2	J	4
SP	GOLDEN EAGLE	2	K	1
SP	GOLDEN EAGLE	2	K	1
SU	GOLDEN EAGLE	2	K	6

TABLE 3-2. CONTINUED

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
WI	GOLDEN EAGLE	2	L	1
SP	GOLDEN EAGLE	2	N	6
SU	GOLDEN EAGLE	2	N	1
SU	GOLDEN EAGLE	2	N	1
WI	GOLDEN EAGLE	2	O	1
SP	GOLDEN EAGLE	2	O	2
SU	GOLDEN EAGLE	2	O	1
SU	GOLDEN EAGLE	2	O	1
FA	GOLDEN EAGLE	2	Q	1
SU	GOLDEN EAGLE	2	Q	2
FA	GOLDEN EAGLE	2	T	2
WI	GOLDEN EAGLE	2	T	1
SP	GOLDEN EAGLE	2	T	2
SU	GOLDEN EAGLE	2	T	2
SU	GOLDEN EAGLE	2	T	2
FA	GOLDEN EAGLE	3	O	1
FA	GOLDEN EAGLE	3	P	1
FA	GOLDEN EAGLE	3	R	1
SU	GOLDEN EAGLE	3	R	2
SP	GOLDEN EAGLE	3	U	1
SP	GOLDEN EAGLE	3	U	1
SU	GOLDEN EAGLE	4	F	2
WI	GOLDEN EAGLE	4	L	1
SU	GOLDEN EAGLE	4	M	2
FA	GOLDEN EAGLE	4	P	2
WI	GOLDEN EAGLE	4	P	3
SP	GOLDEN EAGLE	4	P	2
SP	GOLDEN EAGLE	4	S	2
WI	GOLDEN EAGLE	4	T	2
SP	GOLDEN EAGLE	4	U	2
SP	GOLDEN EAGLE	5	I	2
WI	GOLDEN EAGLE	5	P	1
WI	GOLDEN EAGLE	5	Q	1
SP	GOLDEN EAGLE	5	Q	4
FA	GOLDEN EAGLE	5	R	2
WI	GOLDEN EAGLE	5	R	1
WI	GOLDEN EAGLE	5	T	1
SP	GOLDEN EAGLE	6	O	2
SU	GOLDEN EAGLE	6	O	2
SP	GOLDEN EAGLE	6	P	2
FA	GOLDEN EAGLE	7	F	1
FA	GOLDEN EAGLE	7	H	1
SP	GOLDEN EAGLE	7	R	2
SP	GOLDEN EAGLE	8	M	2

TABLE 3-2. CONTINUED

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
SP	GOLDEN EAGEL	8	N	1
SP	GOLDEN EAGEL	8	N	1
FA	GOLDEN EAGLE	8	N	1
SP	GOLDEN EAGLE	9	C	2
SP	GOLDEN EAGLE	9	K	2
FA	GOLDEN EAGLE	9	L	1
WI	GOLDEN EAGLE	9	M	1
SU	GOLDEN EAGLE	9	T	2
WI	GOLDEN EAGLE	10	O	1
FA	GOLDEN EAGLE	10	Q	1
WI	GOLDEN EAGLE	10	Q	1
SU	GOLDEN EAGLE	11	M	2
SU	GOLDEN EAGLE	11	N	2
WI	GOLDEN EAGLE	11	P	1
WI	GOLDEN EAGLE	11	Q	1
WI	GOLDEN EAGLE	11	R	1
SU	GOLDEN EAGLE	11	S	4
WI	GOLDEN EAGLE	12	O	1
SP	GOLDEN EAGLE	12	O	1
SP	GOLDEN EAGLE	12	O	1
FA	GOLDEN EAGLE	12	R	2
WI	GOLDEN EAGLE	12	S	4
WI	GOLDEN EAGLE	12	T	2
WI	GOLDEN EAGLE	13	G	1
FA	GOLDEN EAGLE	13	H	1
FA	GOLDEN EAGLE	13	K	1
SP	GOLDEN EAGLE	13	O	2
SP	GOLDEN EAGLE	13	R	2
SP	GOLDEN EAGLE	13	S	2
SU	GOLDEN EAGLE	13	S	1
SU	GOLDEN EAGLE	13	S	1
WI	GOLDEN EAGLE	14	H	1
SU	GOLDEN EAGLE	14	I	2
WI	GOLDEN EAGLE	14	J	1
WI	GOLDEN EAGLE	14	M	1
FA	GOLDEN EAGLE	15	G	1
WI	GOLDEN EAGLE	15	H	1
FA	GOLDEN EAGLE	15	I	1
FA	GOLDEN EAGLE	15	P	1
SP	GOLDEN EAGLE	15	P	2
SU	GOLDEN EAGLE	15	S	2
FA	GOLDEN EAGLE	16	I	2
SU	GOLDEN EAGLE	16	J	2
WI	GOLDEN EAGLE	16	O	1

TABLE 3-2. CONTINUED

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
SP	GOLDEN EAGLE	16	O	2
SP	GOLDEN EAGLE	16	P	6
SP	GOLDEN EAGLE	16	Q	2
WI	GOLDEN EAGLE	17	K	1
SP	GOLDEN EAGLE	17	K	2
SP	GOLDEN EAGLE	17	M	2
WI	GOLDEN EAGLE	17	O	1
FA	GOLDEN EAGLE	17	P	2
SP	LOGGERHEAD SHRIKE (4, 5)	4	P	1
SP	LOGGERHEAD SHRIKE	6	I	1
SU	LOGGERHEAD SHRIKE	7	F	1
FA	LOGGERHEAD SHRIKE	7	H	1
SP	LOGGERHEAD SHRIKE	7	I	1
FA	LOGGERHEAD SHRIKE	7	L	2
FA	LOGGERHEAD SHRIKE	7	M	1
SU	LOGGERHEAD SHRIKE	8	F	1
FA	LOGGERHEAD SHRIKE	11	E	1
SU	LOGGERHEAD SHRIKE	11	E	3
SU	LOGGERHEAD SHRIKE	14	G	2
SU	LOGGERHEAD SHRIKE	14	I	2
FA	LOGGERHEAD SHRIKE	15	G	1
WI	LOGGERHEAD SHRIKE	17	K	1
SU	LOGGERHEAD SHRIKE	17	K	1
SP	LONG-BILLED CURLEW (1, 5)	11	F	6
SP	LONG-BILLED CURLEW	15	L	1
WI	LONG-BILLED CURLEW	16	O	1
SP	LONG-EARED OWL (6)	7	N	2
SU	LONG-EARED OWL	14	G	2
FA	LONG-EARED OWL	15	J	3
SU	LONG-EARED OWL	17	J	2
SP	MERLIN (5)	4	G	1
SP	MERLIN	4	G	1
WI	MERLIN	11	E	1
WI	NORTHERN GOSHAWK (4, 5)	2	F	1
WI	NORTHERN GOSHAWK	2	G	1
SP	NORTHERN GOSHAWK	15	K	2
SU	NORTHERN HARRIER (6)	2	J	1
SU	NORTHERN HARRIER	2	J	1
FA	NORTHERN HARRIER	2	S	1
FA	NORTHERN HARRIER	2	T	2
SP	NORTHERN HARRIER	2	T	2
FA	NORTHERN HARRIER	2	U	1
SP	NORTHERN HARRIER	2	U	2
FA	NORTHERN HARRIER	3	R	1

TABLE 3-2. CONTINUED

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
WI	NORTHERN HARRIER	3	R	1
WI	NORTHERN HARRIER	4	K	1
SP	NORTHERN HARRIER	4	L	2
SU	NORTHERN HARRIER	4	M	2
FA	NORTHERN HARRIER	4	T	1
FA	NORTHERN HARRIER	5	F	1
SP	NORTHERN HARRIER	5	G	2
FA	NORTHERN HARRIER	5	H	1
FA	NORTHERN HARRIER	5	I	1
WI	NORTHERN HARRIER	5	I	2
SU	NORTHERN HARRIER	5	I	2
FA	NORTHERN HARRIER	5	J	1
WI	NORTHERN HARRIER	5	J	1
FA	NORTHERN HARRIER	5	O	1
SP	NORTHERN HARRIER	5	P	2
SU	NORTHERN HARRIER	5	P	2
FA	NORTHERN HARRIER	6	H	1
FA	NORTHERN HARRIER	6	I	2
WI	NORTHERN HARRIER	6	I	1
FA	NORTHERN HARRIER	6	J	2
WI	NORTHERN HARRIER	6	J	1
SU	NORTHERN HARRIER	6	J	2
FA	NORTHERN HARRIER	6	K	1
WI	NORTHERN HARRIER	6	K	2
SP	NORTHERN HARRIER	6	K	2
FA	NORTHERN HARRIER	6	P	1
WI	NORTHERN HARRIER	7	F	2
FA	NORTHERN HARRIER	7	K	1
WI	NORTHERN HARRIER	7	K	1
FA	NORTHERN HARRIER	7	M	1
WI	NORTHERN HARRIER	7	M	1
FA	NORTHERN HARRIER	7	N	1
FA	NORTHERN HARRIER	7	O	1
FA	NORTHERN HARRIER	7	P	1
SU	NORTHERN HARRIER	7	P	2
SU	NORTHERN HARRIER	8	G	2
FA	NORTHERN HARRIER	8	L	1
WI	NORTHERN HARRIER	8	P	1
FA	NORTHERN HARRIER	10	D	1
FA	NORTHERN HARRIER	10	H	1
FA	NORTHERN HARRIER	10	O	1
FA	NORTHERN HARRIER	10	Q	2
FA	NORTHERN HARRIER	11	E	1
WI	NORTHERN HARRIER	11	F	1

TABLE 3-2. CONTINUED

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
WI	NORTHERN HARRIER	11	N	1
SU	NORTHERN HARRIER	11	N	2
WI	NORTHERN HARRIER	11	P	1
FA	NORTHERN HARRIER	11	R	1
FA	NORTHERN HARRIER	12	F	1
WI	NORTHERN HARRIER	12	F	2
SU	NORTHERN HARRIER	12	G	2
FA	NORTHERN HARRIER	12	N	1
FA	NORTHERN HARRIER	12	O	1
WI	NORTHERN HARRIER	12	O	1
FA	NORTHERN HARRIER	12	P	1
FA	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	8
WI	NORTHERN HARRIER	13	F	1
FA	NORTHERN HARRIER	13	G	4
WI	NORTHERN HARRIER	13	G	1
SU	NORTHERN HARRIER	13	G	2
FA	NORTHERN HARRIER	13	H	1
WI	NORTHERN HARRIER	13	H	1
FA	NORTHERN HARRIER	13	K	1
FA	NORTHERN HARRIER	13	L	2
FA	NORTHERN HARRIER	13	P	2
WI	NORTHERN HARRIER	13	Q	1
WI	NORTHERN HARRIER	13	R	1
FA	NORTHERN HARRIER	13	S	1
SP	NORTHERN HARRIER	13	S	2
FA	NORTHERN HARRIER	14	G	2
WI	NORTHERN HARRIER	14	G	1
SU	NORTHERN HARRIER	14	G	2
FA	NORTHERN HARRIER	14	H	2
FA	NORTHERN HARRIER	14	I	2
SU	NORTHERN HARRIER	14	I	4
FA	NORTHERN HARRIER	14	J	1
FA	NORTHERN HARRIER	14	J	4
FA	NORTHERN HARRIER	14	N	1
SP	NORTHERN HARRIER	14	R	1
SP	NORTHERN HARRIER	14	R	1
FA	NORTHERN HARRIER	14	S	1
SU	NORTHERN HARRIER	14	T	2
FA	NORTHERN HARRIER	14	U	1
SU	NORTHERN HARRIER	15	F	2
FA	NORTHERN HARRIER	15	G	1
FA	NORTHERN HARRIER	15	H	1
FA	NORTHERN HARRIER	15	I	1

TABLE 3-2. CONTINUED

SEASON	SPECIES	RF GRID N	RF GRID E	NUMBER OF OBSERVATIONS
FA	NORTHERN HARRIER	15	J	1
SU	NORTHERN HARRIER	15	K	2
FA	NORTHERN HARRIER	15	O	1
FA	NORTHERN HARRIER	15	P	2
WI	NORTHERN HARRIER	17	N	1
WI	PEREGRINE FALCON (7)	13	P	1
FA	PEREGRINE FALCON	12	F	1
SP	PEREGRINE FALCON	4	L	2
SP	PEREGRINE FALCON	4	R	1
SP	PEREGRINE FALCON	4	R	1
SP	PEREGRINE FALCON	7	P	1
FA	PRAIRIE FALCON (6)	5	I	1
FA	PRAIRIE FALCON	7	I	2
SP	PRAIRIE FALCON	9	E	2
SP	PRAIRIE FALCON	11	G	2
WI	PRAIRIE FALCON	13	F	1
FA	PRAIRIE FALCON	14	R	1
FA	PRAIRIE FALCON	15	P	1
WI	PRAIRIE FALCON	15	Q	1
FA	PRAIRIE FALCON	17	O	1
FA	SHARP-SHINNED HAWK (6)	2	T	1
SP	SHARP-SHINNED HAWK	5	P	2
SP	SHARP-SHINNED HAWK	7	I	2
SP	SHARP-SHINNED HAWK	8	C	2
SP	SHARP-SHINNED HAWK	8	N	1
SP	SHARP-SHINNED HAWK	8	N	1
SU	SHARP-SHINNED HAWK	14	F	2
FA	NORTHERN LEOPARD FROG (1, 5, 6)	12	L	1
SU	EASTERN SHORT-HORNED LIZARD (4)	3	O	1
SU	EASTERN SHORT-HORNED LIZARD	12	S	1

FOOTNOTES

1) Colorado State "Species of Special Concern"
2) Species listed federally as "Threatened"
3) Colorado Division of Wildlife is tracking breeding population of this species.
4) Species that were formerly listed by the U. S. Fish and Wildlife Service as a C-2 candidate f This listing was revised in February 1996 to include only C-1 candidates and Proposed spec
5) Species classified by the U. S. Forest Service as "Sensitive" due to current or predicted downward population trends
6) Species "Watch-listed" by the Colorado Natural Heritage Program
7) Species listed federally as "Endangered"

at the time of the survey were two white-tailed deer (six were recorded a few days before the count). Winter surveys such as this are weather dependent, and often not all deer present at the site are visible to observers or identifiable by sex. It should be noted, however, that the Winter count has been decreasing since 1993. A deer count performed in January 1994 produced observations of 164 mule deer, in January 1995 there were 143 mule deer, compared with the January 1996 count when only 118 were recorded. The age class breakdown revealed lower fawn survival at the end of 1995, which may partially explain the decline in numbers. The number of fawns recorded in January 1996 (20) was only half that of the previous years (40 in 1994 and 43 in 1995). There were no unusual weather conditions that can explain this lowered survival rate. Should this prove to be a continuing trend, it will bear further investigation. The doe (59) to buck (37) ratio of approximately 1.6:1 shows a good balance for a healthy herd. According to Wallmo (1981), a sex ratio of approximately two adult does per one adult buck indicates a very healthy mule deer population. This sex ratio has changed from the greatest difference in 1994 of 94 does per 30 bucks (or 3.1:1), through the 1996 numbers of 65 does to 27 bucks (or 2.4:1).

When compared with Winter counts from the previous years, fawn survival was found to be lower at the end of 1995, while the number of bucks was somewhat higher. The number of does has declined somewhat since 1994. The lower numbers recorded may have been due to persistent inclement weather during the time of the count in January 1996, but there may have been some displacement of the deer from the New Landfill area. Observations of deer near the New Landfill construction area continued to decline during 1995, and few were observed in what had been a traditional late Fall and Winter congregation and feeding area. During past censuses, at least one group of deer was recorded in this area on the day of the count, however, no deer were near this site during the 1996 count.

The number of deer present in the BZ (approximately 11 deer/m^2 on average) remains fairly large, and is due to excellent health of the habitat, and the protection afforded them by the prohibition of hunting within RFETS boundaries. The lack of constant disturbance in the BZ also provides protection from stress, and normally promotes a good fawn survival rate.

Area Use Mapping

With the availability of monitoring data from 1993, 1994, and 1995 in the SSD, data have been summarized to provide maps of areas used by mule deer during Spring, Summer, Fall, and Winter. Seasonal summaries of mule deer use at RFETS reflect the species' strong year-round preference for some locations, and seasonal preferences for other locations. The use patterns reflect two apparent area preference criteria. One preference is for specific seasonal habitat that meets certain survival requirements (i.e., protective cover for new fawns). A second important area preference is the preference for secluded areas. Some heavily used areas do not provide unique habitat, but do offer isolation from sources of disturbance. Not all preferred habitat areas provide seclusion from human disturbance during all seasons.

Mule Deer Spring Area Use

During the Spring season, mule deer area use at RFETS is the least dispersed (see Figure 3-2). Snow-free south-facing hillsides are most preferred, as are locations providing the best refuge and thermal cover from residual Winter storms that are common during March and April. Areas with the heaviest mule deer use are upper Rock Creek, the lower Rock Creek shrublands unit, the area encompassing the Antelope Spring and Apple Orchard Spring complex, the upper Smart Ditch drainage basin, and the south-facing hillsides of lower Woman Creek. Several areas in the

xeric tallgrass prairie community are also frequently used when the weather is not severe. The 3-year data summary used to create Figure 3-2 is provided in Appendix B.

Mule Deer Summer Area Use

During the Summer season, mule deer use is quite dispersed throughout RFETS (see Figure 3-3). At the start of this season (June) fawning occurs, and by the end of the season (August) the young-of-the-year are gaining independence. Areas of heavy concentration are limited in extent, and reflect heavy use by does with fawns or by buck groups. Does with dependent fawns show a strong preference for areas with tall upland shrubland and riparian woodland complex habitats such as are found in upper Rock Creek and along the bottomland areas of the Woman Creek and Smart Ditch drainages. Bucks are drawn to areas providing seclusion and shade cover during this season. These areas include upper Rock Creek, the lower Rock Creek shrubland unit, and the Smart Ditch drainage basin. Mature bucks are seldom found in the company of does with young during this season. The 3-year data summary used to create Figure 3-3 is provided in Appendix B.

Mule Deer Fall Area Use

Mule deer Fall use patterns are similar in location and extent to Summer use patterns (see Figure 3-4). The areas of heavy use are somewhat larger, and more numerous, but the overall Fall use of RFETS includes the same areas. The most concentrated Fall use again lies within the upper Rock Creek drainage, the Antelope Spring and Apple Orchard Spring complex, and the Smart Ditch bottomland areas occupied by the riparian woodland complex. Additional heavy use areas during this season are the A- and B-Ponds and the riparian woodland complex between Pond C-1 and Pond C-2. Certain areas occupied by xeric tallgrass prairie are also high use areas. This reflects the tendency of the species to concentrate in these areas during the November breeding season (the rut). During the rut, large mixed sex groups of mule deer are frequently observed in the open grasslands areas, often at the same location for several days at a time. The 3-year data summary used to create Figure 3-4 is provided in Appendix B.

Mule Deer Winter Area Use

Winter mule deer area use at RFETS is somewhat less concentrated than Spring use, but more concentrated than Summer and Fall (see Figure 3-5). The most preferred locations are, as with the other seasons, upper Rock Creek, the Antelope Spring and Apple Orchard Spring complex, and the Woman Creek and Smart Ditch bottomlands. Additionally, a pattern of use on south- and southeast-facing mesic grassland hillsides emerges. Some Winter use patterns clearly reflect the thermal advantages provided by the preferred areas. Other Winter use areas provide better quality, or more available forage, with reduced procurement effort (i.e., a better energy return for the effort). Upper Rock Creek, for example provides refuge from the frigid northwest winds of the Winter months. South- and southeast-facing slopes provide the greatest incident thermal energy, as well as the best snow-free forage areas. Even as early as late January, many of the early forbs and grasses on these slopes are greening-up for spring growth, and provide good early-season forage. The 3-year data summary used to create Figure 3-5 is provided in Appendix B.

Elk and White-tailed Deer Area Use

Little data is available on preferred elk and white-tailed deer habitat at RFETS, but an increased number of observations of white-tailed deer during 1995 indicate their willingness to abandon

their normally preferred brushland habitat to join the mule deer in the open grasslands. The majority of the white-tailed deer observations were of individuals in company with large or small groups of mule deer. Elk observations have been such physical evidence as tracks, beds, droppings, and skeletal remains. Areas used by elk and white-tailed deer are shown in Figure 3-6. The 3-year data summary used to create Figure 3-6 is provided in Appendix B.

Current Status of Big Game Mammals

The small-scale disturbance in the BZ has not contributed significantly to habitat fragmentation for big game mammals during 1995. The large-scale disturbances at RFETS, however, have now destroyed about 42 acres of grassland habitat; approximately 14 acres by construction of the New Landfill, and approximately 28 acres by the combined gravel mining operations.

The large-scale disturbances have occurred largely in the xeric mixed grasslands and to a lesser extent in mesic mixed grasslands. Both grassland habitats are important fall breeding and Winter foraging habitat for the resident mule deer herd. Destruction of the habitats in this portion of the BZ has withdrawn them from availability as range for mule deer.

The calculation of mule deer displaced from former breeding and foraging range (based only on numbers of deer versus available acres at RFETS) shows less than one individual displaced from the impact area. This does not, in fact, reflect the actual impact because the former grassland habitat of the New Landfill was frequently visited by groups of two to 12 mule deer during the breeding season, and for large parts of the Winter before the disturbance. Groups displaced by the mining expansion were of similar size. After the initial surface disturbance and resultant destruction of their habitat, mule deer were frequently observed near the edge of the disturbance within their former range, however, with time, edge use has also ceased. This species establishes "traditional" range, and will visit traditional range during specific seasons unless prevented by barriers or habitat destruction. This behavior has been observed during the Winters of 1994-95 and 1995-96 at the New Landfill. Mule deer do not use all areas of RFETS uniformly, as illustrated in Figures 3-2 through 3-5, therefore calculations based only on the total acres of RFETS versus the total number of deer at RFETS would be invalid.

Population trends and area use of big game animals are an indicator of the ecological health of an area. The big game animals in an ecosystem must have diverse and healthy habitats in which to live and reproduce. Degraded habitat is directly reflected in the lower numbers and/or poorer health of big game animals. Although the January 1996 big game count conducted at RFETS recorded fewer mule deer than in past years (DOE 1994a and 1995), total numbers of individuals and a good sex ratio continue to indicate a healthy mule deer herd at RFETS. Should fawn survival rates continue to be depressed in the future, the cause should be investigated. It is somewhat perplexing that, in a year when the coyote population has been depressed, the fawn survival rate should also be low. Displacement of animals due to increased surface disturbance and destruction of range may be part of the explanation. Observations of range conditions indicate that the herd is not beyond the carrying capacity of the range, thus competition alone is not the likely cause for this decline in numbers.

38

3.1.3 Mid-Sized Mammals

Lagomorphs (Rabbits and Hares)

The most commonly observed lagomorph at RFETS is the desert cottontail (*Sylvilagus audubonii*) (175 observations in 1995). White-tailed jackrabbits (*Lepus townsendii*) and black-tailed jackrabbits (*Lepus californicus*) have been recorded at the site, but individuals of both species are seldom observed, and none was recorded in 1995. Desert cottontails inhabit disturbed areas, scrap storage areas, trailer yards, conex storage areas, rip-rap areas, and other areas affording cover. Figure 3-7 illustrates areas at RFETS where desert cottontails occur. The 3-year data summary used to create Figure 3-7 is provided in Appendix B.

Muskrat

Muskrats (*Ondatra zibethicus*) are most commonly observed in impoundments (ponds) at RFETS. This species is also periodically recorded in tall marsh within the South Interceptor Ditch. Muskrats are prey to various predators including coyotes and golden eagles, and are consequently an important link in the RFETS food chain. As aquatic mammals, they are in contact with any potential contamination in the aquatic ecosystem. Populations of this species are difficult to estimate without a heavy trapping regimen, but fortuitous observations, nine total in 1995, have allowed general mapping of its areas of use at RFETS (see Figure 3-8).

Porcupine

Porcupines (*Erethizon dorsatum*) are observed occasionally within areas of the Rock Creek drainage. Their preferred forage species are hawthorn (*Crataegus sp.*), choke-cherry (*Prunus virginiana*), and ponderosa pines (*Pinus ponderosa*), all of which are most abundant in upper Rock Creek. Occurrences of the species, two of which were in 1995, are shown in Figure 3-8.

Eastern Fox Squirrel

Eastern fox squirrels (*Sciurus niger*) are uncommon at RFETS due to limited habitat, and most probably, the abundance of predators. While the species was not recorded in 1995, individuals have been recorded previously in such widely separate locations as upper Rock Creek, lower Walnut Creek, and the Industrial Area (DOE 1995). Records of sightings of this species are shown on Figure 3-8.

Black-tailed Prairie Dog

Black-tailed prairie dogs (*Cynomys ludovicianus*) were largely extirpated from RFETS in 1994 by plague. Plague has reduced prairie dog populations in the local area to only remnant populations. Only a very small remnant population survived at RFETS by the end of 1994, and by early 1995 no prairie dogs remained. Locations of historic prairie dog colonies at RFETS are shown on Figure 3-8.

Beaver

A single beaver (*Castor canadensis*) was recorded in Pond A-1 in 1993 and 1994, but has since disappeared. Evidence of beavers was recorded near Pond C-2 in the Woman Creek drainage during the baseline characterization (DOE 1992). Suitable habitat for the species is extremely limited at RFETS due to the intermittent stream flows and the water management regimen at the site. While pioneering individuals can be expected from time to time, no permanent populations are expected to become established at RFETS.

40

3.1.4 Carnivores

The dominant carnivore species at RFETS is the coyote (*Canis latrans*), with the next most frequently observed species being the raccoon (*Procyon lotor*). The coyote population suffered a decline in late 1994, probably due to canine distemper which swept through the local area. The population rebounded somewhat, and by the end of 1995 was estimated to be approximately 10 animals. This is 66 percent of the population levels documented in 1993 and 1994. With the abundant prey species at RFETS, the population can be expected to rebound to the average of 15 individuals previously documented (DOE 1994a and 1995). Areas frequented by coyotes are shown in Figure 3-9. The 3-year data summary used to create Figure 3-9 is provided in Appendix B.

Raccoons are most frequently documented from tracks or through small mammal trapping activities. Due to their penchant for robbing bait from traps set for small mammal studies, raccoons are often trapped along small mammal traplines. Based on trapping during 1995, the raccoon population estimate for RFETS is an average of 20 individuals in the BZ, and as high as another 24 in the developed area where food scraps are readily available in dumpsters. Locations of raccoon observations are shown on Figure 3-10. The 3-year data summary used to create Figure 3-10 is provided in Appendix B.

Other carnivores present at RFETS include long-tailed weasels (*Mustela frenata*), striped skunks (*Mephitis mephitis*), badgers (*Taxidea taxus*), bobcats (*Lynx rufus*), gray foxes (*Urocyon cinereoargenteus*), red foxes (*Vulpes vulpes*), and mountain lions (*Felis concolor*). Area use by carnivores other than coyotes is summarized in Figure 3-10. Feral domestic cats (*Felis domesticus*) are also common around the buildings of the Industrial Area. The majority of these species are secretive and nocturnal, thus they are seldom observed during normal surveys. Sightings are often limited to fortuitous sightings, night surveys, and identification of observed tracks or sign (see Table 3-1 for numbers observed in 1995). Population estimates of these species are difficult to obtain without considerable effort, consequently, numbers of carnivores occupying the site, except for coyotes, are not well documented.

Population trends of carnivores, the top species in the mammalian food chain, are an indicator of the ecological health of an area. The top carnivores in an ecosystem must have a large, healthy population of prey species upon which to subsist. Reduced numbers of prey species are normally reflected in reduced numbers of carnivores.

3.1.5 Waterfowl (Ducks, Geese, and Shorebirds)

The majority of the 46 species of waterfowl and other shorebirds observed at RFETS are primarily around the impoundments (ponds), as shown in Figure 3-11. The 3-year data summary used to create Figure 3-11 is provided in Appendix B. Of this group, 13 species have been documented as breeders or suspected breeders at the site. Relative abundance and habitat use for all observed bird species, including waterfowl, are summarized in Table 3-3.

Some puddle-ducks, such as mallards (*Anas platyrhynchos*), are observed in pools, at seeps, and along creeks. Great blue herons (*Ardea herodias*) are observed on impoundment mudflats, and in ditches, short marshland, and wet meadows. Typically, larger numbers of waterfowl are observed at the site during the Spring migration than during Fall migration. In Spring 1995 there were 24 species, represented by 1,119 individuals observed. During the Fall migration, 15 species, represented by 692 individuals were recorded at RFETS (see Table 3-4). Waterfowl in Spring migration frequently move to the northern-most open water and congregate at such

43

TABLE 3-3. BIRD DISTRUBUTION BY HABITAT AT ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BASED ON DATA FROM 1991, 1993, 1994, AND 1995

Species Common Name	Species Scientific Name	Seasonal Abundance				Habitats						Neotrop	Breeding
		Sp	Su	Fa	Wi	G	D	T	R	W	M	Mig (1)	Status
GREBES	***PODICIPEDIDAE***												
Western Grebe*	*Aechmophorus occidentalis*	R									X		
Eared Grebe*	*Podiceps nigricollis*	R		R							X		
Pied-billed Grebe	*Podilymbus podiceps*	U	U	U							X		Confirmed
PELICANS	***PELECANIDAE***												
American White Pelican (2)	*Pelecanus erythrorhynchos*	O	O								X		
CORMORANTS	***PHALACROCORACIDAE***												
Double-crested Cormorant	*Phalacrocorax auritus*	O	U	O			X				X		
HERONS	***ARDEIDAE***												
Great Blue Heron	*Ardea herodias*	U	C	U		X			X	X	X		
Green-backed Heron	*Butorides striatus*	O									X		
Black-crowned Night-heron	*Nycticorax nycticorax*	U	C				X		X	X	X		Confirmed
GEESE AND DUCKS	***ANATIDAE***												
Wood Duck*	*Aix sponsa*		R								X		Confirmed
Northern Pintail	*Anas acuta*	O	O								X		
American Wigeon	*Anas americana*	O	O		O						X		
Northern Shoveler	*Anas clypeata*	U	U								X		
Green-winged Teal	*Anas crecca*	C	U	O	U						X		
Cinnamon Teal	*Anas cyanoptera*	C	O								X		
Blue-winged Teal	*Anas discors*	C	O	C							X		Confirmed
Mallard	*Anas platyrhynchos*	A	A	C	C	X	X		X	X	X		Confirmed
Gadwall	*Anas strepera*	C	U	U							X		Confirmed
Greater Scaup	*Atthya marila*	O		O							X		
Lesser Scaup	*Aythya affinis*	C		U	U						X		
Redhead	*Aythya americana*	U	U		U						X		
Ring-necked Duck	*Aythya collaris*	U		U							X		
Canvasback	*Aythya valisineria*				U						X		
Canada Goose	*Branta canadensis*	U	U	U	U	X				X	X		Confirmed
Bufflehead	*Bucephala albeola*	U		C	U		X			X	X		
Common Goldeneye	*Bucephela clangula*	U		U	U						X		
Snow Goose	*Chen caerulescens*			U		X					X		
Hooded Merganser	*Lophodytes cucullatus*	O									X		
Common Merganser	*Mergus merganser*	U		O							X		
AMERICAN VULTURES	***CATHARTIDAE***												
Turkey Vulture	*Cathartes aura*	O	O	O		X	X	X	X	X	X	Yes	
EAGLES AND HAWKS	***ACCIPITRIDAE***												
Cooper's Hawk	*Accipiter cooperii*		O			X						Yes	
Northern Goshawk (3)	*Accipiter gentilis*				R	X		X				Yes	
Sharp-shinned Hawk	*Accipiter striatus*	U		U		X	X		X	X		Yes	
Golden Eagle	*Aquila chrysaetos*	O	O	O	O	X	X	X	X	X	X	Yes	
Red-tailed Hawk	*Buteo jamaicensis*	C	C	C	C	X	X	X	X	X	X	Yes	Confirmed
Rough-legged Hawk	*Buteo lagopus*	O		C	C	X	X	X	X	X	X		
Ferruginous Hawk (3)	*Buteo regalis*	O	O	O	C	X	X	X	X	X	X	Yes	
Swainson's Hawk	*Buteo swainsoni*	U	U	O		X		X	X	X	X	Yes	Confirmed
Northern Harrier	*Circus cyaneus*	O	U	O	U	X	X	X	X	X	X	Yes	Suspected
Bald Eagle (4)	*Haliaeetus lecocephalus*			O	O	X		X			X		

TABLE 3-3. CONTINUED

Species Common Name	Species Scientific Name	Seasonal Abundance Sp	Su	Fa	Wi	Habitats G	D	T	R	W	M	Neotrop Mig (1)	Breeding Status
FALCONS	***FALCONIDAE***												
Merlin	*Falco columbarius*	R			R				X	X		Yes	
Prairie Falcon	*Falco mexicanus*	O		O	O	X	X	X	X	X		Yes	
Peregrine Falcon (4)	*Falco peregrinus*	R		R	R	X		X	X	X		Yes	
American Kestrel	*Falco sparverius*	O	U	U	O	X	X	X	X	X	X	Yes	Confirmed
GROUSE AND TURKEYS	***PHASIANIDAE***												
Wild Turkey	*Meleagris gallopavo*	R				X							
Ring-necked Pheasant	*Phasianus colchicus*	U	U	U	U	X			X	X	X		Suspected
RAILS AND COOTS	***RALLIDAE***												
American Coot	*Fulica americana*	U	U	U		X				X	X		Confirmed
Sora	*Porzana carolina*		U								X		Suspected
Virginia Rail	*Rallus limicola*	U									X		Suspected
CRANES	***GRUIDAE***												
Sandhill Crane (2)	*Grus canadensis*			O		X					X		
PLOVERS	***CHARADRIIDAE***												
Killdeer	*Charadrius vociferus*	C	C	U		X	X		X	X	X		Confirmed
STILTS AND AVOCETS	***RECURVIROSTRIDAE***												
American Avocet	*Recurvirostra americana*	U											
SANDPIPERS AND ALLIES	***SCOLOPACIDAE***												
Spotted Sandpiper	*Actitis macularia*	C	U								X		
Pectoral Sandpiper	*Calidris melanotos*	O	O								X		
Willet	*Catoptrophorus semipalmatus*	U	O								X		
Common Snipe	*Gallinago gallinago*	U	C	U					X	X	X		Confirmed
Long-billed Dowitcher	*Limnodromus scolopaceus*	O									X		
Long-billed Curlew (2)	*Numenius americanus*	R			R		X					Yes	
Wilson's Phalarope	*Phalaropus tricolor*	U											
Lesser Yellowlegs	*Tringa flavipes*	O	O								X		
Greater Yellowlegs	*Tringa melanoleuca*		R										
Solitary Sandpiper	*Tringa solitaria*	U	O								X		
GULLS	***LARIDAE***												
Ring-billed Gull	*Larus delawarensis*	C	O	O	O	X		X	X		X		
Franklin's Gull	*Larus pipixcan*			O									
PIGEONS AND DOVES	***COLUMBIDAE***												
Band-tailed Pigeon	*Columba fasciata*		O			X						Yes	Confirmed
Rock Dove	*Columba livia*	C	C	C	C	X	X		X	X	X		Confirmed
Mourning Dove	*Zenaida macroura*	C	C	C		X	X	X	X	X	X		Confirmed
OWLS	***STRIGIDAE***												
Short-eared Owl	*Asio flammeus*	O	O	O	O	X		X	X	X		Yes	
Long-eared Owl	*Asio otus*		O	O				X	X	X		Yes	
Burrowing Owl (3)	*Athene cunicularia*	R	R			X						Yes	
Great Horned Owl	*Bubo virginianus*	C	C	C	C	X	X	X	X	X	X		Confirmed
NIGHT JARS	***CAPRIMULGIDAE***												
Common Nighthawk	*Chordeiles minor*	U	U			X	X	X		X	X	Yes	Confirmed
Common Poorwill	*Phalaenoptilus nuttallii*		C			X		X				Yes	
SWIFTS	***APODIDAE***												
Black Swift* (3)	*Cypseloides niger*	R				X						Yes	

TABLE 3-3. CONTINUED

Species Common Name	Species Scientific Name	Seasonal Abundance Sp	Su	Fa	Wi	Habitats G	D	T	R	W	M	Neotrop Mig (1)	Breeding Status
HUMMINGBIRDS	***TROCHILIDAE***												
Broad-tailed Hummingbird	*Selasphorus platycercus*		O			X	X	X		X		Yes	Suspected
Rufous Hummingbird	*Selasphorus rufus*		O						X			Yes	
KINGFISHERS	***ALCEDINIDAE***												
Belted Kingfisher	*Ceryle alcyon*	O	O	O						X	X	Yes	
WOODPECKERS	***PICIDAE***												
Northern Flicker	*Colaptes auratus*	U	U	C	C	X	X	X	X	X			Suspected
Downy Woodpecker	*Picoides pubescens*		O	O	O			X	X	X			Suspected
Hairy Woodpecker	*Picoides villosus*			O				X	X	X			
Red-naped Sapsucker	*Sphyrapicus nuchalis*			O						X		Yes	
TYRANT FLYCATCHERS	***TYRANNIDAE***												
Olive-sided Flycatcher	*Contopus borealis*			O						X		Yes	
Western Wood-Pewee	*Contopus sordidulus*	U	U	O		X		X	X	X		Yes	
Hammond's Flycatcher	*Empidonax hammondii*	U								X		Yes	
Dusky Flycatcher	*Empidonax obserholseri*	U		O						X	X	Yes	
Cordilleran Flycatcher	*Empidonax occidentails*	U		O				X		X	X	Yes	
Willow Flycatcher (3)	*Empidonax traillii*	U								X		Yes	
Ash-throated Flycatcher*	*Myiarchus cinerascens*	R						X				Yes	
Eastern Phoebe	*Sayornis phoebe*	R								X		Yes	
Say's Phoebe	*Sayornis saya*	C	C	U		X	X	X	X	X	X	Yes	Confirmed
Scissor-tailed Flycatcher	*Tyrannus forficatus*	R				X						Yes	
Eastern Kingbird	*Tyrannus tyrannus*	O	C			X		X	X	X	X	Yes	Confirmed
Western Kingbird	*Tyrannus verticalis*	C	C	U		X	X	X	X	X	X	Yes	Confirmed
LARKS	***ALAUDIDAE***												
Horned Lark	*Eremophila alpestris*	U	O	U	C	X	X	X		X	X	Yes	Confirmed
SWALLOWS	***HIRUNDINIDAE***												
Cliff Swallow	*Hirundo pyrrhonota*	U	C	U		X	X	X	X	X	X	Yes	Confirmed
Barn Swallow	*Hirundo rustica*	C	A	U		X	X	X	X	X	X	Yes	Confirmed
Northern Rough-winged Swallow	*Steigidopteryx serripennis*	O				X					X	Yes	
Tree Swallow	*Tachycineta bicolor*	C	C	O		X		X	X	X	X	Yes	Suspected
Violet-green Swallow	*Tachycineta thalassina*	U	U			X		X	X	X	X	Yes	Suspected
CROWS, JAYS, MAGPIES	***CORVIDAE***												
American Crow	*Corvus brachyrhynchos*	O	O	O	O	X		X			X		
Common Raven	*Corvus corax*	U	O	O	U	X	X	X	X	X	X		Confirmed
Blue Jay	*Cyanocitta cristata*		U	U		X		X	X	X	X		
Pinyon Jay	*Gymnorhinus cyanocephalus*		O							X			
Black-billed Magpie	*Pica pica*	C	C	C	C	X	X	X	X	X	X		Confirmed
TITMICE	***PARIDAE***												
Black-capped Chickadee	*Parus atricapillus*	O	O	O	O			X	X	X			Confirmed
NUTHATCHES	***SITIIDAE***												
Red-breasted Nuthatch*	*Sitta canadensis*			R						X			
White-breasted Nuthatch	*Sitta carolinensis*	U								X			
WRENS	***TROGLODYTIDAE***												
Marsh Wren	*Cistothorus palustris*	U	U	U			X				X	Yes	Suspected
Rock Wren	*Salpinctes obsoletus*	C	C	U		X	X			X	X		
House Wren	*Troglodytes aedon*	U	O	O		X		X	X	X		Yes	Suspected
Winter Wren	*Troglodytes troglodytes*			R					X				

TABLE 3-3. CONTINUED

Species Common Name	Species Scientific Name	Seasonal Abundance Sp	Su	Fa	Wi	Habitats G	D	T	R	W	M	Neotrop Mig (1)	Breeding Status
MUSCICAPIDS	***MUSCICAPIDAE***												
Hermit Thrush*	*Catharus guttatus*	U						X	X	X		Yes	
Swainson's Thrush	*Catharus ustulatus*		U					X	X			Yes	
Townsend's Solitaire	*Myadestes townsendi*	U			O					X	X	Yes	
Blue-gray Gnatcatcher	*Polioptila caerulea*	U		R				X	X	X		Yes	Confirmed
Ruby-crowned Kinglet	*Regulus calendula*			C						X		Yes	Suspected
Golden-crowned Kinglet	*Regulus satrapa*		R					X	X	X			
Mountain Bluebird	*Sialia currucoides*	U		U		X		X				Yes	
American Robin	*Turdus migratorius*	C	C	U	O	X	X	X	X	X	X	Yes	Confirmed
THRASHERS	***MIMIDAE***												
Gray Catbird	*Dumetella carolinensis*	U	U						X			Yes	Suspected
Sage Thrasher	*Oreoscoptes montanus*	U	U	U		X	X	X	X	X		Yes	Suspected
PIPITS	***MOTACILLIDAE***												
American Pipit*	*Anthus rubescens*	U		U		X				X		Yes	
WAXWINGS	***BOMBYCILLIDAE***												
Bohemian Waxwing	*Bombycilla garrulus*				U			X					
SHRIKES	***LANIIDAE***												
Northern Shrike	*Lanius excubitor*				O					X			
Loggerhead Shrike (5)	*Lanius ludovicianus*	U	O	O	O	X	X	X	X	X	X	Yes	Suspected
STARLINGS	***STURNIDAE***												
European Starling	*Sturnus vulgaris*	C	A	C	U	X	X	X	X	X	X		Confirmed
VIREOS	***VIREONIDAE***												
Warbling Vireo	*Vireo gilvus*	U	U							X		Yes	Suspected
Solitary Vireo	*Vireo solitarius*			O						X		Yes	
WOOD WARBLERS	***EMBERIZIDAE: Parulinae***												
Yellow-rumped Warbler	*Dendroica coronata*	C	O	C				X	X	X		Yes	
Black-throated Gray Warbler	*Dendroica nigrescens*				R			X		X		Yes	
Palm Warbler	*Dendroica palmarum*			R		X					X	Yes	
Chestnut-sided Warbler*	*Dendroica pensylvanica*		R					X				Yes	Suspected
Yellow Warbler	*Dendroica petechia*	C	C	C		X		X	X	X	X	Yes	Confirmed
Townsend's Warbler	*Dendroica townsendi*			O							X	Yes	
Common Yellowthroat	*Geothlypis trichas*	U	C	C		X		X	X	X	X	Yes	Confirmed
Yellow-breasted Chat	*Icteria virens*	U						X		X		Yes	Suspected
MacGillivray's Warbler	*Oporonis tolmiei*			U		X		X	X	X	X	Yes	
Ovenbird	*Seiurus aurocapillus*	R						X		X		Yes	
Virginia's Warbler	*Vermivora virginiae*			R				X				Yes	
Wilson's Warbler	*Wilsonia pusilla*			U				X	X	X	X	Yes	
TANAGERS	***EMBERIZIDAE: Thraupinae***												
Western Tanager	*Piranga ludoviciana*	U		U						X		Yes	
GROSBEAKS AND ALLIES	***EMBERIZIDAE: Cardinalinae***												
Blue Grosbeak	*Guiraca caerulea*	U	C	U		X		X	X	X		Yes	Confirmed
Lazuli Bunting	*Passerina amoena*	O	O					X		X		Yes	
Indigo Bunting	*Passerina cyanea*	O	O							X		Yes	
Black-headed Grosbeak	*Pheucticus melanocephalus*			O						X		Yes	
TOWHEES AND SPARROWS	***EMBERIZIDAE: Emberizinae***												
Baird's Sparrow (3)	*Ammodramus bairdii*	R		R		X		X				Yes	
Grasshopper Sparrow	*Ammodramus savannarum*	C	C	U		X	X	X	X		X	Yes	Confirmed

TABLE 3-3. CONTINUED

Species Common Name	Species Scientific Name	Seasonal Abundance Sp	Su	Fa	Wi	Habitats G	D	T	R	W	M	Neotrop Mig (1)	Breeding Status
Lark Bunting	*Calamospiza melanocorys*	O	O	O		X	X					Yes	
Lapland Longspur	*Calcarius lapponicus*				O	X							
Chestnut-collared Longspur*	*Calcarius ornatus*				R	X						Yes	
Lark Sparrow	*Chondestes grammacus*		O	O				X			X	Yes	Suspected
Dark-eyed Junco	*Junco hyemalis*	U	U	U	O	X		X	X	X	X	Yes	Suspected
Lincoln's Sparrow	*Melospiza lincolnii*	U		U						X	X	Yes	
Song Sparrow	*Melospiza melodia*	C	C	C	U	X	X	X	X	X	X		Confirmed
Savannah Sparrow	*Passerculus sandwichensis*	U	U	U		X	X	X	X	X	X	Yes	Suspected
Green-tailed Towhee	*Pipilo chlorurus*	U	U	O				X	X	X		Yes	Suspected
Rufous-sided Towhee	*Pipilo erythrophthalmus*	C	C	C	O	X	X	X	X	X	X	Yes	Confirmed
Vesper Sparrow	*Pooecetes gramineus*	A	A	C		X	X	X	X	X	X	Yes	Confirmed
American Tree Sparrow	*Spizella arborea*	U		U	C	X	X	X	X	X	X		
Brewer's Sparrow	*Spizella breweri*		U	C		X		X		X	X	Yes	
Clay-colored Sparrow	*Spizella pallida*			U	U	X		X		X	X	Yes	
Chipping Sparrow	*Spizella passerina*	U	U	C	O	X	X	X	X	X	X	Yes	
White-crowned Sparrow	*Zonotrichia leucophrys*	C		C		X		X	X	X			
Harris' Sparrow	*Zonotrichia querula*				R					X			
MEADOWLARKS, BLACKBIRDS	***EMBERIZIDAE: Icterinae***												
Red-winged Blackbird	*Agelaius phoeniceus*	A	A	C	U	X	X	X	X	X	X	Yes	Confirmed
Brewer's Blackbird	*Euphagus cyanocephalus*	C	U	O		X	X	X	X	X	X	Yes	Confirmed
Northern Oriole	*Icterus galbula*	C	C			X		X	X	X	X	Yes	Confirmed
Brown-headed Cowbird	*Molothrus ater*	U	C			X		X	X	X	X	Yes	Suspected
Common Grackle	*Quiscalus quiscula*	U	C	O		X	X		X	X	X		Confirmed
Western Meadowlark	*Sturnella neglecta*	A	A	A	O	X	X	X	X	X	X	Yes	Confirmed
Yellow-headed Blackbird	*Xanthocephalus xanthocephalus*	C	C							X	X	Yes	Confirmed
FINCHES	***FRINGILLIDAE***												
Pine Siskin	*Carduelis pinus*	U	O	O	O	X		X	X	X	X	Yes	
Lesser Goldfinch	*Carduelis psaltria*	O	U	O		X	X	X	X	X		Yes	Suspected
American Goldfinch	*Carduelis tristis*	C	A	C	O	X	X	X	X	X	X	Yes	Confirmed
Cassin's Finch	*Carpodacus cassinii*	R							X			Yes	
House Finch	*Carpodacus mexicanus*	A	A	A	U	X	X	X	X	X	X		Confirmed
OLD WORLD SPARROWS	***PASSERIDAE***												
House Sparrow	*Passer domesticus*	C	C	C	C	X	X			X			Confirmed

DEFINITIONS

SEASONS

Sp = Spring
Su = Summer
Fa = Fall
Wi = Winter

HABITATS

G = Grassland
D = Disturbed
T = Tall Upland Shrubland
R = Riparian Shrubland
W = Woodland
M = Marshland

RELATIVE ABUNDANCE (In appropriate habitat for species)

A = Abundant
C = Common
U = Uncommon
O = Occasional
R = Rare **

NOTE

Taxonomic organization of table follows "Colorado Birds: A reference to their distribution and habitat," Andrews & Righter, 1992.

(1) Neotropical Migrants are a passerine bird group of concern due to significant population declines over two continents.

(2) A Colorado Species of Special Concern

(3) Former candidate species for listing as a federal threatened or endangered species

(4) Federal threatened or endangered species

(5) Loggerhead Shrike is still treated as a former a candidate by USFWS Region 6.

TABLE 3-4. SUMMARY OF 1995 SEASONAL WATERFOWL USE

SPRING	SUMMER	FALL	WINTER
AMERICAN COOT	AMERICAN COOT	AMERICAN COOT	AMERICAN WIGEON
AMERICAN GOLDENEYE	AMERICAN WHITE PELICAN	AMERICAN GOLDENEYE	GREEN-WINGED TEAL
AMERICAN WHITE PELICAN	BLACK-CROWNED NIGHT HERON	AMERICAN WIGEON	LESSER SCAUP
AMERICAN WIGEON	BLUE-WINGED TEAL	BLUE-WINGED TEAL	MALLARD
BLACK-CROWNED NIGHT HERON	COMMON MERGANSER	BUFFLEHEAD	REDHEAD
BLUE-WINGED TEAL	DOUBLE-CRESTED CORMORANT	CANADA GOOSE	SNOW GOOSE
BUFFLEHEAD	GADWALL	DOUBLE-CRESTED CORMORANT	
CANADA GOOSE	GREAT BLUE HERON	EARED GREBE	
CINNAMON TEAL	MALLARD	GADWALL	
COMMON MERGANSER	NORTHERN SHOVELER	GREAT BLUE HERON	
DOUBLE-CRESTED CORMORANT	PIED-BILLED GREBE	GREEN-WINGED TEAL	
EARED GREBE	WOOD DUCK	MALLARD	
GADWALL		PIED-BILLED GREBE	
GREAT BLUE HERON		RING-NECKED DUCK	
GREATER SCAUP		SANDHILL CRANE	
GREEN-WINGED TEAL			
LESSER SCAUP			
MALLARD			
NORTHERN PINTAIL			
NORTHERN SHOVELER			
PIED-BILLED GREBE			
REDHEAD			
RING-NECKED DUCK			
WESTERN GREBE			
TOTAL NUMBER OF SPECIES 24	**TOTAL NUMBER OF SPECIES 12**	**TOTAL NUMBER OF SPECIES 15**	**TOTAL NUMBER OF SPECIES 6**

locations until the thaw progresses farther. This causes seasonal concentrations of waterfowl at certain locations for short periods. This seasonal concentration of waterfowl occurs at some impoundments, producing observations of large numbers in mixed species flocks.

Summer and Winter numbers of waterfowl and shorebirds recorded at RFETS are lower than migration season numbers. Summer residents during 1995 included 12 species, represented by 518 individuals, while 1995 Winter visitors included six species represented by 295 individuals.

The most common waterfowl at RFETS are mallards (960 observations in 1995) and Canada geese (*Branta canadensis*) (328 observations in 1995). The most common wading bird at RFETS is the great blue heron (68 observations in 1995). Black-crowned night herons (*Nycticorax nycticorax*), though not numerous at the site (13 observations in 1995), have been confirmed as breeding at Pond D-2.

In addition to the species listed above, several species are common Summer season residents. These species include double-crested cormorants (*Phalacrocorax auritus*) with 58 observations in Summer 1995; pied-billed grebes (*Podilymbus podiceps*) with 60 observations in Summer 1995; American coots (*Fulcia americana*) with 48 observations in Summer 1995; and blue-winged teal (*Anas discors*) with 20 observations in Summer 1995.

3.1.6 Raptors

Combined survey results from 1993, 1994, and 1995 indicate that the most common raptors at RFETS year-round are red-tailed hawks (*Buteo jamaicensis*), with 100 observations in 1995, followed by great horned owls (*Bubo virginianus*), with 95 observations in 1995; American kestrels (*Falco sparverius*) with 67 observations in 1995; and Northern Harriers (*Circus cyaneus*) with 50 observations in 1995. The most common Summer season raptors, in addition to those just listed, are Swainson's hawks (*Buteo swainsoni*) with 21 observations in Summer 1995. Golden eagles (*Aquila chrysaetos*), while observed at RFETS year-round are not numerous (20 observations in 1995). The more common Winter raptors include roughlegged hawks (*Buteo lagopus*) with 21 Winter observations in 1995; American kestrels with 16 Winter 1995 observations; red-tailed hawks with 21 Winter 1995 observations; bald eagles with 18 Winter 1995 observations; and great horned owls with 35 Winter observations. Prairie falcons (Falco mexicanus) are regular, though rare Winter visitors to RFETS. Table 3-5 summarizes 1995 seasonal observation data for raptors in the RFETS BZ.

Ferruginous hawk numbers recorded at RFETS were down to one observation each in 1994 (DOE 1995) and 1995 as compared to seven in 1993 (DOE 1994a). Greater densities have been recorded in the "Extended Observation Area" (EA) which includes areas bounding RFETS on the north, east, and south. Ferruginous hawks recorded in the EA have declined in numbers since the prairie dog die-off of 1994. In 1993 (DOE 1994a) there were 40 observations of ferruginous hawks recorded in the EA (DOE 1994a), while in 1994 (DOE 1994), half that number (20) was recorded, and in 1995 there were 28.

Other raptor species considered occasional visitors to RFETS, and recorded in 1995, include short-eared owls (*Asio flammeus*), long-eared owls (*Asio otus*), sharp-shinned hawks (*Accipiter striatus*), American peregrine falcons, and burrowing owls. Merlins (*Falco columbarius*) have been recorded in previous years (DOE 1995). Several raptors, including great horned owls, American kestrels, red-tailed hawks, and Swainson's hawks have been documented as nesting within the RFETS boundaries (DOE 1992, 1994a and 1995).

Although the raptor species using RFETS vary between the Spring-Summer and Fall-Winter seasons (see Table 3-5), the frequent use areas during these seasons are very similar (see Figures 3-12 and 3-13). The use concentrations throughout the year are highest in the Rock Creek shrublands, the riparian corridors of the three main drainages of the site, and around the ponds. Since these are the areas of concentration for prey species (small mammals, songbirds, and waterfowl) higher use of these areas by the avian predators is to be expected. Larger numbers of raptors are observed during Winter, probably due to the greater concentration of over-wintering raptors near available prey sources (e.g., prairie dog colonies). The 3-year data summaries used to create Figures 3-12 and 3-13 are provided in Appendix B.

In the case of raptors, the NRPCP integrated monitoring program for ecologically interactive species has proven valuable in identifying and explaining the decline of some raptors over-wintering in the vicinity of RFETS. During 1994 and again in 1995, raptors observed at the site and in the local area have been less numerous than in previous years. Because NRPCP monitors prey species populations, the die-off of local prairie dog populations was documented in 1994 (DOE 1995), and the present lack of recovery in local populations is well known. Had the drop in prairie dog populations at RFETS and in the vicinity not been observed, the reason for the reduction of raptor species observed at RFETS since the Winter of 1994 might have been difficult to explain. With the reduced prey population, the birds have been forced to find hunting grounds farther afield from their traditional wintering grounds at RFETS and the surrounding vicinity.

3.1.7 Upland Gamebirds

Few upland gamebirds inhabit RFETS. Species observed have been limited to ring-necked pheasant (*Phasianus colchicus*) and wild turkey (*Meleagris gallopavo*) (DOE 1992). Only ring-necked pheasants have been observed on RFETS during the years 1993 (two individuals), 1994 (eight individuals), and 1995 (five individuals) (DOE 1994a and 1995). This species prefers brushy riparian habitat with dense cover, such as the riparian shrublands in the Woman Creek and Smart Ditch bottomlands. Figure 3-14 shows area use locations for ring-necked pheasants. The 3-year data summary used to create Figure 3-14 is provided in Appendix B.

3.1.8 Herptiles (Reptiles and Amphibians)

During the Summer of 1995, a limited search for reptiles and amphibians was conducted at RFETS. Table 3-6 shows a summary of locations, habitats, and numbers of individuals for each species observed in 1995. The continued existence of several species was confirmed, and one species, the bullfrog (*Rana catesbeiana*) was documented for the first time at several ponds. Boreal chorus frogs (*Pseudacris triseriatus maculata*) were confirmed at many locations on the site. These tiny frogs breed in permanent pools, ponds, and seasonal melt-water or runoff puddles. A single great plains toad (*Bufo cognatus*) was recorded in mesic mixed grasslands habitat. A northern leopard frog (*Rana pipiens*) was recorded along a pond margin. Tiger salamanders (*Ambystoma tigrinum*) were confirmed in ponds, pools, seasonal puddles, and watercourses at RFETS. This species was also randomly encountered in such widely separated locations as the xeric mixed grasslands of the eastern pediments and parking lots of the Industrial Area.

54

TABLE 3-5. SUMMARY OF 1995 SEASONAL RAPTOR USE

SEASON	NUMBER OF OBSERVATIONS	SEASON TOTAL
FALL		
RED-TAILED HAWK	24	
GREAT HORNED OWL	15	
AMERICAN KESTREL	9	
NORTHERN HARRIER	21	
SWAINSON'S HAWK	2	
ROUGHLEGGED HAWK	6	
GOLDEN EAGLE	1	
TURKEY VULTURE	1	
COOPER'S HAWK	2	
BURROWING OWL	1	
AMERICAN PEREGRINE FALCON	1	
SHORT-EARED OWL	1	**FALL TOTAL 84**
WINTER		
RED-TAILED HAWK	21	
GREAT HORNED OWL	35	
AMERICAN KESTREL	16	
NORTHERN HARRIER	21	
ROUGHLEGGED HAWK	21	
BALD EAGLE	18	
GOLDEN EAGLE	7	
TURKEY VULTURE	1	
PRAIRIE FALCON	4	
FERRUGINOUS HAWK	1	**WINTER TOTAL 145**
FALL-WINTER TOTAL	**229**	
SPRING		
RED-TAILED HAWK	27	
GREAT HORNED OWL	27	
AMERICAN KESTREL	28	
NORTHERN HARRIER	4	
SWAINSON'S HAWK	11	
ROUGHLEGGED HAWK	1	
BALD EAGLE	4	
GOLDEN EAGLE	9	
SHARP-SHINNED HAWK	4	
BURROWING OWL	1	
AMERICAN PEREGRINE FALCON	1	
NORTHERN GOSHAWK	1	
LONG-EARED OWL	1	**SPRING TOTAL 119**
SUMMER		
RED-TAILED HAWK	28	
GREAT HORNED OWL	18	
AMERICAN KESTREL	14	
NORTHERN HARRIER	4	
SWAINSON'S HAWK	21	
GOLDEN EAGLE	3	**SUMMER TOTAL 88**
SPRING-SUMMER TOTAL	**207**	
		1995 TOTAL 436

TABLE 3-6. 1995 REPTILE AND AMPHIBIAN OBSERVATIONS

DATE	SPECIES	SITE NAME	OP. UNIT	RF GRID N	RF GRID E	HABITAT	NUMBER OF INDIVIDUALS
AMPHIBIANS SPRING SEASON 1995							
05/16/95	BOREAL CHORUS FORG	RS02B		16	K	SHORT MARSH	1
05/16/95	BOREAL CHORUS FROG	RA01B		12	F	TALL MARSH	1
05/23/95	BOREAL CHORUS FROG	RA04B		2	T	TALL MARSH	3
05/15/95	BOREAL CHORUS FORG	BA01R		13	G	STREAM RIFFLE	2
04/28/95	BOREAL CHORUS FROG	RS02B		17	M	NATURAL POND	3
04/24/95	BOREAL CHORUS FROG	POND C-1	OU5	7	N	IMPOUNDMENT	1
04/28/95	BOREAL CHORUS FROG	POND A-3	OU6	12	P	IMPOUNDMENT	3
04/28/95	BOREAL CHORUS FROG	RG02B		16	P	IMPOUNDMENT	9
05/15/95	BOREAL CHORUS FROG	SNWBERPD		11	D	IMPOUNDMENT	4
05/15/95	BOREAL CHORUS FROG			13	H	IMPOUNDMENT	12
05/16/95	BOREAL CHORUS FROG	POND A-1	OU6	12	N	IMPOUNDMENT	8
05/16/95	BOREAL CHORUS FROG	POND A-2	OU6	12	O	IMPOUNDMENT	10
05/16/95	BOREAL CHORUS FROG	POND A-3	OU6	12	P	IMPOUNDMENT	12
05/16/95	BOREAL CHORUS FROG	POND B-3	OU6	10	O	IMPOUNDMENT	6
05/16/95	BOREAL CHORUS FROG	POND B-1	OU6	10	N	IMPOUNDMENT	5
05/16/95	BOREAL CHORUS FORG	RA01B		11	E	MUDFLAT	1
TOTAL SPRING OBSERVATIONS							*81*
05/15/95	GREAT PLAINS TOAD	RG02A		7	G	MESIC MIXED GRASSLAND	1
TOTAL SPRING OBSERVATIONS							*1*
AMPHIBIANS SUMMER SEASON 1995							
07/25/95	BOREAL CHORUS FROG	HA24A		2	T	IMPOUNDMENT	10
07/16/95	BOREAL CHORUS FROG	HA16A		3	F	DITCH RIFFLE	10
07/13/95	BOREAL CHORUS FROG	HA04A		11	N	NATURAL POND	10
07/31/95	BOREAL CHORUS FROG	HA04A		11	N	NATURAL POND	2
07/13/95	BOREAL CHORUS FROG	HWO5A		13	P	IMPOUNDMENT	10
07/13/95	BOREAL CHORUS FROG	HA06A		17	N	NATURAL POND	10
06/23/95	BOREAL CHORUS FROG	RG02B		17	O	NATURAL POND	1
TOTAL SUMMER OBSERVATIONS							*53*
07/26/95	BULLFROG	HA25A		4	R	IMPOUNDMENT	1

TABLE 3-6. CONTINUED

DATE	SPECIES	SITE NAME	OP. UNIT	RF GRID N	RF GRID E	HABITAT	NUMBER OF INDIVIDUALS
07/25/95	BULLFROG	HA25A		4	R	MUDFLAT	1
TOTAL SUMMER OBSERVATIONS							*2*
06/23/95	TIGER SALAMANDER	RG02B		17	O	NATURAL POND	1
TOTAL SUMMER OBSERVATIONS							*1*
AMPHIBIANS FALL SEASON 1995							
09/28/95	NORTHERN LEOPARD FRFOG	LANDFILL	OU7	12	L	IMPOUNDMENT	1
TOTAL FALL OBSERVATIONS							*1*
09/29/95	TIGER SALAMANDER	BLDG850	OU1	8	L	ROAD	1
10/13/95	TIGER SALAMANDER	130 BLDG		8	H	BUILT-UP AREA	1
TOTAL FALL OBSERVATIONS							*2*
REPTILES SPRING SEASON 1995							
05/15/95	WESTERN PAINTED TURTLE	SNWBERPD		11	D	IMPOUNDMENT	1
05/15/95	WESTERN PAINTED TURTLE			13	H	IMPOUNDMENT	5
05/16/95	WESTERN PAINTED TURTLE	RA01B		13	H	IMPOUNDMENT	2
05/16/95	WESTERN PAINTED TURTLE	POND B-2	OU6	10	O	IMPOUNDMENT	2
05/16/95	WESTERN PAINTED TURTLE	POND B-2	OU6	10	O	IMPOUNDMENT	2
05/16/95	WESTERN PAINTED TURTLE	POND B-1	OU6	10	N	IMPOUNDMENT	1
05/23/95	WESTERN PAINTED TURTLE	POND D-1		3	R	IMPOUNDMENT	2
TOTAL SPRING OBSERVATIONS							*15*
05/24/95	WESTERN PLAINS GARTER SNAKE	RW02B		4	N	RIPARIAN SHRUBLAND	1
TOTAL SPRING OBSERVATIONS							*1*
REPTILES SUMMER SEASON 1995							
06/22/95	BULLSNAKE	RG03B		2	M	MESIC MIXED GRASSLAND	1
07/11/95	BULLSNAKE	C-1 DAM	OU5	7	N	MESIC MIXED GRASSLAND	1
07/19/95	BULLSNAKE	HA08A		7	P	TALL MARSH	1
07/12/95	BULLSNAKE	DECONPAD	OU2	8	M	BUILT-UP AREA	1
08/17/95	BULLSNAKE	881 HILL	OU1	8	N	BUILT-UP AREA	1

TABLE 3-6. CONTINUED

DATE	SPECIES	SITE NAME	OP. UNIT	RF GRID N	RF GRID E	HABITAT	NUMBER OF INDIVIDUALS
06/12/95	BULLSNAKE	POND B-2	OU6	10	O	IMPOUNDMENT	1
06/23/95	BULLSNAKE	RW01B		14	R	RIPARIAN WOODLAND	1
TOTAL SUMMER OBSERVATIONS							*7*
07/19/95	EASTERN SHORT-HORNED LIZARD	HX15R		3	O	XERIC MIXED GRASSLAND	1
07/13/95	EASTERN SHORT-HORNED LIZARD	HX21R		12	S	XERIC MIXED GRASSLAND	1
TOTAL SUMMER OBSERVATIONS							*2*
07/12/95	EASTERN YELLOWBELLY RACER	HX02R		2	0	XERIC MIXED GRASSLAND	1
07/12/95	EASTERN YELLOWBELLY RACER	HX03R		16	N	XERIC MIXED GRASSLAND	1
TOTAL SUMMER OBSERVATIONS							*2*
06/15/95	PRAIRIE RATTLESNAKE	RS03B		5	P	RIPARIAN SHRUBLAND	1
06/05/95	PRAIRIE RATTLESNAKE	POND C-2	OU5	7	P	RIPRAP	1
08/01/95	PRAIRIE RATTLESNAKE	RA01B		13	G	MESIC MIXED GRASSLAND	1
TOTAL SUMMER OBSERVATIONS							*3*
07/31/95	WESTERN PAINTED TURTLE	POND D-1		3	S	IMPOUNDMENT	5
07/07/95	WESTERN PAINTED TURTLE	LANDFILL	OU7	12	L	MUDFLAT	9
08/28/95	WESTERN PAINTED TURTLE	LINDSAY		13	H	IMPOUNDMENT	6
06/05/95	WESTERN PAINTED TURTLE	LANDFILL	OU7	13	L	IMPOUNDMENT	1
07/26/95	WESTERN PAINTED TURTLE	LANDFILL	OU7	13	L	IMPOUNDMENT	2
TOTAL SUMMER OBSERVATIONS							*23*
06/22/95	WESTERN PLAINS GARTER SNAKE	RA03B		5	I	TALL MARSH	1
07/18/95	WESTERN PLAINS GARTER SNAKE	HW09R		7	O	RIPARIAN WOODLAND	1
TOTAL SUMMER OBSERVATIONS							*2*
REPTILES FALL SEASON 1995							
09/28/95	WESTERN PAINTED TURTLE	POND A-2	OU6	12	O	IMPOUNDMENT	2
10/03/95	WESTERN PAINTED TURTLE	LANDFILL	OU7	13	L	MUDFLAT	1
TOTAL FALL OBSERVATIONS							***3***

Reptile species confirmed as still present in 1995 included western painted turtles(*Chrysemys picta*), found almost exclusively in the ponds, and eastern short-horned lizards in widely separated locations in xeric mixed grasslands. The more highly mobile snakes are widelydistributed, and species recorded during 1995 included the eastern yellowbelly racer (*Coluber constrictor*), bullsnake (*Pituophis melanoleucus*), the western plains garter snake (*Thamnophis radix*), and the prairie rattlesnake (*Crotalus viridis*).

3.2 MIGRATORY BIRDS

3.2.1 Relative Abundance

Assessment of relative abundance is a qualitative means of determining species densities in various habitats. Relative abundance is based on numbers observed per unit time in a given habitat. Table 3-3 (see Section 3.1) summarizes bird distribution by habitat, based on relative abundance data from migratory bird surveys, relative abundance surveys, sitewide surveys, site-specific surveys, and fortuitous observations. This summary table shows relative abundance in appropriate habitats for each species, but does not estimate total numbers of each species inhabiting RFETS. Some species are very habitat specific, while others are virtually ubiquitous.

Combined records from the different observation methods over the four years discussed in this report indicate that 132 bird species use or visit RFETS in Spring, 106 species in Summer, 110 species in Fall, and 55 species in Winter. Evaluation of habitat use by birds, as indicated by data from combined records from all observation methods, yields somewhat different total species numbers for the different habitats than the species richness data from bird surveys only as discussed below in Section 3.2.3. Based on all combined data, bird species richness in the major habitats at RFETS is 89 species in grasslands, 85 species in tall upland shrubland, 78 species in riparian shrubland, 109 species in riparian woodlands, 104 species in wetlands, and 51 species in disturbed habitats.

3.2.2 General Observations

Several migratory bird species new to RFETS were recorded during 1995. These sightings were made during relative abundance surveys, bird surveys, or were recorded as fortuitous sightings. The new waterfowl include the wood duck (*Aix sponsa*), the western grebe (*Aechmophorus occidentalis*), and the eared grebe (*Podiceps nigricollis*). The new passerine (songbird) species are the black swift (*Cypseliodes niger*), the ash-throated flycatcher (*Myiarchus cinerascens*), the red-breasted nuthatch (*Sitta canadensis*), the hermit thrush (*Catharus guttatus*), the American pipit (*Anthus rubescens*), the chestnut-sided warbler (*Dendroica pensylvanica*), and the chestnut-collared longspur (*Calcarius ornatus*).

As a result of breeding bird surveys, relative abundance surveys, and fortuitous observations, the list of confirmed and suspected breeding bird species continued to grow in 1995. Confirmed breeding species are those species that have been observed building nests, tending eggs, tending young, or for which young, flightless nestlings have been observed. Suspected breeding species are those that have been observed carrying nesting material, food, or other such indicators of breeding activity without actual visual confirmation of the presence of a nest or young. The current list of breeding bird species now encompasses 46 confirmed species and 21 species suspected of breeding on RFETS (a total of 67). Among the 99 species of neotropical migrants known to use RFETS, 43 species are confirmed or suspected breeders at the site.

62

3.2.3 Migratory Bird Survey Summaries

After several years of migratory bird surveys, the data in the MBD can be queried for trends in species richness (number of species) and bird densities by habitat. Twenty permanent transects in seven habitats have been surveyed monthly, using bird survey transects as discussed in the methods section, for four complete years. The years evaluated included 1991 (DOE 1992), 1993 (DOE 1994a), 1994 (DOE 1995), and the current report year of 1995. No surveys were performed between the baseline characterization (DOE 1992) and the inception of the NRPCP in 1993. Results of the four years' bird observations for the Summer breeding season (June) and for Winter are discussed in this section. Species richness was tallied and species density was calculated for each of seven habitats. Breeding season calculations included data collected during the month of June in 1991, 1993, 1994, and 1995. Winter season data were collected during the Winters of 1991-92, 1993-94, 1994-95, and 1995-96. Trends in species richness and species densities are discussed below.

Bird Species Richness Trends

The general trend in species richness (diversity), across all habitats, during Winter and the breeding season is a slight increase over time (see Figure 3-15). Table 3-7 and Figures 3-16 through 3-22 demonstrate that each habitat individually, except wetlands, also reflects this trend for both seasons examined. This upward trend in species richness reflects the additional species recorded each year probably due to greater familiarity of the NRPCP ecologists with the RFETS bird species, and also reflects the greater probability of encountering representatives of some of the rarer species at the site with greater cumulative time afield.

In contrast to this overall upward trend in species richness is the decline of neotropical migratory birds across all habitats (see Figure 3-23). Neotropical migrants are characterized as migratory bird species that travel to Central and South America to over-winter, and return to North America to breed. Although this downward trend of neotropical migrants at RFETS may reflect the general decline of this group regionally, it is probably not significant for RFETS alone. One neotropical migratory species previously recorded at RFETS, the savannah sparrow (*Passerculus sandwichensis*), was not recorded during the 1994 or the 1995 breeding season. Since the variation in species richness only reflects a difference of four species over five years, and some neotropical migrants are present only as a few individuals in any given year, this fluctuation is probably normal. If the species richness shows further decline, however, this may become cause for concern.

Species richness in Winter is characterized by relatively low numbers as compared to Summer (see Figure 3-15). Typically the Winter assemblage of bird species (species normally present) changes from year to year. Appendix C has data summaries for bird species richness. Analysis of Winter data is hampered by the lower numbers of observations in that season. Habitats that exhibit fluctuation of bird species assemblages from year to year include wetlands, riparian shrublands, mesic mixed grasslands, reclaimed grasslands, and xeric mixed grasslands. Conversely, riparian woodlands consistently harbor American tree sparrows (*Spizella arborea*), great-horned owls, and northern flickers (*Colaptes auratus*) in Winter. In tall upland shrublands, Winter residents routinely include black-billed magpies (*Pica pica*), and black-capped chickadees (*Parus atricapillus*).

Summer bird assemblages show the greatest diversity in riparian woodland and tall upland shrubland habitats (see Figures 3-16 through 3-22). These two habitats have the greatest annual maximums and averages of species richness among all the habitats surveyed. Habitats

63

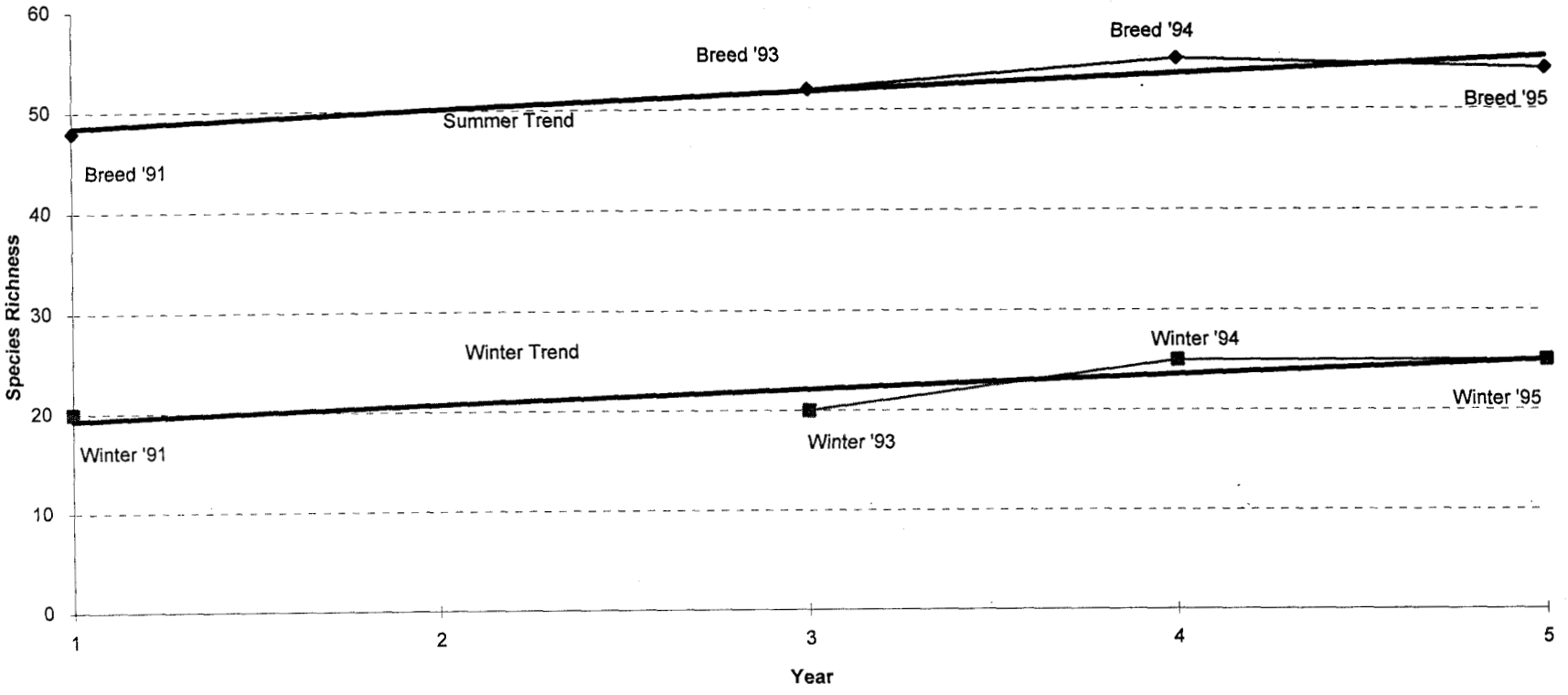


Figure 3-15 Seasonal and Annual Variation of Bird Species Richness in All Habitat (1991, 1993, 1994, and 1995)

TABLE 3-7. SPECIES RICHNESS OF BIRD COMMUNITIES BY HABITAT

HABITAT	SEASON	1991/92	1993/94	1994/95	1995/96
BOTTOMLAND SHRUBLAND	BREEDING	17	21	19	21
	WINTER	3	2	6	4
TALL UPLAND SHRUBLAND	BREEDING	22	31	37	39
	WINTER	6	7	13	10
MESIC MIXED GRASSLAND	BREEDING	15	12	30	22
	WINTER	4	2	11	5
XERIC MIXED GRASSLAND	BREEDING	21	19	29	22
	WINTER	4	6	8	9
RECLAIMED MIXED GRASSLAND	BREEDING	15	23	23	24
	WINTER	2	2	9	5
RIPARIAN WOODLAND	BREEDING	31	30	33	38
	WINTER	8	11	14	15
WETLANDS	BREEDING	26	32	31	27
	WINTER	10	5	7	11
ALL HABITATS	BREEDING	48	52	55	54
	WINTER	20	20	25	25
TOTAL	BREEDING	147	168	202	193
	WINTER	37	35	68	59
NEOTROPICAL MIGRANTS	BREEDING	30	33	30	28
NUMBER OF OBSERVATIONS	BREEDING	1341	1496	2195	1774
	WINTER	65	70	178	154

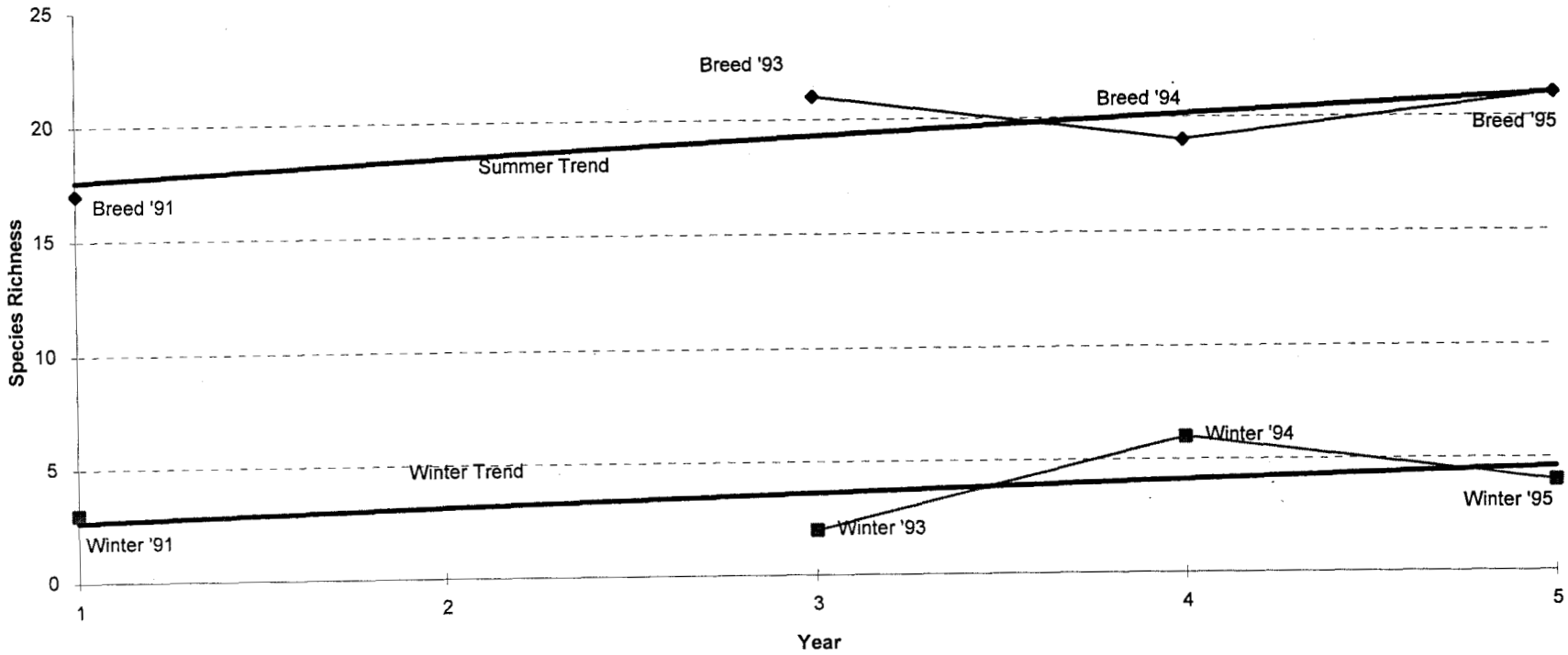


Figure 3-16 Seasonal and Annual Variation of Bird Species Richness in Riparian Shrubland Habitat (1991, 1993, 1994, and 1995)

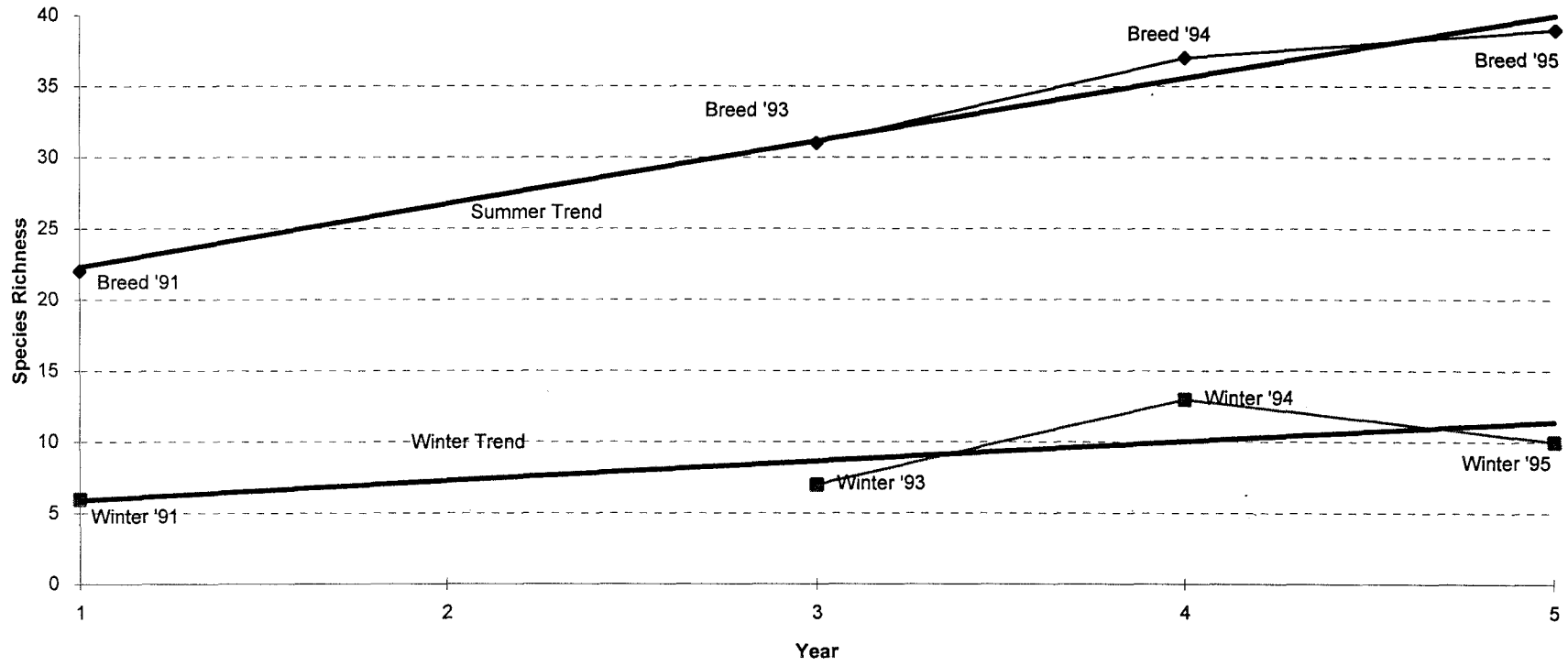


Figure 3-17 Seasonal and Annual Variation of Bird Species Richness in Tall Upland Shrub Habitat (1991, 1993, 1994, and 1995)

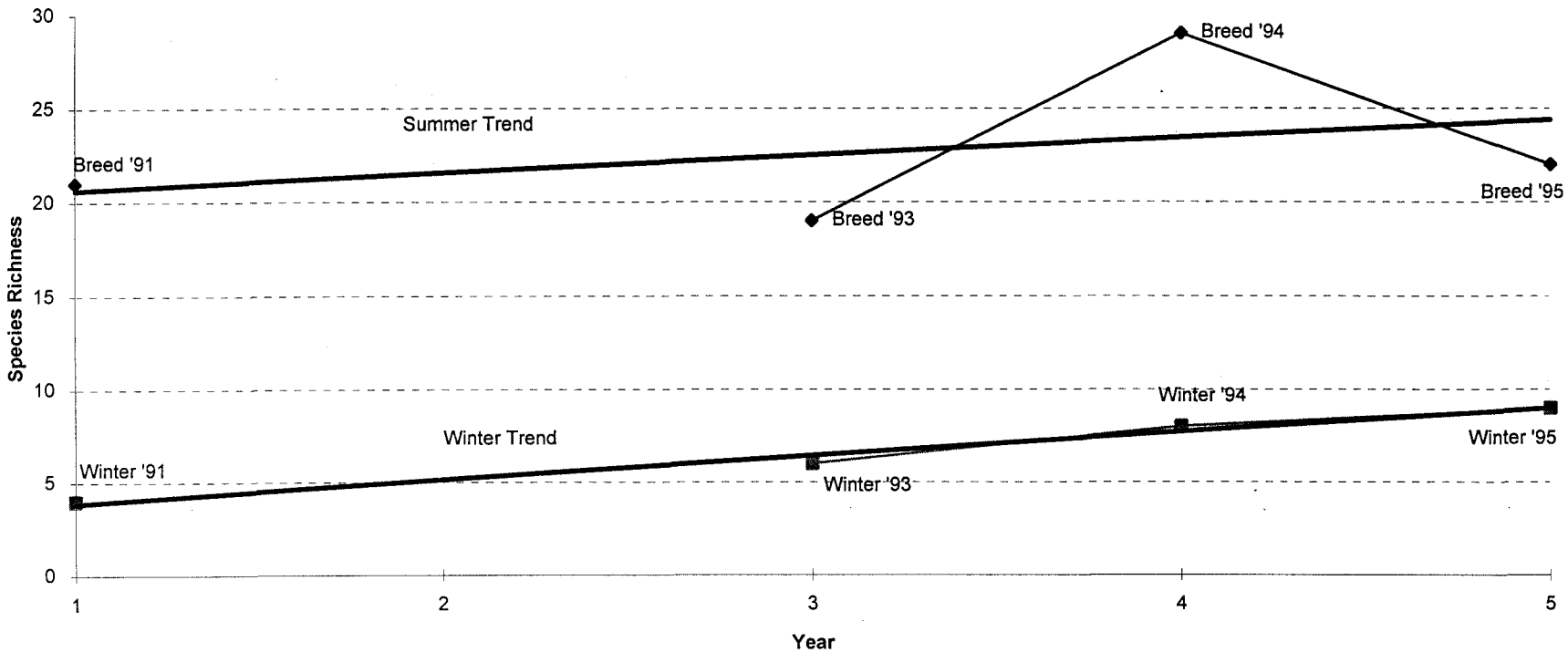


Figure 3-18 Seasonal and Annual Variation of Bird Species Richness in Xeric Mixed Grassland Habitat (1991, 1993, 1994, and 1995)

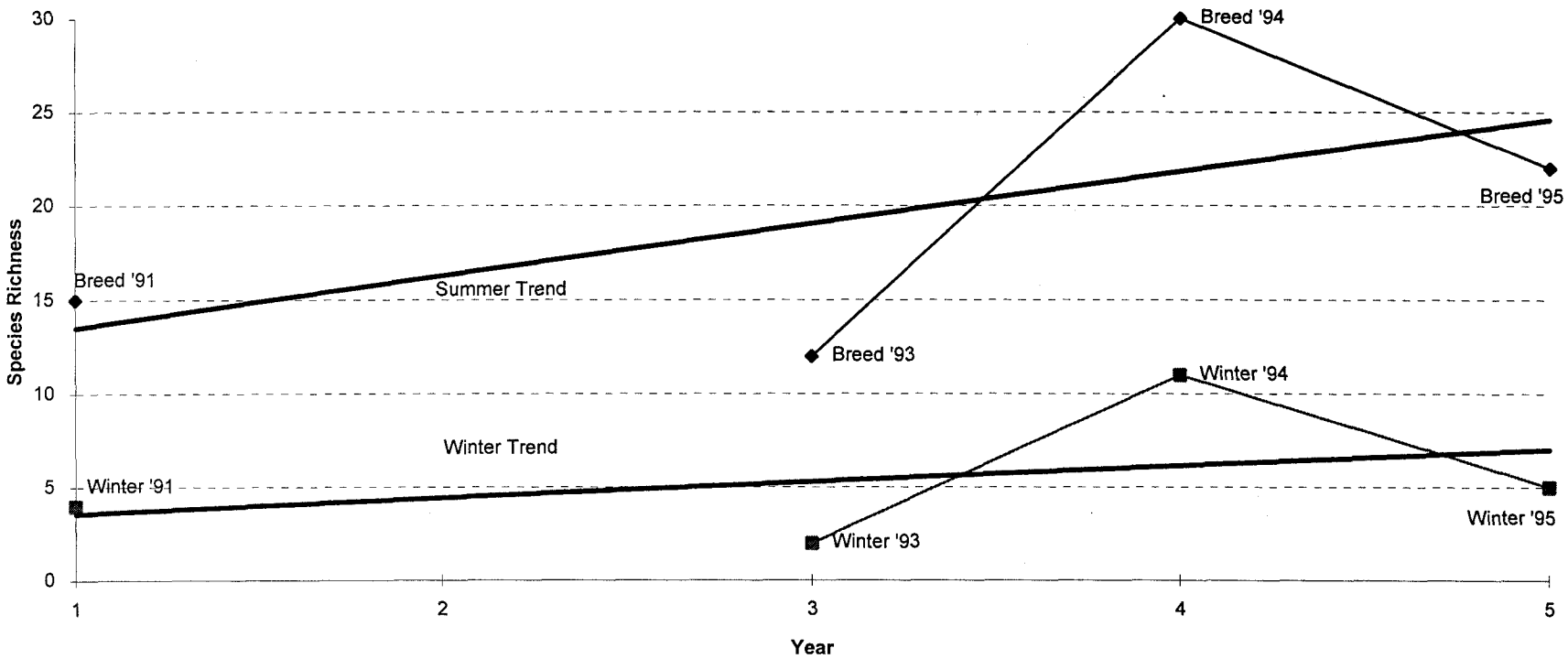


Figure 3-19 Seasonal and Annual Variation of Bird Species Richness in Mesic Mixed Grassland Habitat (1991, 1993, 1994, and 1995)

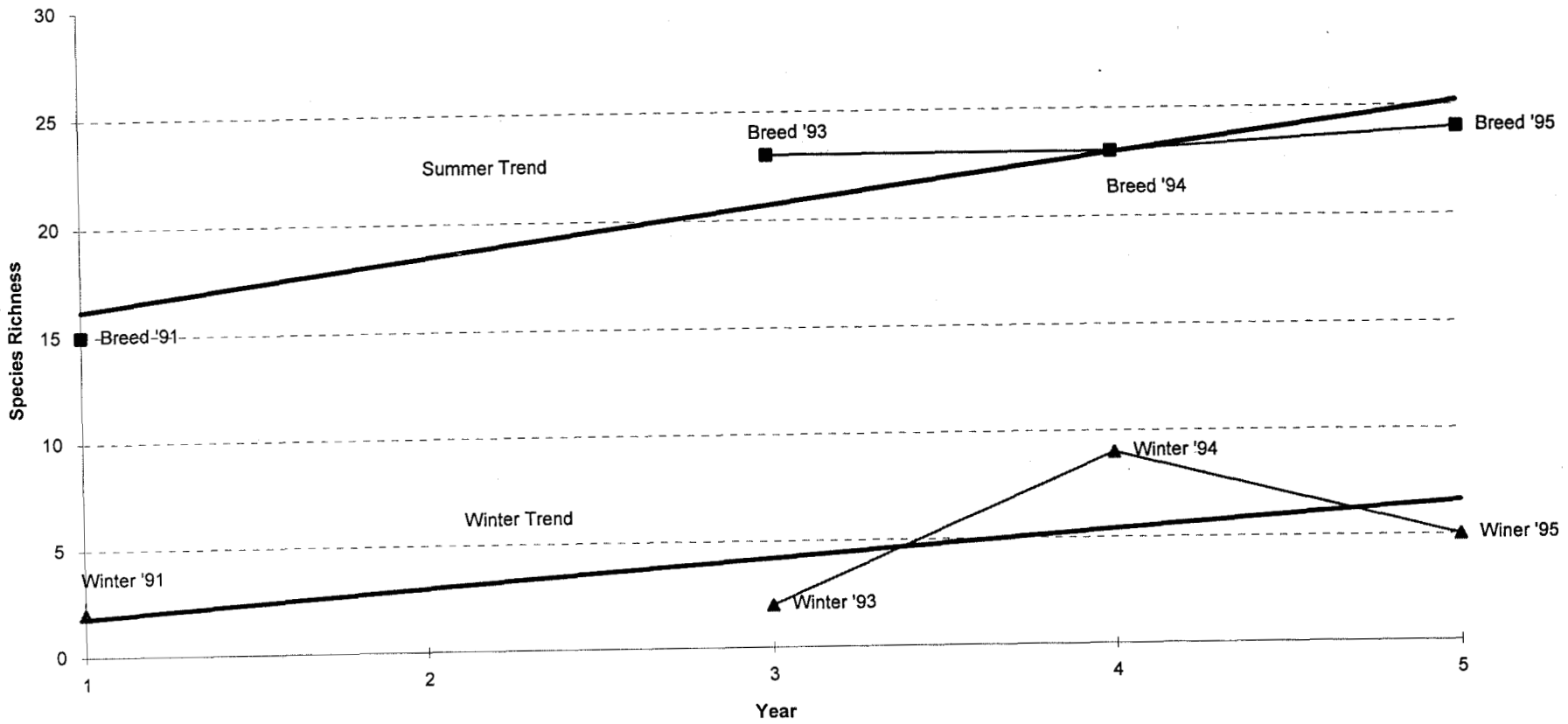


Figure 3-20 Seasonal and Annual Variation of Bird Species Richness in Reclaimed Grassland Habitat (1991, 1993, 1994, and 1995)

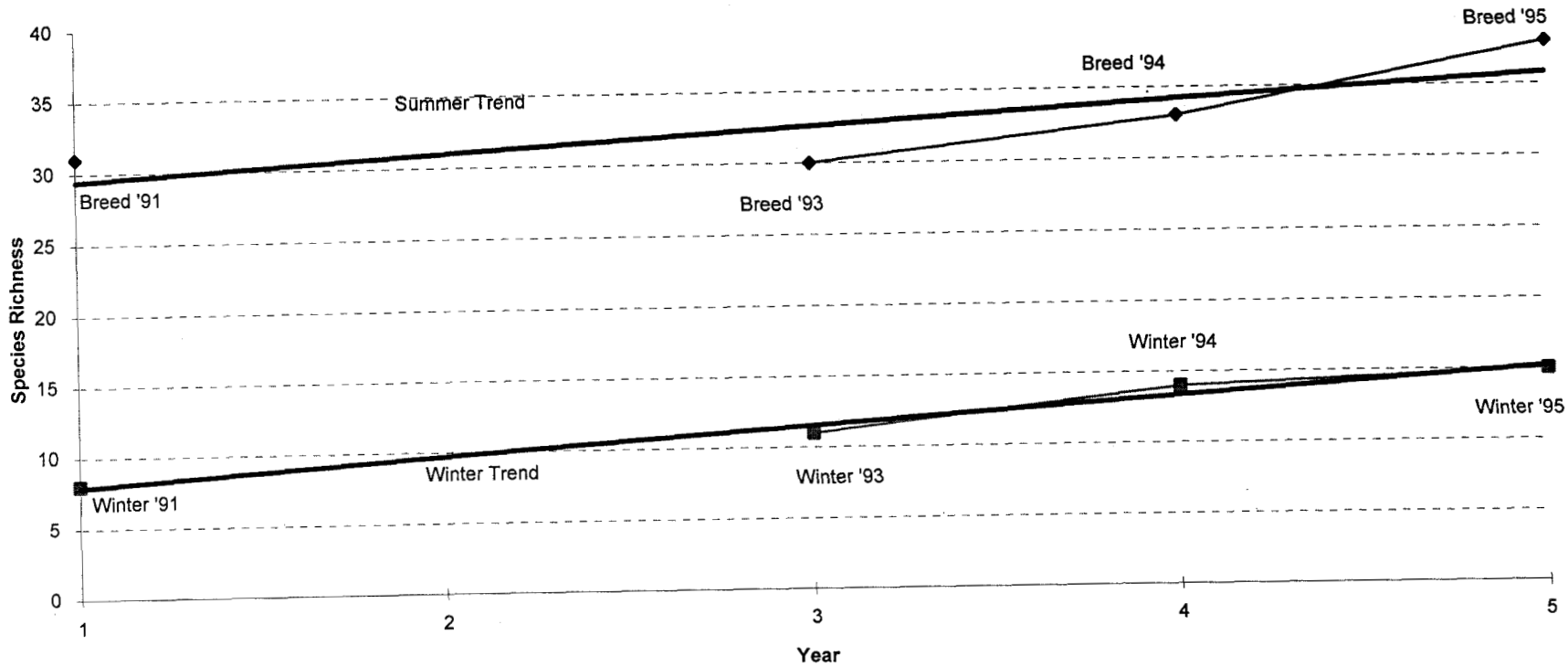


Figure 3-21 Seasonal and Annual Variation of Bird Species Richness in Riparian Woodland Habitat (1991, 1993, 1994, and 1995)

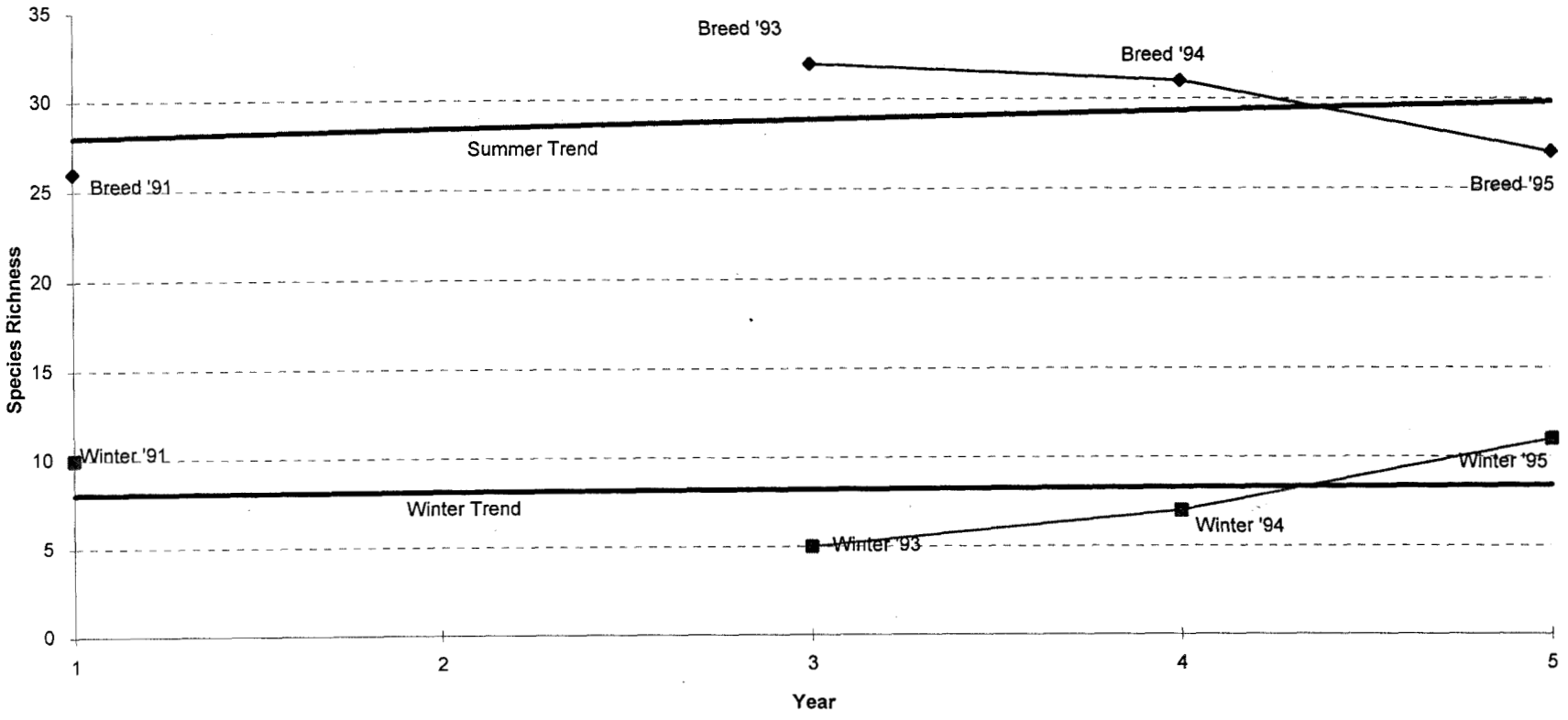


Figure 3-22 Seasonal and Annual Variation of Bird Species Richness in Wetland Habitat (1991, 1993, 1994, and 1995)

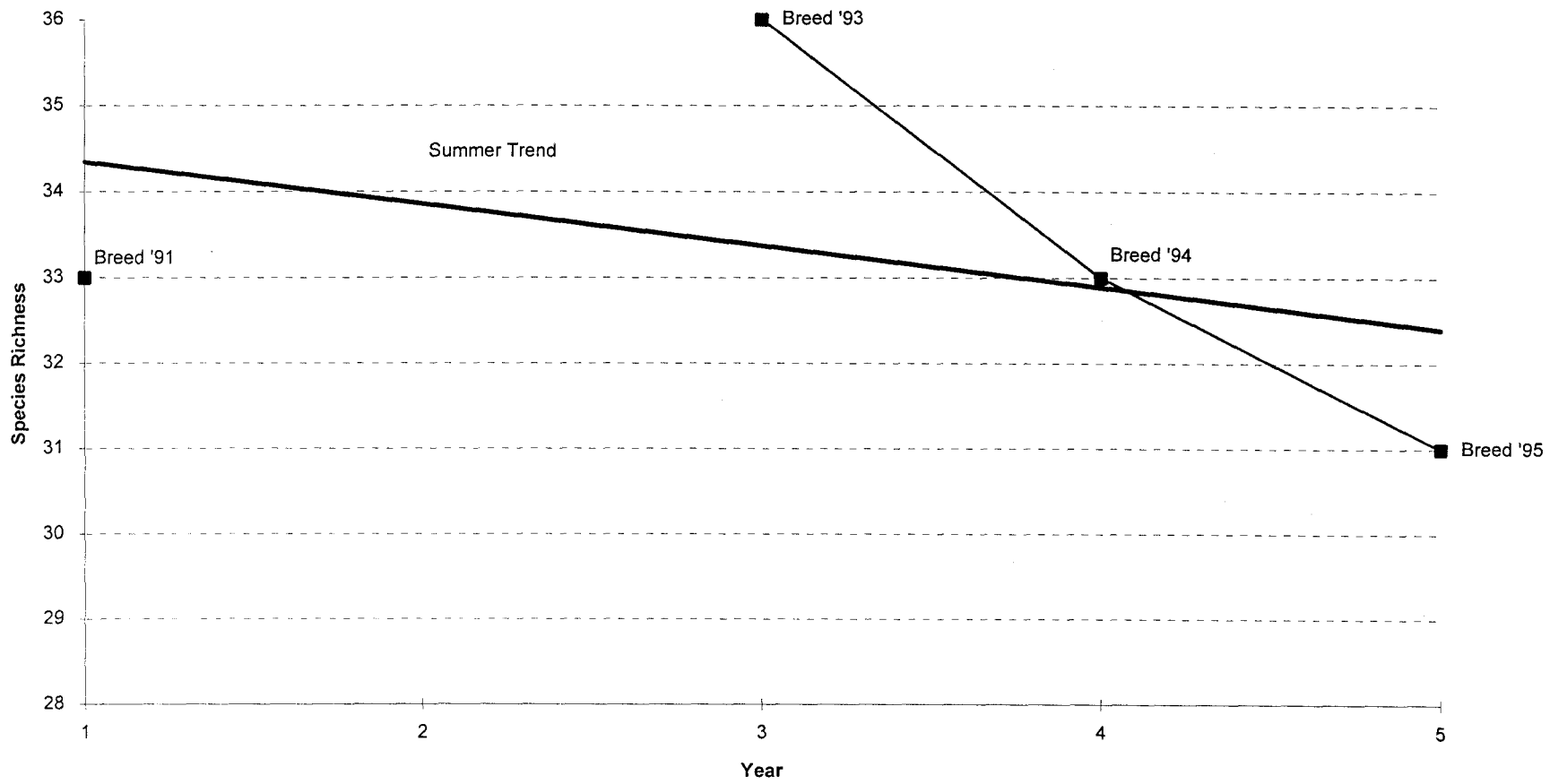


Figure 3-23 Trends in Species Richness of Neotropical Migrants in All Habitats (1991, 1993, 1994, and 1995)

dominated by woody vegetation, as characterized by the riparian woodland complex and shrublands, have the greatest bird species richness. It should be noted, however, that grassland habitats support very different bird assemblages (see Appendix D). Habitats dominated by woody vegetation provide a greater variety and number of ecological niches than grasslands due to the greater three-dimensional vegetative coverage. These "extra" niches provide for a greater number of food sources, both plant and anima), that in turn support more bird species foraging in the habitat. Due to more strata (layers) in the vegetation (trees, shrubs, and herbaceous plants), more nesting sites are available in woody vegetation than in grasses. Greater diversity in food sources and nesting sites provides the needs of a greater number of species. The variety of habitats offered by the grasslands, woody vegetation communities, and wetlands combine to create a habitat mosaic suitable for the overall diversity of 176 bird species at RFETS.

Bird Density Trends

Several representative species from each of the seven habitat types were selected to analyze the trends in bird densities (numbers of individuals) at RFETS. Table 3-8 shows the densities (individuals per hectare) of these representative species groups over time. Species analyzed were selected based on their overall abundance in each habitat type and/or their uniqueness to a particular habitat (i.e., indicator species). The following paragraphs describe bird density trends for the various habitats.

Trends of undesirable species, specifically the European starling (*Sturnus vulgaris*), an introduced Eurasian species, and the brown-headed cowbird (*Molothrus ater*), a parasite on other bird species, were examined for all habitats. While the trend of these species is steady in most habitats, European starlings show an increase in density in riparian woodland habitat. The increase in numbers of European starlings reflects a regional trend in this species that concerns wildlife biologists. This cavity-nesting species aggressively takes over and defends available nest cavities, excluding native cavity-nesting birds from their normal nesting habitat. This loss of nesting sites is reflected in declines of some species (Bull et. al. 1977, Dunn, et. al. 1991).

Representative bird species of riparian woodland habitats include the northern oriole (*Icterus galbula*), American goldfinch (*Carduelis tristis*), house finch (*Carpodacus mexicanus*), and yellow warbler (*Dendroica petechia*). Densities of the representative woodland species assemblage show a decline. Northern oriole densities have increased, but densities of the other three species have decreased.

Bird species representative of wetlands include the red-winged blackbird (*Agelaius phoeniceus*), song sparrow (*Melospiza melodia*), common yellowthroat (*Geothylpis trichas*), and the common snipe (*Gallinago gallinago*). The trend of these representative species in wetland areas is increasing densities.

Song sparrows, rufous-sided towhees (*Pipilo erythropthalmus*), black-billed magpies, and black-capped chickadees are representative of tall upland shrubland habitats. One interesting development is the recent appearance of black-capped chickadees in this habitat. During the first two years, no chickadees were observed, then the species appeared and has been increasing in abundance. Densities of these representative tall upland shrubland species show an increase.

Riparian shrublands are represented by the vesper sparrow (*Pooecetes gramineus*), northern oriole, and mourning dove (*Zenaida macroura*). Densities of these representative riparian shrubland species show an increase.

TABLE 3-8. DENSITIES OF SELECTED BIRD SPECIES BY HABITAT

	1991		1993		1994		1995	
SUMMARY	DEN	STD	DEN	STD	DEN	STD	DEN	STD
Riparian Woodlands								
House Finch	5.096	4	1.305	2	3.36	2.27	0.96	1.32
Northern Oriole	1.47	1	1.259	1	2.3	1.04	2.19	1.21
American Goldfinch	1.405	1	0.604	1	0.78	0.62	0.64	0.15
Yellow Warbler	1.222	1	1.417	2	0.25	0.32	0.31	0.75
European Starling	1.09	2	0.22	0	1.26	3.33	1.26	0.98
Brown-headed Cowbird	0.22	0	0.03	0	0.82	0.85	0.23	0.36
Wetlands								
Red-winged Blackbird	5.495	1.08	7.206	4.14	6.31	1.44	5.5	1.83
Song Sparrow	0.303	0.44	0.16	0.14	0.31	0.15	0.84	0.28
Common Yellowthroat	0.254	0.08	0.5	0.46	0.51	0.33	1.05	0.44
European Starling	0.19	0.23			0.02	0.02	0.02	0.03
Common Snipe	0.148	0.94	0.522	0.61	0.49	0.36	0.29	0.26
Brown-headed Cowbird			0.02	0.04	0.02	0.04	0	0.01
Reclaimed Grasslands								
Western Meadowlark	1.076	0.72	0.696	0.24	1.18	0.2	0.79	0.22
Vesper Sparrow	1.061	0.32	0.857	0.56	0.948	0.22	0.95	0.53
Grasshopper Sparrow	0.247	0.14	0.85	0.38	0.656	0.26	0.71	0.35
European Starling	0.02	0.03	0.007	0.02	0.02	0.04	0.07	0.07
Brown-headed Cowbird			0.042	0.1	0.025	0.05	0.01	0.03
Mesic Mixed Grasslands								
Vesper Sparrow	1.39	0.91	0.549	0.02	1.14	0.73	0.8	0.4
House Finch	1.35	1.52	0.25	0.3	1.389	1.13	2.19	5.6
Western Meadowlark	0.74	0.3	0.658	0.2	1.14	0.41	1.1	0.73
Brown-headed Cowbird			0.022	0.05	0.02	0.04		
European Starling					0.14	0.21	0.91	1.11
Xeric Mixed Grasslands								
Vesper Sparrow	1.08	0.6	0.779	0.95	1.13	0.73	1.26	0.52
Western Meadowlark	0.63	0.07	0.54	0.22	0.67	0.31	0.64	0.04
Grasshopper Sparrow	0.355	0.36	0.522	0.21	0.72	0.29	0.53	0.37
European Starling	0.01	0.01			0.04	0.07	0	0.01
Brown-headed Cowbird					0.02	0.05	0	0.01
Upland Shrublands								
Song Sparrow	1.48	2.18	0.42	0.31	2.58	0.89	2.31	1.42
Rufous-sided Towhee	1.46	0.73	1.2	0.53	2.33	0.46	2.75	2.14
Brown-headed Cowbird	0.27	0.46	0.05	0.26	0.49	0.1	0.43	0.34
Black-billed Magpie	0.22	0.11	0.22	0.27	0.97	0.55	0.87	0.62
European Starling	0.03	0.03	0.04	0.1	0.03	0.03	0.01	0.01
Black-capped Chicadee					0.13	0.25	0.64	0.52
Riparian Shrublands								
Vesper Sparrow	1.15	0.57	1.36	1.3	1.67	2.55	0.96	0.84
Brown-headed Cowbird	1	1			0.13	0.26	0.06	0.09
European Starling	0.62	0.65	0.06	0.1	0.43	0.93	0.59	1.91
Northern Oriole	0.53	1	1.16	3.42	1.8	1	1.84	0.69
Mourning Dove	0.5	0.16	0.43	1.32	1.53	1.46	1.28	1.47

Representative bird species of the mesic mixed grasslands include the vesper sparrow, house finch, and western meadowlark (*Sturnella neglecta*). The densities of house finches and western meadowlarks show an increase, while vesper sparrow densities show a decline.

The representative bird species of reclaimed grasslands are the western meadowlark, vesper sparrow, and grasshopper sparrow (*Ammodramus savannarum*). The overall trend for these selected species is a steady abundance, with the density of grasshopper sparrows increasing.

Bird species representative of xeric mixed grasslands are the grasshopper sparrow, vesper sparrow, and western meadowlark. These selected species show increases in densities over time, with the increase in density of meadowlarks being only slight. There is a general increasing trend of grasshopper sparrow densities not only in xeric mixed grasslands, but in all grassland habitats across the site. This can be viewed as a positive trend for a bird species whose numbers have been decreasing regionally.

Current Status of Migratory Birds

Based on species richness, woodlands and tall upland shrublands have the greatest species diversities. While grassland habitats have somewhat lower diversities, the bird assemblages using these habitats are quite different from those in woody habitats. With one exception, riparian woodlands, the habitats at RFETS show generally steady or increasing trends in bird densities and species richness. Although the overall health of the bird communities on RFETS appears healthy, the decline in densities in riparian woodlands may indicate the start of a problematic trend.

The general trend of increasing or steady bird density across all RFETS habitats indicates continued good ecological health of these habitats. The identified trends that fall outside these general RFETS trends may have regional explanations. As previously stated, European starlings are an aggressive and successful Eurasian transplant to the New World. The trend of increasing populations of this species is well known by wildlife biologists throughout the species' range, and is not unique to RFETS. The decreasing densities of riparian woodland species may be reflective of fluctuations in food sources. During the baseline characterization study (DOE 1992), house finches, and other finch species were abundant due to copious seed production by cottonwoods (*Populus deltiodes*) and musk thistles (*Carduus nutans*). Since that season, inclement weather at flowering time has somewhat reduced seed production in cottonwoods, and biological controls used for musk thistle have significantly reduced seed production by that species. Without the abundant food source, some seed-eating species can be expected to exhibit a decline in numbers where they have previously been abundant.

The large-scale disturbance caused by construction of the New Landfill and expansion of mining discussed in Section 3.1.2 has impacted breeding areas of grassland birds. Since the xeric mixed grassland habitat was entirely destroyed where excavations have been made, grassland birds can no longer breed or forage in areas once occupied by this habitat. Breeding bird densities, calculated from data collected over the past several years, indicate that among the typical population of grassland species approximately 8.5 breeding pairs per acre from seven species (357 pairs total) have been displaced from breeding territory. Impacts during the Summer (non-breeding) season are displacement of approximately 9.6 birds per acre from 17 species (403 birds total). Fall impacts are displacement of approximately 1.7 birds per acre from nine species (71 birds total), from the impacted area. Winter densities of grassland species are too low to allow calculation of impacts. Displaced birds are forced to establish new territories elsewhere within suitable habitat. The resulting increase of competition for choice nesting sites,

foraging territories, and roost sites increases stress on all affected birds. The larger the number of displaced individuals, the higher the stress level, and the lower the reproductive success of a species.

To allow verification of the results of the analyses in this report, monitoring migratory birds in all habitats across RFETS should continue. Future analyses of trends should include habitat-specific bird assemblages, specific attention to neotropical migratory birds as a group, continued tracking of indicator species abundance, and continued monitoring of the densities of less desirable species.

4.0 CONCLUSIONS

RFETS provides a unique refuge along the central Front Range area for a large number of bird and mammal species. The presence of this refuge is due in large part to more than two decades of protection from grazing, development, and other disturbances that the major portion of RFETS has enjoyed. The area enclosed by the 1950's BZ has experienced this singular habitat protection for over 40 years. The exclusion of grazing and development has allowed the native prairie/montane ecotonal area to rebound to a near-pristine condition resembling the ungrazed, unfarmed natural conditions. Large-scale real estate development, mining, and water diversions on large tracts of land have destroyed or degraded much of the native habitat once available along the Front Range. It is due to the protection and isolation of the BZ that rare species such as American peregrine falcons, bald eagles, eastern short horned lizards, burrowing owls, loggerhead shrikes, black swifts, Baird's sparrows, American white pelicans, grasshopper sparrows, water shrews (*Sorex palustris*), and Preble's meadow jumping mice are found at RFETS. Many of these species are sensitive species or indicator organisms that by their presence or, more significantly, by their absence indicate the ecological health of an area.

The area use mapping undertaken in this report has provided valuable insight into the physical locations preferred by all wildlife groups using RFETS. Area use to a great extent reflects habitat preferences of wildlife, but also reflects the requirement for refuge (isolation) areas by most species, as well. Figure 4-1 shows a summary of all heavy use and elevated use areas from all monitored species combined. This use map confirms that the areas with the main water-courses and impoundments are the most important areas to wildlife. Areas occupied by xeric mixed grasslands are also very important. Areas of heavy use mapped on Figure 4-1 should be interpreted as essential habitat areas for a large number of species at RFETS, and planning of future activities should take this habitat sensitivity into account.

Based on bird species richness, riparian woodlands and tall upland shrublands support the greatest bird diversity. While grassland habitats have somewhat lower diversities, the bird assemblages using these habitats are quite different from those in woody habitats. With one exception, riparian woodlands, the habitats at RFETS show generally steady or increasing trends in bird densities and species richness. In riparian woodlands the selected species densities show a decline. The general abundance of less desirable species is either holding steady or increasing. Although the overall health of the bird communities at RFETS appears healthy, the decline in densities in riparian woodlands will require further monitoring to determine its significance.

The data summaries from the past several years (DOE 1995 and DOE 1994a) show an abundance and diversity of sensitive species that demonstrate the excellent ecological health of site. Even in areas designated as contaminated, wildlife species do not evidence ecological stress as manifested by poor viability, reduced numbers of surviving offspring, unusual vulnerability to disease, or lowered population levels. The wildlife populations at RFETS are vital, viable, and include rare, unusual, and endangered species.

With 176 species of birds (including 19 avian predators), three big game species, 10 species of carnivores, nine species of mid-sized mammals, 15 small mammal species, eight reptile species, and seven amphibian species, RFETS provides habitat for a surprising variety of wildlife. This species diversity indicates that the habitats provided by RFETS are of high quality.

78

The dominant big game species is the mule deer, though white-tailed deer and elk also visit RFETS on a casual basis. Muskrats, eastern fox squirrels, and porcupines continue to occupy RFETS in appropriate habitat. Desert cottontails are the most abundant lagomorph species, with white-tailed jackrabbits and black-tailed jackrabbits observed occasionally. The diversity of carnivores present at RFETS is a reflection of the large number of habitats, ecological niches, and prey available at site.

RFETS supports a high diversity of bird species. Sixty-seven of the bird species recorded at RFETS are believed to breed at the site. Neotropical migratory species are represented by 99 species at RFETS. The presence of 46 waterfowl and shorebirds at RFETS are indicative of the good water quality and abundant food organisms available in aquatic and wetland habitats. Raptors (19 species), the top avian predators of the food chain, are also an indicator of the ecological health of an area. Raptors must have a large, healthy population of prey species upon which to subsist. Reduced numbers of prey species are reflected in reduced numbers of raptors.

While wildlife species diversity has not manifested significant changes since the 1991 baseline characterization (DOE 1992), some effects have been observed in habitat use, movement patterns, and numbers of individuals of some species. These changes have been due to human activities and natural causes.

Large-scale disturbance including completion of the New Landfill and expansion of gravel mining operations by Western Aggregates, Inc. and Jefferson County in the western part of RFETS during 1995 has withdrawn more xeric mixed grassland habitat from wildlife. A secondary effect of this disturbance has been further habitat fragmentation in addition to previous disturbances such as installation of industrial facilities and road building. The recent large-scale disturbances have destroyed about 42 acres of grassland classified by the Colorado Natural Heritage Program (CNHP 1995b) as xeric tallgrass prairie (a rare and imperiled plant community).

Xeric mixed grasslands are important fall breeding and winter foraging habitat for the resident mule deer herd. Additionally, xeric and mesic mixed grasslands are important breeding habitats for grasshopper sparrows (a declining prairie species) and other grassland bird species. Destruction of the habitats in this portion of the BZ has withdrawn them from availability as foraging range for deer, breeding territory for grassland bird species, and home range for the eastern short horned lizard (a former C-2 candidate, and a special-concern species). Fragmentation of the xeric grassland habitat has isolated some breeding populations of the lizard in the western portion of RFETS.

The natural effects observed over the past several years have been a crash in the local prairie dog population and the accompanying reduction in the number of wintering raptors observed throughout Winter. The prairie dog population crash was the result of plague in 1994. The local prairie dog population had not recovered by the end of 1995. Another natural ecological effect observed was the decline in coyote numbers at RFETS during the late Fall 1994 and Winter of 1994-95. This population reduction was probably due to the canine distemper epizootic that passed through Jefferson County during 1994 and early 1995 (pers. comm. K. Green, S. Werner). During the 1995 coyote breeding season, some of the coyotes killed by distemper were replaced by recruits from young-of-the-year.

The long-term year-round ecological monitoring program conducted under the NRPCP is essential in identifying, describing, and quantifying fluctuations of wildlife populations, wildlife habitat use, and changes in the species using RFETS as year-round or seasonal habitat. Wildlife population densities vary constantly due to natural pressures, and only well integrated, long-term monitoring such as this can identify consequences of natural causes versus consequences of

80

human activities. An integrated monitoring program that gathers data on ecologically interactive species is essential in evaluating population fluctuations. Such data are an invaluable tool in predicting and avoiding impacts on the ecology of an area due to projected human activities. If sensitive species should dwindle in numbers or disappear, it would be an indication of a serious environmental health problem. Monitoring and surveys such as those carried out by the NRPCP will indicate trends of this sort, and act as an "early warning system" for impending ecological problems. This function will become increasingly important as remediation activities at RFETS increase, and will play an essential role when NRDA evaluations are made.

The population trends of wildlife species tracked through the NRPCP are an indicator of the ecological health of RFETS and surrounding areas. The healthier the natural environment, the more diverse the composition of species, and the greater the number of individuals of each species. All wildlife species in an ecosystem require healthy and well balanced habitats in which to live and reproduce. Degraded habitat is directly reflected in the lower wildlife numbers, as demonstrated in the lower bird species diversity found in disturbed habitats (see Section 3.2.1). Monitoring the numbers, habitat affinity, and apparent health of wildlife populations is one means of tracking overall trends in the ecological health of RFETS.

5.0 REFERENCES

Andrews, R. and R. Righter. 1992. *Colorado Birds: A Reference to Their Distribution and Habitat.* Denver Museum of Natural History. Denver, Colorado. 1992.

Bull, J. D, and J. Farrand. 1977. *The Audubon Society Field Guide to North American Birds - Eastern Region.* Alfred A. Knop, Inc. New York, New York. 1977.

CNHP. 1995a. *Rare and Imperiled Animals, Plants, and Natural Communities.* Colorado Natural Heritage Program. The Nature Conservancy. Fort Collins, Colorado. May 1995.

CNHP. 1995b. *Natural Heritage Resources of the Rocky Flats Environmental Technology Site and Their Conservation: Phase II: The Buffer Zone.* Colorado Natural Heritage Program. The Nature Conservancy. Fort Collins, Colorado. December 8, 1995.

CO. State of Colorado. *Colorado Nongame, Threatened, and Endangered Species Conservation Act*, CRS 33-1-115, 33-2-101 to 33-2-107.

DOE. 1996. *Rocky Flats Cleanup Agreement, Public Comment Draft.* Department of Energy, Rocky Flats Field Office. Golden, Colorado. March 14, 1996.

DOE. 1994a. *Resource Protection Program Annual Wildlife Survey Report.* Department of Energy. Golden, Colorado. April 1994.

DOE. 1994b. *EMD Operating Procedures, Volume V: Ecology.* Department of Energy. Golden, Colorado. December 1994.

DOE. 1994c. *Identification and Protection of Threatened, Endangered, and Special-Concern Species*, 1-D06-EPR-END.03. Department of Energy. Golden, Colorado. January 14, 1994.

DOE. 1994d. *Migratory Bird Evaluation and Protection*, 1-G98-EPR-END.04. Department of Energy. Golden, Colorado. April 19, 1994.

DOE. 1992. *Baseline Biological Characterization of Terrestrial and Aquatic Habitats at Rocky Flats Plant.* Department of Energy. Golden, Colorado. September 1992.

Dunn, J. L., E. A. T. Blom, G. E. Watson, and J. P. O'Neill. 1991. *Field Guide to the Birds of North America.* National Geographic Society. Washington, D. C. 1991.

Personal Communication Kathi Green and Susan Werner, Colorado Division of Wildlife, Central Region, Denver, Colorado.

U.S. Congress. *Bald and Golden Eagle Protection Act*, 16 USC 668 et. seq. 1978.

U.S. Congress. *Endangered Species Act of 1973*, 16 USC 1531 et. seq. 1973.

U.S. Congress. *Migratory Bird Treaty Act*, 16 USC 703 et. seq. 1973.

U.S. Congress. Federal Water Pollution Control Act (A.K.A. Clean Water Act), 33 USC 1251 et. seq. 1972.

82

U.S. Congress. *Fish and Wildlife Coordination Act of 1958*, 16 USC 661 et. seq. as amended. 1958.

USFWS. 1996. *Federal Register, Vol. 61, No. 40. Proposed Rules*, pp. 7596 - 7613. United States Government Printing Office. February 28, 1996.

Wallmo, O. C. 1981. *Mule and Black-tailed Deer of North America.* University of Nebraska Press. Lincoln and London, 1981.

83

APPENDIX A

CODE ENTRY EXPLANATIONS AND INSTRUCTIONS FOR DATA ENTRY IN SIGNIFICANT SPECIES DATABASE

Information and data may be entered from field data sheets, log books, fortuitous sighting reports, and any other reliable sources, provided minimum data are reported. Minimum data for a record to be entered into this database are: species, date, location, habitat type, number of individuals, and identity of observer.

OBSERVER (OBSERVER)
Enter initials of the primary observer (up to 3 letters). If others were present this may be noted in the MEMO field.

TYPE OF OBSERVATION (OBSTYPE)
Observation Codes

1 = Visual (includes observations of dead individuals)
2 = Trap/Net Capture
3 = Hand Capture
4 = Radio Fix
5 = Tracks
6 = Scat/Pellets
7 = Hair/Feathers/Other Remains
8 = Sound/Vocalization
9 = Photographic Evidence
10 = Nest/Eggs

DATE OF OBSERVATION (DATE)
Input observation date as mm/dd/yy (e.g., 02/04/95)

TIME OF OBSERVATION (TIME)
Enter observation time using 24-hour military time clock (e.g., 1310 for 1:10 PM)

TAXONOMIC GROUP CODE (TAXNGRUP)
Groups to be recorded include big game mammals; furbearers; small game mammals; upland game birds; waterfowl and wading birds; raptors; reptiles and amphibians; and threatened, endangered, and candidate species.

Taxonomic Group Codes

B = Big Game
C = Carnivores
M = Other Mammals
H = Herptiles (Reptiles/Amphibians)
F = Fish
R = Raptors
U = Upland Game Birds
W = Waterbirds
A = Other Avifauna
L = Lepidoptera
P = Soil Protozoa
N = Soil Nematodes
S = Soil Arthropods
T = Other Terrestrial Invertebrates
I = Aquatic Invertebrates
Z = Zooplankton
V = Vegetation
G = Algae

NAME OF SPECIES (SPECIES)
Enter species common name from Current Approved Species Code List (CASCL) see Attachment A.

SPECIES CODE (SPECCODE)
Enter species code from CASCL see Attachment A.

OBSERVATION AREA (ADMNAREA)
Enter code for observation area relative to Rocky Flats:

Administrative Area Codes
PA = Protected Area
IA = Industrial Area
BZ = Buffer Zone
EA = Extended Observation Area - within 10 km of Rocky Flats boundary

NAME OF OBSERVATION LOCATION (SITENAME)
Enter name of transect, pond, or other physical feature at observation location, if applicable

NAME OF OPERABLE UNIT (OP_UNIT)
Enter Operable Unit name of observation area, if applicable

NAME OF NEARBY ROAD(S) (ROADNAME)
Name(s) of road(s) or other feature nearest to observation in EA, if applicable

NORTH-SOUTH ROCKY FLATS GRID CODE (RFGRIDN)
Enter alphanumeric code number (1-17) for location of observation according to Rocky Flats Grid (see Attachment B for map).

EAST-WEST ROCKY FLATS GRID CODE (RFGRIDE)
Enter alphanumeric code letter (A-U) for location of observation according to Rocky Flats Grid (see Attachment B for map).

ACTIVITY CODES (ACTIVTY1 & ACTIVTY2)
Enter primary activity code in ACTIVTY1 column and secondary activity code in ACTIVTY2 column.

Activity Codes

Fauna:
0 = Inactive/Immobile
1 = In Transit
2 = Walking/Leisurely Flight
3 = Running/Rapid Flight
4 = Fleeing
5 = Feeding/Hunting
6 = Courtship
7 = Nursing/Feeding Young
8 = Nesting/Incubating
9 = Nesting/Brooding

Activity Codes (Continued)

10 = Nest Building
11 = Fighting/Aggression
12 = Grooming/Preening
13 = Socialization/Playing
14 = Being Prey
15 = Drinking
16 = Swimming
17 = Territorial Behavior
18 = Dead
19 = Defense of Young
20 = Giving Birth
21 = Sick/Injured
22 - 49 (Open)

Flora:
50 = Died Back/Standing Dead
51 = Vegetative
52 = In Bud
53 = In Flower
54 = In Fruit/Seed

DIURNAL CODES FOR TIME OF DAY (DAY_NIGHT)
Enter diurnal code.

Diurnal Codes
1 = Dawn (Beginning of morning twilight to sunrise)
2 = Day (Sunrise to sunset)
3 = Dusk (Sunset to end of evening twilight)
4 = Night (End of evening twilight to beginning of morning twilight)

DESCRIPTION OF HABITAT AT OBSERVATION LOCATION (HABITAT, HABTYPE, HABITAT2, HABTYPE2)
Enter habitat description for HABITAT (e.g., Tall Upland Shrubland), Enter habitat code for HABTYPE. Enter secondary habitat description for HABITAT2 (e.g., Short Marsh). Enter secondary habitat code for HABTYPE2. See list below for wildlife habitat codes.

Wildlife Habitat Codes
000 Aquatic and Wetlands Habitats Group
Terrestrial Subgroup
010 Wet Meadow/Marsh Ecotone
020 Short Marsh (*Carex/Juncus*)
030 Tall Marsh (*Typha/Scirpus*)
Open Water Subgroup
040 Streams and Rivers
041 Intermittent Stream - Riffle
042 Intermittent Stream - Run
043 Intermittent Stream - Pool
044 Persistent Stream -Riffle

045 Persistent Stream - Run
046 Persistent Stream - Pool
047 Ditch (Drainage/Irrigation) - Riffle
048 Ditch (Drainage/Irrigation) - Run
049 Ditch (Drainage/Irrigation) - Pool
050 Ponds and Impoundments
* 051 Natural Pond - Littoral Zone
* 052 Natural Pond - Limnitic Zone
• 053 Natural Pond - Profundal Zone
054 Impoundment - Littoral Zone
055 Impoundment - Limnitic Zone
056 Impoundment - Profundal Zone
057 Dugout/Excavated Pond - Littoral Zone
058 Dugout/Excavated Pond - Limnitic Zone
059 Dugout/Excavated Pond - Profundal Zone
*060 Lakes and Reservoirs
* 061 Littoral Zone
* 062 Limnitic Zone
* 063 Profundal Zone
070 Springs and Seeps
071 Persistent
072 Intermittent
080 Groundwater
<u>Emergent Subgroup</u>
090 Mudflats
091 Stream Edge
* 092 Natural Pond Edge
093 Impoundment Edge
094 Dugout Edge
095 Ditch Edge

100 Woodlands Habitats Group
110 Riparian Woodland (*Populus, Salix* and Associated)
120 Ponderosa Woodland (*Pinus ponderosa* and Associated)
* 125 Douglas-fir Woodland (*Pseudotsuga menziesii* and Associated)
130 Tree Plantings (Ornamentals and Shelterbelts)

200 Shrublands Habitats Group
210 Riparian Shrubland (*Salix, Amorpha*, and Associated)
211 Riparian Shrubland - *Amorpha*
212 Riparian Shrubland - *Salix*
220 Short Upland Shrubland (*Symphoricarpos* and Associated)
230 Tall Upland Shrubland (*Crataegus, Prunus*, and Associated)
* 240 Rabbitbrush Shrubland (*Chrysothamnus* and Associated)
* 250 Mountain Mahogany/Bitterbrush Shrubland (*Cercocarpus, Purshia*, and Associated)
260 Savannah Shrubland (*Rhus, Ribes, Physocarpus*, and Associated)

300 Grasslands Habitats Group
310 Short Grassland (*Buchloe, Bouteloua*, and Associated)
320 Mixed Grassland (General)
322 Mesic Mixed Grassland (*Agropyron, Bouteloua, Poa*, and Associated)
323 Xeric Mixed Grassland (*Andropogon, Stipa, Muhlenbergia*, and Associated)

324 Reclaimed Mixed Grassland (Planted grass mixtures)
* 325 Overgrazed Pasture

400 Disturbance Habitat Group

410 Annual Grass/Forb (*Bromus japonicus, Bromus tectorium, Centaurea, Helianthus*)
420 Disturbed/Barren Lands (Roads, dirt lots)
* 430 Cultivated Lands

500 Structures and Structure Associations Habitats Group

510 Transmission Lines
520 Buildings/Structures
530 Rock and Gravel Piles
540 Roadside/Fencerow Complex
550 Debris Plies
560 Fence

***600 Special Features Group**

* 610 Cliffs
* 620 Caves

---

* Habitat codes not found within the Rocky Flats Boundary, but found within the Extended Observation Area, see Attachment C for an expanded description of vegetative communities of major habitats .

TEMPERATURE DURING OBSERVATION (TEMPTURE)
Enter temperature in degrees Celsius, enter temperatures below zero with a minus (e.g., -4°C).

WIND SPEED (WNDSPEED)
Enter approximate wind speed in miles per hour.

WIND DIRECTION (WINDDRCT)
Enter wind direct using directional code up to 2 letters.

Wind Direction Codes

N = North
NE = Northeast
E = East
SE = Southeast
S = South
SW = Southwest
W = West
NW = Northwest

SIGNIFICANT WEATHER CONDITIONS PRESENT (WXPHENOM)
Weather Condition Codes

0 = No significant weather conditions
1 = Fog/smog, visibility less than 1 km
2 = Drizzle or mist
3 = Rain
4 = Hail
5 = Snow or sleet
6 = Thunderstorm
7 = Blowing sand or dust

GROUND CONDITIONS PRESENT (GRNDCOND)
Enter ground condition code.

Ground Condition Codes

0 = Ground surface dry
1 = Ground damp/moist
2 = Ground wet/saturated
3 = Ground frozen and snowfree
4 = Ground covered with trace of snow
5 = Ground covered with 1-5" (2-23 cm) of snow
6 = Ground covered with 6-10" (14-26 cm)of snow
7 = Ground covered with 11-20" (27-50 cm) of snow
8 = Ground covered with more than 20" (>50 cm) of snow

GROUP SIZE (GRPSIZE)
Enter total number of individuals in the group.

NUMBER OF MALES (MALES)
Enter number of males.

NUMBER OF FEMALES (FEMALES)
Enter number of females.

NUMBER OF YOUNG (YOUNG)
Enter number of young.

NUMBER OF UNCLASSIFIED INDIVIDUALS (UNCLASSD)
Enter number of unclassified individuals.

MEMORANDUM (memo/MEMO)
Open this field by entering CTRL/HOME. Enter any pertinent information as to description of activity, detailed description of behavior, additional observers, specific location, or any other information. If the specimen was dead, mortality information may be entered here as well. Once a memo has been entered into the MEMO field, the display will change from "memo" to "MEMO", indicating the presence of an entry. This field has an unlimited size.

ATTACHMENT A

SPECIES CODES FOR DATA ENTRY, EXCERPT FROM CURRENT APPROVED SPECIES CODE LIST (January 1996)

AMPHIBIANS

AMBYSTOMATIDAE

Ambystoma tigrinum	Tiger Salamander	AMTI1

PELOBATIDAE

Scaphiophus bombifrons	Plains Spadefoot	SCBO1

BUFONIDAE

Bufo cognatus	Great Plains Toad	BUCO1
Bufo woodhousei	Woodhouse's Toad	BUWO1

HYLIDAE

Pseudacris triseriatus maculata	Boreal Chorus Frog	PSTR1

RANIDAE

Rana catesbeiana	Bullfrog	RACA1
Rana pipiens	Northern Leopard Frog	RAPI1

REPTILES

CHELYDRIDAE

Chrysemys picta	Western Painted Turtle	CHPI1

IGUANIDAE

Phynosoma douglassi	Short-horned Lizard	PHDO1
Sceloporus undulatus	Eastern Fence Lizard	SCUN1

COLUBRIDAE

Coluber constrictor	Eastern Yellowbelly Racer	COCO1
Pituophis melanoleucus	Bullsnake	PIME1
Thamnophis radix	Western Plains Garter Snake	THRA1
Thamnophis sirtalis	Red-sided Garter Snake	THSI1

VIPERIDAE

Crotalus viridis	Prairie Rattlesnake	CRVI1

BIRDS

PODICIPEDIDAE

Aechmophorus occidentalis	Western Grebe	AEOC1
Podiceps nigricollis	Eared Grebe	PONI1
Podilymbus podiceps	Pied-billed Grebe	POPO1

PELECANIDAE

Pelecanus erythrorhynchos	American White Pelican	PEER1

PHALACROCORACIDAE

Phalacrocorax auritus	Double-crested Cormorant	PHAU1

ARDEIDAE

Ardea herodias	Great Blue Heron	ARHE1
Butorides striatus	Green-backed Heron	BUST1
Nycticorax nycticorax	Black-crowned Night-Heron	NYNY1

ANATIDAE

Aix sponsa	Wood Duck	AISP1
Anas acuta	Northern Pintail	ANAC1
Anas americana	American Wigeon	ANAM1
Anas clypeata	Northern Shoveler	ANCL1
Anas crecca	Green-winged Teal	ANCR1
Anas cyanoptera	Cinnamon Teal	ANCY1
Anas discors	Blue-winged Teal	ANDI1
Anas platyrhynchos	Mallard	ANPL1
Anas strepera	Gadwall	ANST1
Aythya affinis	Lesser Scaup	AYAF1
Aythya americana	Redhead	AYAM1
Aythya collaris	Ring-necked Duck	AYCO1
Aythya marila	Greater Scaup	AYMA1
Aythya valisineria	Canvasback	AYVA1
Branta canadensis	Canada Goose	BRCA1
Bucephala albeola	Bufflehead	BUAL1
Bucephala clangula	Common Goldeneye	BUCL1
Chen caerulescens	Snow Goose	CHCA1
Lophodytes cucullatus	Hooded Merganser	LOCU1
Mergus merganser	Common Merganser	MEME1

CATHARTIDAE

Cathartes aura	Turkey Vulture	CAAU1

ACCIPITRIDAE

Accipiter cooperii	Cooper's Hawk	ACCO1
Accipiter gentili	Northern Goshawk	ACGE1
Accipiter striatus	Sharp-shinned Hawk	ACST1
Aquila chrysaetos	Golden Eagle	AQCH1
Buteo jamaicensis	Red-tailed Hawk	BUJA1
Buteo lagopus	Rough-legged Hawk	BULA1
Buteo regalis	Ferruginous Hawk	BURE1
Buteo swainsoni	Swainson's Hawk	BUSW1
Circus cyaneus	Northern Harrier	CICY1
Haliaeetus leucocephalus	Bald Eagle	HALE1
Pandion haliaetus	Osprey	PAHA1

FALCONIDAE

Falco columbarius	Merlin	FACO1
Falco mexicanus	Prairie Falcon	FAME1
Falco peregrinus	American Peregrine Falcon	FAPE1
Falco sparverius	American Kestrel	FASP1

PHASIANIDAE

Meleagris gallopavo	Wild Turkey	MEGA1
Phasianus colchicus	Ring-necked Pheasant	PHCO1

RALLIDAE

Fulica americana	American Coot	FUAM1

GRUIDAE

Grus canadensis	Sandhill Crane	GRCA1

SCOLOPACIDAE

Limnodromus scolopaceus	Long-billed Dowitcher	LISC1

STRIGIDAE

Asio flammeus	Short-eared Owl	ASFL1
Asio otus	Long-eared Owl	ASOT1
Athene cunicularia	Burrowing Owl	ATCU1
Bubo virginianus	Great Horned Owl	BUVI1

APODIDAE

Cypseloides niger	Black Swift	CYNI1

TYRANNIDAE

Empidonax occidentalis	Cordilleran Flycatcher	EMDI1
Empidonax traillii	Willow Flycatcher	EMTR1

LANIIDAE

Lanius ludovicianus	Loggerhead Shrike	LALU1

Emberizinae

Ammodramus bairdii	Baird's Sparrow	AMBA1

MAMMALS

ORDER CHIROPTERA

VESPERTILIONIDAE

Myotis subulatus (=*M. ciliolabrum*)	Small-footed Myotis	MYSU1

ORDER LAGOMORPHA

LEPORIDAE

Lepus californicus	Black-tailed Jackrabbit	LECA1
Lepus townsendii	White-tailed Jackrabbit	LETO1
Sylvilagus audubonii	Desert Cottontail	SYAU1

ORDER RODENTIA

SCIURIDAE

Cynomys ludovicianus	Black-tailed Prairie Dog	CYLU1
Sciurus niger	Eastern Fox Squirrel	SCNI1

CASTORIDAE

Castor canadensis	Beaver	CACA1

MURIDAE

Ondatra zibethicus	Muskrat	ONZI1

ZAPODIDAE

Zapus hudsonius preblei	Preble's Meadow Jumping Mouse	ZAHU1

ERETHIZONTIDAE

Erethizon dorsatum	Common Porcupine	ERDO1

ORDER CARNIVORA

PROCYONIDAE

Procyon lotor	Raccoon	PRLO1

MUSTELIDAE

Mephitis mephitis	Striped Skunk	MEME1
Mustela frenata	Long-tailed Weasel	MUFR1
Mustela vison	Mink	MUVI1
Taxidea taxus	American Badger	TATA1

CANIDAE

Canis latrans	Coyote	CALA1
Urocyon cinereoargenteus	Common Gray Fox	URCI1
Vulpes vulpes	Red Fox	VUVU1

FELIDAE

Felis concolor	Mountain Lion	FECO1
Lynx rufus	Bobcat	LYRU1

ORDER ARTIODACTYLA

CERVIDAE

Cervus elaphus	Elk (Wapiti)	CEEL1
Odocoileus hemionus	Mule Deer	ODHE1
Odocoileus virginianus	White-tailed Deer	ODVI1
Odocoileus hemionus x virginianus	Mule X White-tailed Deer	HEXVI

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
LOGGERHEAD SHRIKE OBSERVATIONS 1995																	
12/14/95	LOGGERHEAD SHRIKE	LALU1	BZ	BW01R		17	K	0		2	110		1				1
05/12/95	LOGGERHEAD SHRIKE	LALU1	BZ			4	P	0	1	2	322	560	1				1
08/28/95	LOGGERHEAD SHRIKE	LALU1	BZ	RS01B		14	G	1		2	230		1				1
TOTAL 1995 OBSERVATIONS													*3*				
AMPHIBIANS SPRING SEASON 1995																	
05/16/95	BOREAL CHORUS FORG	PSTR1	BZ	RS02B		16	K	6		2	20		1	1			
05/16/95	BOREAL CHORUS FROG	PSTR1	BZ	RA01B		12	F	6		2	30		1	1			
05/23/95	BOREAL CHORUS FROG	PSTR1	BZ	RA04B		2	T	6		2	30		3	3			
05/15/95	BOREAL CHORUS FORG	PSTR1	BZ	BA01R		13	G	6		2	41		2				2
04/28/95	BOREAL CHORUS FROG	PSTR1	BZ	RS02B		17	M	6		2	51		3	3			
04/24/95	BOREAL CHORUS FROG	PSTR1	BZ	POND C-1	OU5	7	N	6		2	54		1	1			
04/28/95	BOREAL CHORUS FROG	PSTR1	BZ	POND A-3	OU6	12	P	6		2	54	212	3				3
04/28/95	BOREAL CHORUS FROG	PSTR1	BZ	RG02B		16	P	6		2	54		9	9			
05/15/95	BOREAL CHORUS FROG	PSTR1	BZ	SNWBERPD		11	D	6		2	54		4	4			
05/15/95	BOREAL CHORUS FROG	PSTR1	BZ			13	H	6		2	54		12	12			
05/16/95	BOREAL CHORUS FROG	PSTR1	BZ	POND A-1	OU6	12	N	6		2	54		8	8			
05/16/95	BOREAL CHORUS FROG	PSTR1	BZ	POND A-2	OU6	12	O	6		2	54		10	10			
05/16/95	BOREAL CHORUS FROG	PSTR1	BZ	POND A-3	OU6	12	P	6		2	54		12	12			
05/16/95	BOREAL CHORUS FROG	PSTR1	BZ	POND B-3	OU6	10	O	6		2	54		6	6			
05/16/95	BOREAL CHORUS FROG	PSTR1	BZ	POND B-1	OU6	10	N	6		2	54		5	5			
05/16/95	BOREAL CHORUS FORG	PSTR1	BZ	RA01B		11	E	6		2	93		1	1			
TOTAL SPRING OBSERVATIONS													*81*				
05/15/95	GREAT PLAINS TOAD	BUCO1	BZ	RG02A		7	G	0		2	322		1				1
TOTAL SPRING OBSERVATIONS													*1*				
AMPHIBIANS SUMMER SEASON 1995																	
07/25/95	BOREAL CHORUS FROG	PSTR1	BZ	HA24A		2	T	1		2	54		10			10	
07/16/95	BOREAL CHORUS FROG	PSTR1	BZ	HA16A		3	F	1		2	47		10			10	
07/13/95	BOREAL CHORUS FROG	PSTR1	BZ	HA04A		11	N	1		2	51		10			10	
07/31/95	BOREAL CHORUS FROG	PSTR1	BZ	HA04A		11	N	0		2	51		2				2
07/13/95	BOREAL CHORUS FROG	PSTR1	BZ	HWO5A		13	P	1		2	54		10			10	
07/13/95	BOREAL CHORUS FROG	PSTR1	BZ	HA06A		17	N	1		2	51		10			10	
06/23/95	BOREAL CHORUS FROG	PSTR1	BZ	RG02B		17	O	6		2	51		1	1			
TOTAL SUMMER OBSERVATIONS													*53*				
07/26/95	BULLFROG	RACA1	BZ	HA25A		4	R	6		2	54		1				1
07/25/95	BULLFROG	RACA1	BZ	HA25A		4	R	1		2	93		1				1
TOTAL SUMMER OBSERVATIONS													*2*				
06/23/95	TIGER SALAMANDER	AMTI1	BZ	RG02B		17	O	5		2	51		1				1
TOTAL SUMMER OBSERVATIONS													*1*				

96

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
AMPHIBIANS FALL SEASON 1995																	
09/28/95	NORTHERN LEOPARD FRFOG	RAPI1	BZ	LANDFILL	OU7	12	L	1		2	54	93	1				1
TOTAL FALL OBSERVATIONS													*1*				
09/29/95	TIGER SALAMANDER	AMTI1	BZ	BLDG850	OU1	8	L	1		2	420		1				1
10/13/95	TIGER SALAMANDER	AMTI1	IA	130 BLDG		8	H	1		2	520		1				1
TOTAL FALL OBSERVATIONS													*2*				
REPTILES SPRING SEASON 1995																	
05/15/95	WESTERN PAINTED TURTLE	CHPI1	BZ	SNWBERPD		11	D	0		2	54		1				1
05/15/95	WESTERN PAINTED TURTLE	CHPI1	BZ			13	H	0		2	54		5				5
05/16/95	WESTERN PAINTED TURTLE	CHPI1	BZ	RA01B		13	H	0		2	54		2				2
05/16/95	WESTERN PAINTED TURTLE	CHPI1	BZ	POND B-2	OU6	10	O	0		2	54		2				2
05/16/95	WESTERN PAINTED TURTLE	CHPI1	BZ	POND B-2	OU6	10	O	0		2	54		2				2
05/16/95	WESTERN PAINTED TURTLE	CHPI1	BZ	POND B-1	OU6	10	N	0		2	54		1				1
05/23/95	WESTERN PAINTED TURTLE	CHPI1	BZ	POND D-1		3	R	0		2	54		2				2
TOTAL SPRING OBSERVATIONS													*15*				
05/24/95	WESTERN PLAINS GARTER SNAKE	THRA1	BZ	RW02B		4	N	18		2	210		1				1
TOTAL SPRING OBSERVATIONS													*1*				
REPTILES SUMMER SEASON 1995																	
06/22/95	BULLSNAKE	PIME1	BZ	RG03B		2	M	1		2	322		1				1
07/11/95	BULLSNAKE	PIME1	BZ	C-1 DAM	OU5	7	N	1		2	322		1				1
07/19/95	BULLSNAKE	PIME1	BZ	HA08A		7	P	18		2	30		1				1
07/12/95	BULLSNAKE	PIME1	BZ	DECONPAD	OU2	8	M	0		2	540		1				1
08/17/95	BULLSNAKE	PIME1	BZ	881 HILL	OU1	8	N	1		2	540	322	1				1
06/12/95	BULLSNAKE	PIME1	BZ	POND B-2	OU6	10	O	1		2	54		1				1
06/23/95	BULLSNAKE	PIME1	BZ	RW01B		14	R	18		2	110		1				1
TOTAL SUMMER OBSERVATIONS													*7*				
07/19/95	EASTERN SHORT-HORNED LIZARD	PHDO1	BZ	HX15R		3	O	0		2	323		1				1
07/13/95	EASTERN SHORT-HORNED LIZARD	PHDO1	BZ	HX21R		12	S	0		2	323		1				1
TOTAL SUMMER OBSERVATIONS													*2*				
07/12/95	EASTERN YELLOWBELLY RACER	COCO1	BZ	HX02R		2	0	0		2	323		1				1
07/12/95	EASTERN YELLOWBELLY RACER	COCO1	BZ	HX03R		16	N	0		2	323		1				1
TOTAL SUMMER OBSERVATIONS													*2*				
06/15/95	PRAIRIE RATTLESNAKE	CRVI1	BZ	RS03B		5	P	0		2	210		1				1
06/05/95	PRAIRIE RATTLESNAKE	CRVI1	BZ	POND C-2	OU5	7	P	0		2	530		1				1
08/01/95	PRAIRIE RATTLESNAKE	CRVI1	BZ	RA01B		13	G	1		2	322		1				1
TOTAL SUMMER OBSERVATIONS													*3*				
07/31/95	WESTERN PAINTED TURTLE	CHPI1	BZ	POND D-1		3	S	0		4	54		5				5
07/07/95	WESTERN PAINTED TURTLE	CHPI1	BZ	LANDFILL	OU7	12	L	0		2	93		9				9
08/28/95	WESTERN PAINTED TURTLE	CHPI1	BZ	LINDSAY		13	H	0		2	54		6				6

97

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/05/95	WESTERN PAINTED TURTLE	CHPI1	BZ	LANDFILL	OU7	13	L	0		2	54		1				1
07/26/95	WESTERN PAINTED TURTLE	CHPI1	BZ	LANDFILL	OU7	13	L	0		2	54	93	2				3
TOTAL SUMMER OBSERVATIONS													*23*				
06/22/95	WESTERN PLAINS GARTER SNAKE	THRA1	BZ	RA03B		5	I	1		2	20		1				1
07/18/95	WESTERN PLAINS GARTER SNAKE	THRA1	BZ	HW09R		7	O	18		2	110		1				1
TOTAL SUMMER OBSERVATIONS													*2*				
REPTILES FALL SEASON 1995																	
09/28/95	WESTERN PAINTED TURTLE	CHPI1	BZ	POND A-2	OU6	12	O	0		2	54		2				2
10/03/95	WESTERN PAINTED TURTLE	CHPI1	BZ	LANDFILL	OU7	13	L	0		2	93		1				1
TOTAL FALL OBSERVATIONS													***3***				
MULE DEER WINTER SEASON 1995																	
01/12/95	MULE DEER	ODHE1	BZ	RA02A		6	I	1	5	2	10	322	18		13	5	
01/26/95	MULE DEER	ODHE1	BZ			5	I	1		2	10		19		12	7	
02/23/95	MULE DEER	ODHE1	BZ	RS03B		5	R	1		2	10		1		1		
01/30/95	MULE DEER	ODHE1	BZ		OU5	7	I	0		2	20		9		5	4	
02/14/95	MULE DEER	ODHE1	BZ	BA01R		13	H	0		2	20		8			2	6
12/19/95	MULE DEER	ODHE1	BZ	RA01B		12	F	1		2	20		5		4	1	
12/20/95	MULE DEER	ODHE1	BZ			7	J	0		2	20		1	1			
01/26/95	MULE DEER	ODHE1	BZ	POND B-5	OU6	11	P	15		2	54	322	2	2			
01/30/95	MULE DEER	ODHE1	BZ		OU5	7	I	5		2	110		8	2	3	3	
02/23/95	MULE DEER	ODHE1	BZ	RS03B		5	P	5		2	110		26	5	11	10	
01/25/95	MULE DEER	ODHE1	BZ	BA01R		10	E	0		2	120		7	2	3	2	
02/14/95	MULE DEER	ODHE1	BZ	RA02B	OU6	11	M	0		2	210		9	1	6	2	
02/14/95	MULE DEER	ODHE1	BZ	RA02B	OU6	11	P	0		2	210		11				11
01/03/95	MULE DEER	ODHE1	BZ			7	R	5		2	211	322	6		3	3	
12/20/95	MULE DEER	ODHE1	BZ	RW03B		7	J	1		2	211		1	1			
01/30/95	MULE DEER	ODHE1	BZ		OU5	7	J	0		2	212		4	1	3		
12/20/95	MULE DEER	ODHE1	BZ	RW03B		7	K	1		2	212		1	1			
01/24/95	MULE DEER	ODHE1	BZ			4	P	0		2	220		2		2		
01/03/95	MULE DEER	ODHE1	BZ			13	F	1	5	2	230		14	3	6	5	
01/23/95	MULE DEER	ODHE1	BZ	RW03B		6	H	0		2	230		1	1			
01/26/95	MULE DEER	ODHE1	BZ	RS02B		14	J	5		2	230		1	1			
01/30/95	MULE DEER	ODHE1	BZ	RS01B		15	G	5	1	2	230		9		6	5	
02/23/95	MULE DEER	ODHE1	BZ			13	F	1	5	2	230	322	9				9
02/23/95	MULE DEER	ODHE1	BZ	RS02B		16	L	1		2	230		1		1		
12/20/95	MULE DEER	ODHE1	BZ	RS01B		15	G	1		2	230		1	1			
12/22/95	MULE DEER	ODHE1	BZ			14	E	1		2	230		8	1	5	2	
01/03/95	MULE DEER	ODHE1	BZ	POND B-3	0U6	10	O	5		2	322	10	6		4	2	
01/03/95	MULE DEER	ODHE1	BZ	ANT.SPRG		6	I	0		2	322	20	52	11	27	14	
01/03/95	MULE DEER	ODHE1	BZ			14	J	0		2	322	230	10	1	6	3	

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/03/95	MULE DEER	ODHE1	BZ	BORROW	OU5	6	P	0		2	322		2	2			
01/03/95	MULE DEER	ODHE1	BZ	POND C-2	OU2	8	P	0		2	322		1	1			
01/03/95	MULE DEER	ODHE1	BZ			14	L	5	1	2	322		4		2	2	
01/03/95	MULE DEER	ODHE1	BZ			16	L	0		2	322		9	1			8
01/03/95	MULE DEER	ODHE1	BZ	POND B-4	0U6	11	P	5		2	322		39	1	21	17	
01/03/95	MULE DEER	ODHE1	BZ			10	R	0		2	322		10	10			
01/03/95	MULE DEER	ODHE1	BZ			10	G	0		2	322		10		5	5	
01/04/95	MULE DEER	ODHE1	BZ					1		2	322		5	5			
01/06/95	MULE DEER	ODHE1	BZ	POND B-5	OU6	12	Q	0		2	322		5	5			
01/12/95	MULE DEER	ODHE1	BZ	LANDFILL	OU5	7	1	5		2	322		2	1	1		
01/16/95	MULE DEER	ODHE1	BZ		OU1	7	L	1		2	322		25	3			22
01/16/95	MULE DEER	ODHE1	BZ	NW.LFILL		9	D	0		2	322		16	1	10	5	
01/16/95	MULE DEER	ODHE1	BZ		OU7	14	O	0		2	322		3		2	1	
01/16/95	MULE DEER	ODHE1	BZ	881 HILL		8	M	5		2	322		4	1	3		
01/16/95	MULE DEER	ODHE1	BZ			16	P	0		2	322		8	8			
01/17/95	MULE DEER	ODHE1	BZ		OU2	10	O	1		2	322		2	2			
01/17/95	MULE DEER	ODHE1	BZ		0U6	10	O	1		2	322		2		2		
01/17/95	MULE DEER	ODHE1	BZ	ORCHARD		6	I	5		2	322		17				17
01/17/95	MULE DEER	ODHE1	BZ			11	K	5		2	322		14		5	9	
01/17/95	MULE DEER	ODHE1	BZ			13	O	5		2	322		14	12	1	1	
01/18/95	MULE DEER	ODHE1	BZ		OU6	10	O	5		2	322		20				20
01/19/95	MULE DEER	ODHE1	BZ			12	S	0		2	322		17				17
01/20/95	MULE DEER	ODHE1	BZ	BX01B		10	Q	1		2	322		18				18
01/20/95	MULE DEER	ODHE1	BZ	EST GATE		9	S	1		2	322		11	2			9
01/20/95	MULE DEER	ODHE1	BZ		OU3	6	U	5		2	322		9				9
01/20/95	MULE DEER	ODHE1	BZ			6	Q	5		2	322		2	2			
01/23/95	MULE DEER	ODHE1	BZ	RW03B		7	I	0		2	322		15		3	2	10
01/23/95	MULE DEER	ODHE1	BZ	RW03B		7	H	0		2	322		10		8	2	
01/23/95	MULE DEER	ODHE1	BZ	RG02A		7	F	1		2	322		10		9	1	
01/24/95	MULE DEER	ODHE1	BZ		OU2	8	P	0	5	2	322		9	9			
01/24/95	MULE DEER	ODHE1	BZ		OU5	7	J	5		2	322		5		5		
01/24/95	MULE DEER	ODHE1	BZ			4	P	0		2	322		22	4			18
01/24/95	MULE DEER	ODHE1	BZ			15	P	5		2	322		11				11
01/24/95	MULE DEER	ODHE1	BZ			5	H	0		2	322		17		10	7	
01/25/95	MULE DEER	ODHE1	BZ	BW01R		17	L	1		2	322		10	1	6	2	
01/25/95	MULE DEER	ODHE1	BZ	ASHPITS	OU5	7	G	1	5	2	322		9				9
01/25/95	MULE DEER	ODHE1	BZ		OU5	7	H	5	0	2	322		9	1	5	3	
01/25/95	MULE DEER	ODHE1	BZ		OU5	7	K	0		2	322		17		10	7	
01/25/95	MULE DEER	ODHE1	BZ	RS01B		14	G	1		2	322		10	2	5	3	
01/26/95	MULE DEER	ODHE1	BZ			15	I	5		2	322	230	23		15	8	
01/26/95	MULE DEER	ODHE1	BZ			17	I	5	1	2	322	230	11	1	7	3	
01/26/95	MULE DEER	ODHE1	BZ	BW01R		17	K	5		2	322		26	12	9	5	

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/26/95	MULE DEER	ODHE1	BZ			13	U	1	5	2	322		6		4	2	
01/26/95	MULE DEER	ODHE1	BZ		OU1	7	K	5		2	322		9		7	2	
01/26/95	MULE DEER	ODHE1	BZ		OU1	7	K	5		2	322		12	1	7	4	
01/26/95	MULE DEER	ODHE1	BZ			7	Q	5	0	2	322		7	3	2	2	
01/26/95	MULE DEER	ODHE1	BZ		OU1	7	N	0	15	2	322		20	2	11	7	
01/30/95	MULE DEER	ODHE1	BZ	N.LFILL		12	G	1		2	322	420	9		6	3	
01/30/95	MULE DEER	ODHE1	BZ	RW02B		4	J	1		2	322		23	3	14	6	
01/30/95	MULE DEER	ODHE1	BZ		OU5	7	N	1	5	2	322		4	4			
01/30/95	MULE DEER	ODHE1	BZ			15	O	0	5	2	322		5	5			
01/30/95	MULE DEER	ODHE1	BZ			14	O	0		2	322		10	1	5	4	
01/30/95	MULE DEER	ODHE1	BZ		OU7	12	L	1		2	322		3		3		
01/30/95	MULE DEER	ODHE1	BZ	POND A-4	OU6	13	Q	0	5	2	322		14	1	8	5	
01/30/95	MULE DEER	ODHE1	BZ	E. GATE		8	T	0		2	322		15	6	6	2	1
01/30/95	MULE DEER	ODHE1	BZ	E. GATE		9	U	0		2	322		14	1	8	3	2
02/01/95	MULE DEER	ODHE1	BZ	N.LFILL		11	F	0	5	2	322		22	1			21
02/01/95	MULE DEER	ODHE1	BZ	LINDSAY		13	G	1		2	322		8				8
02/14/95	MULE DEER	ODHE1	BZ	RA02B	OU6	11	M	0		2	322		3		3		
02/21/95	MULE DEER	ODHE1	BZ			16	L	0		2	322		2		2		
02/21/95	MULD DEER	ODHE1	BZ			16	P	5		2	322		11	9			2
02/21/95	MULE DEER	ODHE1	BZ			15	T	5		2	322		26	9	10	7	
02/21/95	MULE DEER	ODHE1	BZ			4	U	5		2	322		25	5	14	6	
02/22/95	MULE DEER	ODHE1	BZ			7	Q	0		2	322	211	25	1			24
02/22/95	MULE DEER	ODHE1	BZ			12	T	0		2	322		1	1			
02/22/95	MULE DEER	ODHE1	BZ			8	Q	1	5	2	322		5	5			
02/22/95	MULE DEER	ODHE1	BZ	BG02B		9	D	0		2	322		18		9	9	
02/23/95	MULE DEER	ODHE1	BZ	SEP TRNC		13	L	5		2	322		19		9	10	
02/23/95	MULE DEER	ODHE1	BZ			15	M	1		2	322		8		4	4	
02/23/95	MULE DEER	ODHE1	BZ	RG02B		16	N	0		2	322		9		5	4	
02/23/95	MULE DEER	ODHE1	BZ	RA01B		11	E	1	5	2	322		14	2	6	4	2
02/23/95	MULE DEER	ODHE1	BZ	RS03B		5	P	5		2	322		13	5	7	1	
02/28/95	MULE DEER	ODHE1	BZ		OU1	7	M	5		2	322		26				26
02/28/95	MULE DEER	ODHE1	BZ		OU1	8	M	5		2	322		2	1	1		
02/28/95	MULE DEER	ODHE1	BZ	POND A-1	OU6	11	N	0		2	322		3		3		
12/14/95	MULE DEER	ODHE1	BZ			14	P	5		2	322		10	1	5	4	
12/14/95	MULE DEER	ODHE1	BZ	POND A-2	OU6	12	O	5		2	322		1	1			
12/14/95	MULE DEER	ODHE1	BZ	BW01B		15	T	5	0	2	322		22	10	9	3	
12/19/95	MULE DEER	ODHE1	BZ			4	I	0		2	322		1	1			
12/19/95	MULE DEER	ODHE1	BZ			6	G	0		2	322		7		6	1	
12/19/95	MULE DEER	ODHE1	BZ	POND A-2	OU6	12	O	5		2	322		3	1	2		
12/19/95	MULE DEER	ODHE1	BZ			14	L	5		2	322		6	2	4		
12/19/95	MULE DEER	ODHE1	BZ			14	M	5		2	322		1	1			
12/20/95	MULE DEER	ODHE1	BZ			7	J	5		2	322		2	2			

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
12/20/95	MULE DEER	ODHE1	BZ			10	E	0		2	322		9		7	2	
12/21/95	MULE DEER	ODHE1	BZ			5	T	5		2	322		3		3		
12/22/95	MULE DEER	ODHE1	BZ			5	J	5	1	2	322	20	28				28
12/22/95	MULE DEER	ODHE1	BZ			15	O	1		2	322		1				1
12/22/95	MULE DEER	ODHE1	BZ			11	R	5		2	322		5	1	4		
12/22/95	MULE DEER	ODHE1	BZ			9	R	1		2	322		5	5			
12/22/95	MULE DEER	ODHE1	BZ			6	F	0		2	322		2	2			
12/22/95	MULE DEER	ODHE1	BZ			5	I	0		2	322		14	1	10	4	
12/22/95	MULE DEER	ODHE1	BZ			5	I	0		2	322		5		5		
12/22/95	MULE DEER	ODHE1	BZ			3	L	5		2	322		3				3
12/22/95	MULE DEER	ODHE1	BZ			12	N	5		2	322		5	5			
12/27/95	MULE DEER	ODHE1	BZ			14	L	5		2	322		6				6
12/27/95	MULE DEER	ODHE1	BZ	RG02B		16	N	1	5	2	322		10		8	2	
01/30/95	MULE DEER	ODHE1	BZ	POND A-4	OU6	13	Q	0	5	2	323		9	1	3	5	
02/23/95	MULE DEER	ODHE1	BZ	BG0IB		5	F	0		2	323		13		8	5	
12/14/95	MULE DEER	ODHE1	BZ	BG01R		16	O	1		2	323		1	1			
12/19/95	MULE DEER	ODHE1	BZ			5	F	5		2	323		11	2	7	2	
12/19/95	MULE DEER	ODHE1	BZ	BURN		15	N	5		2	323		13	5	7	1	
12/19/95	MULE DEER	ODHE1	BZ			6	G	0		2	323		16	5	7	4	
12/19/95	MULE DEER	ODHE1	BZ			2	G	0		2	323		20	6	9	5	
12/21/95	MULE DEER	ODHE1	BZ			2	F	5		2	323		10	2	8		
12/21/95	MULE DEER	ODHE1	BZ	RG03B		3	K	1		2	323		1	1			
12/22/95	MULE DEER	ODHE1	BZ			13	P	0		2	323		1	1			
12/22/95	MULE DEER	ODHE1	BZ			11	I	5		2	323		4	2	2		
12/22/95	MULE DEER	ODHE1	BZ			15	N	1		2	323		8	1	5	2	
TOTAL WINTER OBSERVATIONS													*1380*				
MULE DEER SPRING SEASON 1995																	
04/28/95	MULE DEER	ODHE1	BZ	RA01B		11	E	5		2	10		13				13
05/16/95	MULE DEER	ODHE1	BZ	RS02B		16	K	1		2	10		8	8			
05/11/95	MULE DEER	ODHE1	BZ	ORCHARD		6	K	0		2	20	130	7				7
05/15/95	MULE DEER	ODHE1	BZ			13	H	0		2	20		2		2		
05/15/95	MULE DEER	ODHE1	BZ	RA02A		6	H	0		2	20		11				11
05/11/95	MULE DEER	ODHE1	BZ	WAL CK	OU6	13	T	1	5	2	110	322	22				22
05/15/95	MULE DEER	ODHE1	BZ	BD03B		5	Q	0		2	110		5				5
05/18/95	MULE DEER	ODHE1	BZ	RS01B		14	E	0		2	110		1		1		
05/31/95	MULE DEER	ODHE1	BZ	TR10		4	L	1		2	110		7	1	6		
03/01/95	MULE DEER	ODHE1	BZ			11	E	0	5	2	120	322	7				7
04/28/95	MULE DEER	ODHE1	BZ			11	E	0		2	120	540	15				15
03/31/95	MULE DEER	ODHE1	BZ	RW02B		4	L	0		2	210		1	1			
05/15/95	MULE DEER	ODHE1	BZ	BD03B		5	Q	1		2	210		8				8
03/23/95	MULE DEER	ODHE1	BZ			10	H	5		2	211	322	4	1	2	1	

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
03/23/95	MULE DEER	ODHE1	BZ			9	E	5	0	2	211	322	9				9
03/30/95	MULE DEER	ODHE1	BZ	BS01B		14	G	0	5	2	230		12				12
05/15/95	MULE DEER	ODHE1	BZ			13	F	1		2	230	322	14				14
05/15/95	MULE DEER	ODHE1	BZ			15	G	0		2	230		1		1		
05/15/95	MULE DEER	ODHE1	BZ			15	J	0	5	2	230		6				6
05/15/95	MULE DEER	ODHE1	BZ			13	H	0		2	230		9				9
05/16/95	MULE DEER	ODHE1	BZ	RS02B		16	K	1		2	230		1		1		
05/18/95	MULE DEER	ODHE1	BZ	RS01B		14	E	0		2	230		2		2		
05/18/95	MULE DEER	ODHE1	BZ	RS01B		15	F	0		2	230		5		5		
05/18/95	MULE DEER	ODHE1	BZ	RS01B		13	F	0		2	230		7	7			
05/31/95	MULE DEER	ODHE1	BZ			13	H	5	0	2	230	322	4	1	3		
05/31/95	MULE DEER	ODHE1	BZ	BS02B		15	J	1		2	230	322	1		1		
05/31/95	MULE DEER	ODHE1	BZ			13	F	5		2	230		9	1	8		
05/31/95	MULE DEER	ODHE1	BZ			13	F	1		2	230		2				2
05/31/95	MULE DEER	ODHE1	BZ			14	F	1		2	230		2			2	
03/14/95	MULE DEER	ODHE1	BZ		OU5	7	F	5		2	322		7				7
03/17/95	MULE DEER	ODHE1	BZ	POND B-1	OU6	10	N	5		2	322		6	6			
03/17/95	MULE DEER	ODHE1	BZ			14	N	5		2	322		16				16
03/17/95	MULE DEER	ODHE1	BZ	RS02B		15	K	0	5	2	322		12	2	6	4	
03/17/95	MULE DEER	ODHE1	BZ			13	J	5		2	322		20		12	8	
03/17/95	MULE DEER	ODHE1	BZ			4	J	1	5	2	322		9		5	4	
03/17/95	MULE DEER	ODHE1	BZ			4	I	1	5	2	322		30	8	16	6	
03/23/95	MULE DEER	ODHE1	BZ			7	N	5		2	322		12	4			8
03/23/95	MULE DEER	ODHE1	BZ			5	K	0		2	322		5	2	1		2
03/28/95	MULE DEER	ODHE1	BZ	POND A-1	OU6	12	N	0		2	322		4	1	3		
03/29/95	MULE DEER	ODHE1	BZ		OU5	7	H	5		2	322		20				20
03/30/95	MULE DEER	ODHE1	BZ			8	S	5		2	322		1				1
03/30/95	MULE DEER	ODHE1	BZ	RG02A	OU5	7	G	5		2	322		18	1			17
03/30/95	MULE DEER	ODHE1	BZ	RG02A	OU5	7	G	5		2	322		2		2		
03/31/95	MULE DEER	ODHE1	BZ			7	I	5		2	322		10				10
03/31/95	MULE DEER	ODHE1	BZ			5	I	5		2	322		1				1
03/31/95	MULE DEER	ODHE1	BZ		OU5	7	G	5		2	322		9				9
03/31/95	MULE DEER	ODHE1	BZ	RS02B		15	K	0	5	2	322		12				12
03/31/95	MULE DEER	ODHE1	BZ	RG03B		2	K	5		2	322		19				19
04/24/95	MULE DEER	ODHE1	BZ			6	L	5		2	322		6				6
04/25/95	MULE DEER	ODHE1	BZ	LINDSAY		13	G	1		2	322	20	21				21
04/25/95	MULE DEER	ODHE1	BZ	POND A-2	OU6	12	O	1		2	322		15				15
04/25/95	MULE DEER	ODHE1	BZ			14	P	0		2	322		4				4
04/25/95	MULE DEER	ODHE1	BZ			13	O	5		2	322		7				7
04/27/95	MULE DEER	ODHE1	BZ			15	R	0		2	322		8				8
04/28/95	MULE DEER	ODHE1	BZ	ANT.SPRG		4	J	5	0	2	322		27	1			26
04/28/95	MULE DEER	ODHE1	BZ	RG02B		16	O	0		2	322		6				6

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
04/28/95	MULE DEER	ODHE1	BZ	RG02B		16	O	0		2	322		3				3
04/28/95	MULE DEER	ODHE1	BZ	RS02B		15	K	5		2	322		13				13
05/09/95	MULE DEER	ODHE1	BZ	OU5 LFIL	OU5	7	G	5		2	322		11				11
05/09/95	MULE DEER	ODHE1	BZ	TR10		4	K	0	5	2	322		22				22
05/09/95	MULE DEER	ODHE1	BZ	881 HILL	OU1	7	K	1	5	2	322		24				24
05/10/95	MULE DEER	ODHE1	BZ	TR10		4	K	1		2	322		1				1
05/10/95	MULE DEER	ODHE1	BZ	ANT.SPRG		6	J	5		2	322		17				17
05/10/95	MULE DEER	ODHE1	BZ			14	P	5		2	322		14				14
05/12/95	MULE DEER	ODHE1	BZ	SNOWBERY		13	F	0		2	322	220	3		3		
05/12/95	MULE DEER	ODHE1	BZ	SODARRAS		6	F	5		2	322	323	16				16
05/12/95	MULE DEER	ODHE1	BZ	SEPTRNCH		14	M	0		2	322		20	5			15
05/12/95	MULE DEER	ODHE1	BZ			4	P	1		2	322		7	1			6
05/15/95	MULE DEER	ODHE1	BZ			12	E	5		2	322		1	1			
05/15/95	MULE DEER	ODHE1	BZ			13	H	5		2	322		7				7
05/15/95	MULE DEER	ODHE1	BZ			14	H	0		2	322		3				3
05/15/95	MULE DEER	ODHE1	BZ	BA01R		12	F	1		2	322		2				3
05/16/95	MULE DEER	ODHE1	BZ		OU2	8	O	5		2	322		2				2
05/18/95	MULE DEER	ODHE1	BZ			17	J	1	5	2	322		6				6
05/18/95	MULE DEER	ODHE1	BZ	LINDSAY		13	G	5	1	2	322		8				8
05/23/95	MULE DEER	ODHE1	BZ		OU2	8	N	1		2	322		5				5
05/23/95	MULE DEER	ODHE1	BZ			8	P	1		2	322		9	4			5
05/24/95	MULE DEER	ODHE1	BZ		OU5	7	Q	1	5	2	322		18				18
05/24/95	MULE DEER	ODHE1	BZ	LANDFILL	OU5	7	J	5		2	322		6				6
05/24/95	MULE DEER	ODHE1	BZ			15	O	1		2	322		2		1	1	
05/24/95	MULE DEER	ODHE1	BZ	RG03B		4	P	1		2	322		1		1		
05/31/95	MULE DEER	ODHE1	BZ			8	P	5		2	322		9	1	8		
05/31/95	MULE DEER	ODHE1	BZ			7	P	1		2	322		18	18			
05/31/95	MULE DEER	ODHE1	BZ	ORCHARD		6	J	5		2	322		6				6
05/31/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	J	0		2	322		16	3	13		
03/17/95	MULE DEER	ODHE1	BZ			15	L	1		2	323		15	10	3	2	
03/31/95	MULE DEER	ODHE1	BZ	BX01B		11	R	1		2	323		30	1		8	21
03/31/95	MULE DEER	ODHE1	BZ			6	F	5		2	323		25				25
04/25/95	MULE DEER	ODHE1	BZ	BG01R		15	N	0		2	323		3		3		
04/25/95	MULE DEER	ODHE1	BZ	RA03B		5	H	0		2	323		30				30
04/28/95	MULE DEER	ODHE1	BZ	BG02B		8	D	5		2	323		17				17
04/28/95	MULE DEER	ODHE1	BZ	BG02B		9	C	5		2	323		15				15
05/12/95	MULE DEER	ODHE1	BZ			4	H	1	5	2	323		34	1			33
05/18/95	MULE DEER	ODHE1	BZ			11	F	1	5	2	323		5				5
05/18/95	MULE DEER	ODHE1	BZ			12	I	5	1	2	323		5	2	2	1	
05/18/95	MULE DEER	ODHE1	BZ			12	J	1	5	2	323		10	1	8	1	
TOTAL SPRING OBSERVATIONS													*961*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
MULE DEER SUMMER SEASON 1995																	
06/12/95	MULE DEER	ODHE1	BZ			6	L	1	5	2	10		2		1	1	
06/22/95	MULE DEER	ODHE1	BZ	RA02A		7	H	0		2	10		2		2		
08/01/95	MULE DEER	ODHE1	BZ			11	E	1		4	10		6	2	4		
08/01/95	MULE DEER	ODHE1	BZ			15	J	1		4	10		1	1			
08/29/95	MULE DEER	ODHE1	BZ	RA03B		5	I	5		2	10		5	4	1		
06/21/95	MULE DEER	ODHE1	BZ			13	G	1	5	2	20	322	4	4			
06/23/95	MULE DEER	ODHE1	BZ	RA01B		13	G	1		2	20		2	2			
07/06/95	MULE DEER	ODHE1	BZ	BA01R		12	F	1		2	20		2	1	1		
07/25/95	MULE DEER	ODHE1	BZ	RA02A		6	H	1		2	20		2		2		
07/31/95	MULE DEER	ODHE1	BZ			6	K	1		4	20		1				1
07/31/95	MULE DEER	ODHE1	BZ			6	H	1		4	20		1		1		
08/01/95	MULE DEER	ODHE1	BZ	RA01B		11	E	0	1	2	20		2		2		
08/01/95	MULE DEER	ODHE1	BZ	RA01B		13	G	0		2	20		3	1	2		
08/01/95	MULE DEER	ODHE1	BZ			12	F	1		4	20		1		1		
08/29/95	MULE DEER	ODHE1	BZ	RW02B		5	O	0		2	20		1		1		
08/29/95	MULE DEER	ODHE1	BZ	RA02A		7	I	0		2	20		3	1	2		
08/28/95	MULE DEER	ODHE1	BZ	RA01B		12	F	0		2	30		2		2		
06/12/95	MULE DEER	ODHE1	BZ	BS03B		5	R	0		2	110		2		1	1	
06/15/95	MULE DEER	ODHE1	BZ	RA04B		4	R	5	0	2	110	324	2		1	1	
06/15/95	MULE DEER	ODHE1	BZ			6	S	0		2	110		14	14			
06/19/95	MULE DEER	ODHE1	BZ	BS03B		5	R	0		2	110		2		1	1	
06/21/95	MULE DEER	ODHE1	BZ			4	Q	0		2	110		4		4		
06/21/95	MULE DEER	ODHE1	BZ			12	R	1		2	110		1		1		
06/23/95	MULE DEER	ODHE1	BZ	RW01B		14	Q	0		2	110		3	2	1		
06/23/95	MULE DEER	ODHE1	BZ	RW01B		14	R	0		2	110		4		4		
06/23/95	MULE DEER	ODHE1	BZ	RW01B		14	R	0		2	110		1	1			
06/23/95	MULE DEER	ODHE1	BZ	RW01B		13	S	0		2	110		2	2			
06/26/95	MULE DEER	ODHE1	BZ	BW01A		7	M	0		2	110		1		1		
06/28/95	MULE DEER	ODHE1	BZ	RW01A		7	O	0		2	110		2		1	1	
06/29/95	MULE DEER	ODHE1	BZ	RA02B	OU6	12	M	0		2	110		1				1
07/11/95	MULE DEER	ODHE1	BZ	BW01A		7	M	1		2	110		2		1	1	
07/25/95	MULE DEER	ODHE1	BZ	RW03B		7	I	1	5	2	110		3		1	2	
07/26/95	MULE DEER	ODHE1	BZ	RW01A		7	O	1	5	2	110		6		5	1	
07/26/95	MULE DEER	ODHE1	BZ	RW01A		7	M	1		2	110		1			1	
08/21/95	MULE DEER	ODHE1	BZ	TR10		4	M	1	0	2	110		1		1		
08/29/95	MULE DEER	ODHE1	BZ	RW03B		7	I	0		2	110		1			1	
08/30/95	MULE DEER	ODHE1	BZ	RW01A		7	K	5		2	110		3	2	1		
06/21/95	MULE DEER	ODHE1	BZ	BG01B		5	F	0		2	120		4	1	3		
07/07/95	MULE DEER	ODHE1	BZ	BG01B		5	G	0		2	120		6	4	2		
07/07/95	MULE DEER	ODHE1	BZ			11	G	0		2	120		2	1	1		
06/27/95	MULE DEER	ODHE1	BZ	RW02B		5	O	0		2	210		1		1		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/27/95	MULE DEER	ODHE1	BZ	RW02B		4	K	0		2	210		7	7			
06/29/95	MULE DEER	ODHE1	BZ	RA02B	OU6	12	N	0		2	210		1		1		
08/29/95	MULE DEER	ODHE1	BZ	RW02B		4	N	0		2	210		3	1	2		
06/12/95	MULE DEER	ODHE1	BZ	BW01A		7	M	1		2	212		2		1	1	
06/12/95	MULE DEER	ODHE1	BZ	BW01A		7	L	1		2	212		2		1	1	
06/21/95	MULE DEER	ODHE1	BZ			5	Q	5		2	212		1	1			
06/15/95	MULE DEER	ODHE1	BZ			13	F	0		2	230		2		1	1	
06/15/95	MULE DEER	ODHE1	BZ	BS01B		15	G	0		2	230		1		1		
06/15/95	MULE DEER	ODHE1	BZ	BS01B		15	H	0		2	230		1		1		
06/15/95	MULE DEER	ODHE1	BZ	BS01B		13	F	0		2	230		1		1		
06/20/95	MULE DEER	ODHE1	BZ			15	I	1		2	230		2	1	1		
06/21/95	MULE DEER	ODHE1	BZ	BS02B		15	J	0	5	2	230	322	8	8			
06/21/95	MULE DEER	ODHE1	BZ			13	F	1		2	230		2		1	1	
06/21/95	MULE DEER	ODHE1	BZ			13	F	5		2	230		1	1			
06/21/95	MULE DEER	ODHE1	BZ			13	F	1		2	230		1		1		
06/21/95	MULE DEER	ODHE1	BZ			15	G	1		2	230		1		1		
06/21/95	MULE DEER	ODHE1	BZ	BS01B		15	G	0		2	230		1	1			
06/21/95	MULE DEER	ODHE1	BZ			15	G	4		2	230		1			1	
06/21/95	MULE DEER	ODHE1	BZ			15	G	19		2	230		1		1		
06/21/95	MULE DEER	ODHE1	BZ			13	F	1		2	230		1		1		
06/21/95	MULE DEER	ODHE1	BZ		OU6	11	Q	0		2	230		1		1		
06/23/95	MULE DEER	ODHE1	BZ	RS02B		16	K	5		2	230		1	1			
06/23/95	MULE DEER	ODHE1	BZ	RS02B		16	L	0		2	230		1	1			
06/23/95	MULE DEER	ODHE1	BZ	RS02B		16	L	0		2	230		1	1			
06/23/95	MULE DEER	ODHE1	BZ	RS02B		17	N	0		2	230		3	1	2		
06/28/95	MULE DEER	ODHE1	BZ	BS01B		14	G	0		2	230		5	3	2		
06/28/95	MULE DEER	ODHE1	BZ	BS01B		14	F	0		2	230		1		1		
06/28/95	MULE DEER	ODHE1	BZ	BS01B		13	E	0		2	230		1		1		
06/29/95	MULE DEER	ODHE1	BZ	RS01B		14	F	1		2	230		4		2	2	
06/29/95	MULE DEER	ODHE1	BZ	RS01B		15	G	1		2	230		9	2	7		
06/29/95	MULE DEER	ODHE1	BZ	RS01B		14	G	1		2	230		3		3		
07/07/95	MULE DEER	ODHE1	BZ	BS01B		15	H	0		2	230		2	1	1		
07/07/95	MULE DEER	ODHE1	BZ	BS01B		14	G	0		2	230		2		2		
07/07/95	MULE DEER	ODHE1	BZ	BS01B		14	F	1		2	230		2		1	1	
07/07/95	MULE DEER	ODHE1	BZ	BS01B		14	F	1		2	230		1		1		
07/10/95	MULE DEER	ODHE1	BZ	RS01B		14	F	5		2	230		3	2	1		
07/10/95	MULE DEER	ODHE1	BZ	RS01B		14	F	5		2	230		2	1	1		
07/10/95	MULE DEER	ODHE1	BZ	RS01B		13	E	1		2	230		1		1		
07/27/95	MULE DEER	ODHE1	BZ	RS02B		17	M	0		2	230		2	2			
08/28/95	MULE DEER	ODHE1	BZ	RS02B		17	M	0		2	230		2	2			
06/05/95	MULE DEER	ODHE1	BZ			5	R	1		2	322		3		3		
06/07/95	MULE DEER	ODHE1	BZ	BG01R		15	O	0		2	322		7	1			6

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/12/95	MULE DEER	ODHE1	BZ	POND B-4	OU6	10	P	1		2	322		3		3		
06/12/95	MULE DEER	ODHE1	BZ		OU1	7	J	1		2	322		6	6			
06/14/95	MULE DEER	ODHE1	BZ			14	H	1	5	2	322		2		2		
06/14/95	MULE DEER	ODHE1	BZ			11	E	0		2	322		1		1		
06/20/95	MULE DEER	ODHE1	BZ	BG01R		15	O	1		2	322		3	1	2		
06/21/95	MULE DEER	ODHE1	BZ	LANDFILL	OU7	13	M	1		2	322		2		2		
06/21/95	MULE DEER	ODHE1	BZ	850 BLDG	OU2	7	K	1		2	322		2		1	1	
06/21/95	MULE DEER	ODHE1	BZ			7	O	1		2	322		2		1	1	
06/21/95	MULE DEER	ODHE1	BZ			5	Q	5		2	322		2		2		
06/21/95	MULE DEER	ODHE1	BZ			5	Q	5		2	322		2	2			
06/21/95	MULE DEER	ODHE1	BZ			5	P	5		2	322		1		1		
06/21/95	MULE DEER	ODHE1	BZ			4	P	5		2	322		3		3		
06/21/95	MULE DEER	ODHE1	BZ			6	O	1		2	322		4	4			
06/21/95	MULE DEER	ODHE1	BZ			6	U	1		2	322		1	1			
06/21/95	MULE DEER	ODHE1	BZ			11	T	1		2	322		2		1	1	
06/21/95	MULE DEER	ODHE1	BZ			13	U	1	5	2	322		3	3			
06/21/95	MULE DEER	ODHE1	BZ			12	R	0	5	2	322		5		5		
06/23/95	MULE DEER	ODHE1	BZ	RG02B		16	P	1		2	322		3		1	2	
06/26/95	MULE DEER	ODHE1	BZ			7	L	1		2	322		2		1	1	
06/26/95	MULE DEER	ODHE1	BZ	BG01A		8	L	1		2	322		2		1		
06/28/95	MULE DEER	ODHE1	BZ	RG02A		7	I	0		2	322		9	2	7		
06/28/95	MULE DEER	ODHE1	BZ	BA01R		13	F	0		2	322		1	1			
06/28/95	MULE DEER	ODHE1	BZ	BS02B		14	I	0		2	322		1		1		
06/29/95	MULE DEER	ODHE1	BZ	RS01B		14	F	1		2	322		3	2	1		
07/06/95	MULE DEER	ODHE1	BZ	BA01R		13	G	5		2	322		1		1		
07/07/95	MULE DEER	ODHE1	BZ			13	H	5		2	322		2	1	1		
07/07/95	MULE DEER	ODHE1	BZ	881 HILL	OU1	8	N	0		2	322		3		3		
07/07/95	MULE DEER	ODHE1	BZ			7	Q	0		2	322		1	1			
07/07/95	MULE DEER	ODHE1	BZ			4	N	0		2	322		2				2
07/10/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	I	5		2	322		6				6
07/10/95	MULE DEER	ODHE1	BZ	TR04		15	P	0		2	322		1		1		
07/10/95	MULE DEER	ODHE1	BZ	LINDSAY		13	G	1	5	2	322		2	2			
07/10/95	MULE DEER	ODHE1	BZ			11	E	1	5	2	322		2	2			
07/11/95	MULE DEER	ODHE1	BZ	ORCHARD		6	I	1		2	322		7				7
07/13/95	MULE DEER	ODHE1	BZ	BA01B		5	I	1		2	322		3	1	2		
07/17/95	MULE DEER	ODHE1	BZ	BG02B		10	D	5		2	322		4	4			
07/25/95	MULE DEER	ODHE1	BZ			6	J	1	5	2	322		7				7
07/25/95	MULE DEER	ODHE1	BZ			6	F	1	5	2	322		2		2		
07/27/95	MULE DEER	ODHE1	BZ			6	M	5		2	322		6				6
07/27/95	MULE DEER	ODHE1	BZ	RG02B		16	P	1		2	322		2	2			
07/31/95	MULE DEER	ODHE1	BZ			8	N	5		4	322		2	1	1		
07/31/95	MULE DEER	ODHE1	BZ			2	R	1		4	322		8	7	1		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
07/31/95	MULE DEER	ODHE1	BZ			2	N	1		4	322		1		1		
07/31/95	MULE DEER	ODHE1	BZ			4	N	1		4	322		3	3			
07/31/95	MULE DEER	ODHE1	BZ			4	O	1		4	322		2		2		
07/31/95	MULE DEER	ODHE1	BZ			5	P	1		4	322		1		1		
07/31/95	MULE DEER	ODHE1	BZ			13	H	1		4	322		3		3		
07/31/95	MULE DEER	ODHE1	BZ			13	G	1		4	322		2		2		
07/31/95	MULE DEER	ODHE1	BZ			13	J	1		4	322		3	3			
07/31/95	MULE DEER	ODHE1	BZ			15	J	1		4	322		3		3		
07/31/95	MULE DEER	ODHE1	BZ			16	K	1		4	322		1				1
07/31/95	MULE DEER	ODHE1	BZ			15	Q	1		4	322		4	4			
07/31/95	MULE DEER	ODHE1	BZ			14	Q	1		4	322		1	1			
08/01/95	MULE DEER	ODHE1	BZ			15	K	1		4	322	323	1	1			
08/01/95	MULE DEER	ODHE1	BZ			11	K	5		2	322		5		2	3	
08/01/95	MULE DEER	ODHE1	BZ	RA02B	OU6	12	O	5		2	322		2		2		
08/01/95	MULE DEER	ODHE1	BZ			9	Q	1		4	322		2	2			
08/01/95	MULE DEER	ODHE1	BZ			12	F	1		4	322		4	4			
08/01/95	MULE DEER	ODHE1	BZ			12	G	1		4	322		2		2		
08/01/95	MULE DEER	ODHE1	BZ			15	J	1		4	322		1				1
08/01/95	MULE DEER	ODHE1	BZ			17	L	1		4	322		1				1
08/01/95	MULE DEER	ODHE1	BZ			15	N	1		4	322		2	2			
08/01/95	MULE DEER	ODHE1	BZ			14	P	1		4	322		1	1			
08/01/95	MULE DEER	ODHE1	BZ			13	P	1		4	322		1				1
08/01/95	MULE DEER	ODHE1	BZ			7	O	1		4	322		1				1
08/01/95	MULE DEER	ODHE1	BZ			6	J	1		4	322		4		2		2
08/01/95	MULE DEER	ODHE1	BZ			6	Q	1		4	322		2	1	1		
08/01/95	MULE DEER	ODHE1	BZ			2	M	1		4	322		3	3			
08/01/95	MULE DEER	ODHE1	BZ			3	N	1		4	322		1				1
08/01/95	MULE DEER	ODHE1	BZ			2	P	1		4	322		1				1
08/01/95	MULE DEER	ODHE1	BZ			5	O	1		4	322		1				1
08/07/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	I	5	1	2	322		6				6
08/08/95	MULE DEER	ODHE1	BZ		OU1	7	L	5		2	322		5		2	3	
08/16/95	MULE DEER	ODHE1	BZ	BW01B		15	Q	1		2	322		2		2		
08/16/95	MULE DEER	ODHE1	BZ	BG01R		15	O	0		2	322		1	1			
08/16/95	MULE DEER	ODHE1	BZ			15	O	0		2	322		1		1		
08/17/95	MULE DEER	ODHE1	BZ		OU1	7	M	5	1	2	322	110	10		8	2	
08/28/95	MULE DEER	ODHE1	BZ	RG02B		16	N	0		2	322		3		2	1	
08/29/95	MULE DEER	ODHE1	BZ			4	J	0		2	322		1	1			
06/21/95	MULE DEER	ODHE1	BZ			11	H	1	5	2	323		1		1		
06/21/95	MULE DEER	ODHE1	BZ	SEPTRNCH		14	L	1		2	323		1		1		
06/21/95	MULE DEER	ODHE1	BZ	BG01R		15	N	0		2	323		2		2		
06/21/95	MULE DEER	ODHE1	BZ			16	F	1		2	323		1				1
06/26/95	MULE DEER	ODHE1	BZ	BG02B		8	D	1		2	323		1		1		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
08/01/95	MULE DEER	ODHE1	BZ			14	H	1		4	323		1		1		
08/01/95	MULE DEER	ODHE1	BZ			15	L	1		4	323		2	2			
08/01/95	MULE DEER	ODHE1	BZ			6	P	1		4	323		2		2		
08/16/95	MULE DEER	ODHE1	BZ	BX01B		10	R	1		2	323		3	1	2		
08/16/95	MULE DEER	ODHE1	BZ	BG01R		15	N	1		2	323		4	4			
06/26/95	MULE DEER	ODHE1	BZ			8	N	1		2	324		1		1		
07/31/95	MULE DEER	ODHE1	BZ			3	T	1		4	324		1				1
07/31/95	MULE DEER	ODHE1	BZ			7	K	1		4	324		1		1		
08/01/95	MULE DEER	ODHE1	BZ	881 HILL	OU1	8	L	5	1	2	324		1		1		
08/01/95	MULE DEER	ODHE1	BZ			11	J	1		4	324		2	1	1		
08/01/95	MULE DEER	ODHE1	BZ			11	M	1		4	324		4		4		
06/14/95	MULE DEER	ODHE1	IA	BLGD 664		8	J	20		2	520		3		1	2	
08/01/95	MULE DEER	ODHE1	IA	RCRA STO	OU13	10	J	1		2	520		2			2	
08/09/95	MULE DEER	ODHE1	BZ	881 BLDG	OU1	8	K	0		2	520		3		1	2	
08/28/95	MULE DEER	ODHE1	BZ	L RNCH B		13	G	0		2	520		2	2			
06/21/95	MULE DEER	ODHE1	IA			11	J	1		2	540		3		2	1	
06/22/95	MULE DEER	ODHE1	IA	PAC 3		11	K	1		2	540		1		1		
06/23/95	MULE DEER	ODHE1	BZ			13	P	5	15	2	540	322	7	7			
TOTAL SUMMER OBSERVATIONS													*469*				
MULE DEER FALL SEASON 1995																	
09/26/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	I	5		2	10	20	15	3	9	3	
09/26/95	MULE DEER	ODHE1	BZ	BG02B		10	D	0		2	10		1	1			
10/18/95	MULE DEER	ODHE1	BZ			6	J	0		2	10		11	2	7	2	
11/22/95	MULE DEER	ODHE1	BZ			13	H	0		2	10		1		1		
10/24/95	MULE DEER	ODHE1	BZ	RA03B		5	I	0		2	20		1	1			
11/15/95	MULE DEER	ODHE1	BZ	ORCHARD		6	I	5	0	2	20		3		3		
11/22/95	MULE DEER	ODHE1	BZ			13	H	1	5	2	20		2	1	1		
11/22/95	MULE DEER	ODHE1	BZ			5	I	1	5	2	20		3				3
09/12/95	MULE DEER	ODHE1	BZ	RA03B		5	I	0		2	30		4		2	2	
10/31/95	MULE DEER	ODHE1	BZ	RA01B		11	F	18		2	30		1		1		
09/13/95	MULE DEER	ODHE1	BZ	BW01A		7	M	0		2	110		1		1		
09/13/95	MULE DEER	ODHE1	BZ	BW01A		7	M	0		2	110		1		1		
09/14/95	MULE DEER	ODHE1	BZ	RW01B		15	P	0		2	110		1		1		
09/29/95	MULE DEER	ODHE1	BZ	TR10		4	L	0		2	110		10	6	4		
09/29/95	MULE DEER	ODHE1	BZ	RW01A		7	K	0		2	110		5	3	2		
10/05/95	MULE DEER	ODHE1	BZ	TR10		4	L	5	1	2	110		6	6			
10/09/95	MULE DEER	ODHE1	BZ	RS03B		5	Q	0		2	110		1		1		
10/09/95	MULE DEER	ODHE1	BZ	RS03B		5	P	5		2	110		1	1			
11/21/95	MULE DEER	ODHE1	BZ	RW01B		7	O	1		2	110	212	5	2	2	1	
11/22/95	MULE DEER	ODHE1	BZ	RW03B		7	G	0		2	110		1			1	
11/28/95	MULE DEER	ODHE1	BZ			7	J	1	5	2	110		9	2	2		5

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
09/01/95	MULE DEER	ODHE1	BZ	RA02B	OU6	12	N	0		2	210		1		1		
09/12/95	MULE DEER	ODHE1	BZ	RW03B		7	K	0		2	210		1		1		
09/12/95	MULE DEER	ODHE1	BZ	RW03B		7	I	0		2	210		1		1		
09/28/95	MULE DEER	ODHE1	BZ	RW02B		5	P	0		2	210		1	1			
09/29/95	MULE DEER	ODHE1	BZ	RW01A		7	P	0		2	210		1	1			
10/18/95	MULE DEER	ODHE1	BZ			15	G	0	5	2	210		7	1	5	1	
10/17/95	MULE DEER	ODHE1	BZ			7	Q	1		2	211		2	2			
10/11/95	MULE DEER	ODHE1	BZ	BS03B		5	Q	0		2	212		2	2			
10/17/95	MULE DEER	ODHE1	BZ			5	P	0		2	212		1		1		
11/14/95	MULE DEER	ODHE1	BZ	RA02A		6	I	1		2	212		3	1	1	1	
11/27/95	MULE DEER	ODHE1	BZ	RW02B		4	M	1	6	2	212		1	1			
11/27/95	MULE DEER	ODHE1	BZ	RW02B		4	K	1	6	2	212		6	2	3	1	
09/13/95	MULE DEER	ODHE1	BZ	RS02B		15	K	0		2	230		1	1			
09/13/95	MULE DEER	ODHE1	BZ	RS02B		16	L	0		2	230		3	3			
09/13/95	MULE DEER	ODHE1	BZ	RS02B		17	M	0		2	230		1	1			
09/14/95	MULE DEER	ODHE1	BZ	BS01B		15	H	1		2	230		1		1		
09/14/95	MULE DEER	ODHE1	BZ	BS01B		15	H	0		2	230		1		1		
09/14/95	MULE DEER	ODHE1	BZ	BS01B		15	G	1		2	230		1		1		
09/14/95	MULE DEER	ODHE1	BZ	BS02B		15	J	0		2	230		3	3			
09/29/95	MULE DEER	ODHE1	BZ	RS01B		14	F	0		2	230		2		1	1	
10/05/95	MULE DEER	ODHE1	BZ			15	G	1		2	230		6	6			
10/13/95	MULE DEER	ODHE1	BZ	RS01B		14	F	5	11	2	230		8		6	2	
10/13/95	MULE DEER	ODHE1	BZ	RS01B		14	G	1	5	2	230		3		3		
10/18/95	MULE DEER	ODHE1	BZ	BS02B		15	I	5	11	2	230		2	2			
10/18/95	MULE DEER	ODHE1	BZ			13	F	5		2	230		3	2	1		
11/21/95	MULE DEER	ODHE1	BZ	RS01B		14	G	0		2	230		1	1			
11/22/95	MULE DEER	ODHE1	BZ			14	J	5		2	230	322	6	2	4		
11/22/95	MULE DEER	ODHE1	BZ			13	H	0		2	230		2	2			
11/28/95	MULE DEER	ODHE1	BZ	RS02B		15	G	0	5	2	230		3	2	1		
09/13/95	MULE DEER	ODHE1	BZ	RG02B		16	N	5		2	322		3	3			
09/13/95	MULE DEER	ODHE1	BZ	RS02B		15	K	0		2	322		1	1			
09/13/95	MULE DEER	ODHE1	BZ	RS02B		16	L	5		2	322		3	3			
09/14/95	MULE DEER	ODHE1	BZ	BS02B		15	I	5		2	322		5		1	4	
09/14/95	MULE DEER	ODHE1	BZ	BA01R		13	G	5		2	322		1		1		
09/14/95	MULE DEER	ODHE1	BZ	BA01R		12	F	5		2	322		1		1		
09/18/95	MULE DEER	ODHE1	BZ	BG02A		7	L	5		2	322		1		1		
09/18/95	MULE DEER	ODHE1	BZ	BG02A		7	K	5		2	322		2		2		
09/18/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	I	5		2	322		5	5			
09/28/95	MULE DEER	ODHE1	BZ			4	P	5		2	322		14	4	10		
09/28/95	MULE DEER	ODHE1	BZ			4	O	5		2	322		4	1	3		
09/28/95	MULE DEER	ODHE1	BZ	RA04B		5	P	0	5	2	322		2		2		
09/28/95	MULE DEER	ODHE1	BZ	RG03B		2	K	5		2	322		3		3		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
09/29/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	I	5	0	2	322	20	5		5		
09/29/95	MULE DEER	ODHE1	BZ	ORCHARD		6	I	5	0	2	322	20	8	2	6		
09/29/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	I	0	5	2	322	20	2		1	1	
09/29/95	MULE DEER	ODHE1	BZ			5	N	0		2	322		1	1			
09/29/95	MULE DEER	ODHE1	BZ			5	P	0		2	322		1	1			
09/30/95	MULE DEER	ODHE1	BZ			5	F	0		2	322		10	2	8		
09/30/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	I	1		2	322		2		1	1	
09/30/95	MULE DEER	ODHE1	BZ	BORROWPT	OU5	7	O	5	11	2	322		11	5	6		
09/30/95	MULE DEER	ODHE1	BZ			6	O	5	1	2	322		2		2		
09/30/95	MULE DEER	ODHE1	BZ	TR10		5	L	5		2	322		5	4	1		
10/02/95	MULE DEER	ODHE1	BZ	POND A-4	OU6	12	Q	21	18	2	322		1		1		
10/04/95	MULE DEER	ODHE1	BZ	ORCHARD		6	I	5		2	322	20	2				2
10/05/95	MULE DEER	ODHE1	BZ			2	L	5	1	2	322		8	2	6		
10/11/95	MULE DEER	ODHE1	BZ	ANT SPRG		5	K	1	5	2	322		6				6
10/11/95	MULE DEER	ODHE1	BZ			4	P	1		2	322		1		1		
10/12/95	MULE DEER	ODHE1	BZ	POND B-2	OU6	10	O	5		2	322		6				6
10/12/95	MULE DEER	ODHE1	BZ	NW LFILL		10	F	5	0	2	322		6		3	3	
10/12/95	MULE DEER	ODHE1	BZ	BS01B		13	H	5		2	322		2	1	1		
10/13/95	MULE DEER	ODHE1	BZ	LINDSAY		13	G	5		2	322		6		4	2	
10/13/95	MULE DEER	ODHE1	BZ			14	O	5		2	322		3		1	2	
10/13/95	MULE DEER	ODHE1	BZ	POND A-1	OU6	12	N	5		2	322		8		7	1	
10/13/95	MULE DEER	ODHE1	BZ			5	J	5		2	322		16				16
10/17/95	MULE DEER	ODHE1	BZ			6	U	5		2	322		2				2
10/17/95	MULE DEER	ODHE1	BZ			7	R	5		2	322		1				1
10/17/95	MULE DEER	ODHE1	BZ			4	O	5		2	322		2	2			
10/17/95	MULE DEER	ODHE1	BZ	TR10		4	L	1		2	322		2	2			
10/17/95	MULE DEER	ODHE1	BZ	BG02B		10	D	0		2	322		3	1	2		
10/18/95	MULE DEER	ODHE1	BZ	LINDSAY		13	H	5		2	322	20	4		2	2	
10/18/95	MULE DEER	ODHE1	BZ			3	P	1		2	322		2		1	1	
10/18/95	MULE DEER	ODHE1	BZ			3	I	1		2	322		2	2			
10/18/95	MULE DEER	ODHE1	BZ			4	K	5		2	322		21	6	14	1	
10/18/95	MULE DEER	ODHE1	BZ	POND A-2	OU6	12	O	5		2	322		4	1	2	1	
10/18/95	MULE DEER	ODHE1	BZ		OU7	13	M	5		2	322		6		6		
10/18/95	MULE DEER	ODHE1	BZ			13	L	0		2	322		3		1	2	
10/18/95	MULE DEER	ODHE1	BZ	P.DOGTWN	OU2	8	Q	5		2	322		2	2			
10/19/95	MULE DEER	ODHE1	BZ			2	O	5		2	322		3	3			
10/19/95	MULE DEER	ODHE1	BZ	BA01B		6	K	1		2	322		1	1			
10/23/95	MULE DEER	ODHE1	BZ			6	N	5		2	322		6				6
10/24/95	MULE DEER	ODHE1	BZ	RG03B		3	K	0		2	322		1	1			
10/24/95	MULE DEER	ODHE1	BZ	RG03B		3	N	0		2	322		1	1			
10/24/95	MULE DEER	ODHE1	BZ			9	S	5		2	322		1	1			
10/24/95	MULE DEER	ODHE1	BZ			5	K	0		2	322		1	1			

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
10/26/95	MULE DEER	ODHE1	BZ			6	M	5	1	2	322		21				21
10/26/95	MULE DEER	ODHE1	BZ			14	M	18		2	322		1				1
10/26/95	MULE DEER	ODHE1	BZ			14	L	0		2	322		6	1	4	1	
10/26/95	MULE DEER	ODHE1	BZ			6	N	5	1	2	322		22	2	16	4	
10/31/95	MULE DEER	ODHE1	BZ			15	S	5		2	322		2		2		
10/31/95	MULE DEER	ODHE1	BZ			15	Q	5		2	322		2	2			
10/31/95	MULE DEER	ODHE1	BZ			10	F	5		2	322		8	1			7
11/13/95	MULE DEER	ODHE1	BZ	TR10		4	L	1	6	2	322		16	3	10	3	
11/13/95	MULE DEER	ODHE1	BZ			3	K	0		2	322		3	3			
11/14/95	MULE DEER	ODHE1	BZ	RA02A		6	I	0		2	322		2	1	1		
11/14/95	MULE DEER	ODHE1	BZ			6	G	1		2	322		2		2		
11/21/95	MULE DEER	ODHE1	BZ	RS01B		15	F	0		2	322		6	1	4	1	
11/21/95	MULE DEER	ODHE1	BZ			16	I	1		2	322		1	1			
11/21/95	MULE DEER	ODHE1	BZ			7	F	1		2	322		2	1	1		
11/21/95	MULE DEER	ODHE1	BZ			12	J	5		2	322		3				3
11/21/95	MULE DEER	ODHE1	BZ			10	R	5		2	322		2	1	1		
11/22/95	MULE DEER	ODHE1	BZ	BS01B		14	G	5		2	322		3		3		
11/27/95	MULE DEER	ODHE1	BZ	RW02B		4	M	1	5	2	322		14	1	11	2	
11/28/95	MULE DEER	ODHE1	BZ	RA02B		10	P	5	0	2	322	110	15	9	3	2	1
11/28/95	MULE DEER	ODHE1	BZ	RG02B		16	N	1		2	322		1	1			
11/28/95	MULE DEER	ODHE1	BZ			5	K	5	0	2	322		3	2	1		
11/28/95	MULE DEER	ODHE1	BZ	850BLDG	OU1	8	K	1		2	322		1	1			
10/17/95	MULE DEER	ODHE1	BZ			5	F	1		2	323		1	1			
10/18/95	MULE DEER	ODHE1	BZ			9	E	1		2	323		6		4	2	
10/18/95	MULE DEER	ODHE1	BZ			2	I	1		2	323		1	1			
10/19/95	MULE DEER	ODHE1	BZ			6	F	5		2	323		4				4
10/23/95	MULE DEER	ODHE1	BZ			7	F	5		2	323		9		9		
10/24/95	MULE DEER	ODHE1	BZ			6	L	5		2	323	322	8	5	3		
11/21/95	MULE DEER	ODHE1	BZ			11	I	1	5	2	323	420	15	1	3	1	10
11/28/95	MULE DEER	ODHE1	BZ			10	P	1		2	323		1	1			
09/13/95	MULE DEER	ODHE1	BZ	BD03B		4	Q	0		2	324		1		1		
09/28/95	MULE DEER	ODHE1	BZ	POND B-4	OU6	10	P	5		2	324		3		3		
11/28/95	MULE DEER	ODHE1	BZ	POND B-4	OU6	10	P	5		2	324		11	1	7	3	
10/03/95	MULE DEER	ODHE1	IA	850 BLDG	OU1	8	K	1		2	520		3		1	2	
10/24/95	MULE DEER	ODHE1	BZ	881 HILL	OU1	8	L	0		2	540		1		1		
10/26/95	MULE DEER	ODHE1	BZ			8	H	21	18	2	540		1		1		
10/27/95	MULE DEER	ODHE1	BZ			7	O	1		2	540	322	1	1			
TOTAL FALL OBSERVATIONS													*584*				
MULE DEER/WHITE-TAILED DEER HYBRID WINTER SEASON 1995																	
01/03/95	MULE X WHITE-TAILED DEER	HEXVI	BZ			10	R	0		2	322		1	1			
01/26/95	MULE X WHITE-TAILED DEER	HEXVI	BZ			17	I	5	1	2	322	230	1	1			

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/30/95	MULE X WHITE-TAILED DEER	HEXVI	BZ			14	O	0		2	322		1	1			
TOTAL SPRING OBSERVATIONS													*3*				
MULE DEER/WHITE-TAILED DEER HYBRID SUMMER SEASON 1995																	
07/07/95	MULE X WHITE-TAILED DEER	HEXVI	BZ	BS01B		15	H	0		2	230		1	1			
TOTAL SUMMER OBSERVATIONS													*1*				
MULE DEER/WHITE-TAILED DEER HYBRID FALL SEASON 1995																	
09/26/95	MULE X WHITE-TAILED DEER	HEXVI	BZ	BG02B		10	D	0		2	10		1	1			
10/05/95	MULE X WHITE-TAILED DEER	HEXVI	BZ			15	G	1		2	230		1	1			
11/21/95	MULE X WHITE-TAILED DEER	HEXVI	BZ	RS01B		15	F	0		2	322		1	1			
TOTAL FALL OBSERVATIONS													*3*				
WHITE-TAILED DEER WINTER SEASON 1995																	
02/23/95	WHITE-TAILED DEER	ODVI1	BZ	RS03B		5	P	1		2	110		1			1	
12/22/95	WHITE-TAILED DEER	ODVI1	BZ			3	L	5		2	110		5				5
01/03/95	WHITE-TAILED DEER	ODVI1	BZ			5	Q	0		2	212		2		2		
12/21/95	WHITE-TAILED DEER	ODVI1	BZ			5	T	5		2	322		4		4		
12/22/95	WHITE-TAILED DEER	ODVI1	BZ			9	R	0		2	322		1		1		
TOTAL WINTER OBSERVATI0ONS													*13*				
WHITE-TAILED DEER SPRING SEASON 1995																	
04/28/95	WHITE-TAILED DEER	ODVI1	BZ	ANT.SPRG		4	J	5		2	322		1				1
TOTAL SPRING OBSERVATIONS													*1*				
WHITE-TAILED DEER SUMMER SEASON 1995																	
06/23/95	WHITE-TAILED DEER	ODVI1	BZ	RS02B		16	K	0		2	230		1		1		
TOTAL SUMMER OBSERVATIONS													*1*				
WHITE-TAILED DEER FALL SEASON 1995																	
10/09/95	WHITE-TAILED DEER	ODVI1	BZ	RS03B		5	Q	0		2	110		3	1	2		
11/28/95	WHITE-TAILED DEER	ODVI1	BZ	RW01A		7	L	0		2	110		2	1	1		
09/13/95	WHITE-TAILED DEER	ODVI1	BZ	BD03B		5	Q	1		2	211	324	1	1			
10/11/95	WHITE-TAILED DEER	ODV11	BZ	BS03B		5	Q	0		2	212		1		1		
10/17/95	WHITE-TAILED DEER	ODVI1	BZ			4	O	5		2	322		1	1			
10/18/95	WHITE-TAILED DEER	ODVI1	BZ			4	K	5		2	322		1	1			
11/13/95	WHITE-TAILED DEER	ODVI1	BZ	TR10		4	L	1	6	2	322	212	1	1			
11/16/95	WHITE-TAILED DEER	ODVI1	BZ	BX01B		10	R	1		2	323		2	1	1		
TOTAL WINTER OBSERVATIONS													*12*				
DESERT COTTONTAILS WINTER SEASON 1995																	
12/27/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	M	1		2	110		1				1
01/19/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	420		4				4
12/27/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	420		4				4
02/14/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	520		1				1
01/12/95	DESERT COTTONTAIL	SYAU1	BZ	CONT.YRD		8	M	1		1	540		4				4
01/16/95	DESERT COTTONTAIL	SYAU1	BZ		OU2	9	O	1		1	540		4				4

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/17/95	DESERT COTTONTAIL	SYAU1	BZ		OU2	9	O	0		2	540		2				2
TOTAL WINTER OBSERVATIONS													*20*				
DESERT COTTONTAILS SPRING SEASON 1995																	
03/28/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	N	0		2	30		4				4
03/23/95	DESERT COTTONTAIL	SYAU1	BZ	SID		7	K	0		2	212		2				2
04/28/95	DESERT COTTONTAIL	SYAU1	BZ	128 PDT		17	O	0		2	322		1				1
03/28/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	P	0		2	420		4				4
05/24/95	DESERT COTTONTAIL	SYAU1	BZ	POND C-1	OU5	7	N	1		2	530		1				1
05/24/95	DESERT COTTONTAIL	SYAU1	BZ			15	P	1		2	530		1				1
05/31/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	P	0		2	530		1				1
03/23/95	DESERT COTTONTAIL	SYAU1	BZ	BA01A		7	L	0		2	540		2				2
03/28/95	DESERT COTTONTAIL	SYAU1	BZ		OU6	12	Q	0		2	540		3				3
03/31/95	DESERT COTTONTAIL	SYAU1	BZ	881 HILL		8	L	0		2	540		2				2
04/07/95	DESERT COTTONTAIL	SYAU1	BZ	BA01A		7	J	0		2	540		4				4
05/16/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	540		2			1	1
05/16/95	DESERT COTTONTAIL	SYAU1	BZ	BA01A		7	J	0		2	540		1				1
05/31/95	DESERT COTTONTAIL	SYAU1	BZ	SID ROAD		8	O	1		2	540		1				1
04/05/95	DESERT COTTONTAIL	SYAU1	BZ	881 HILL	OU1	8	M	0		2	560	322	1				1
TOTAL SPRING OBSERVATIONS													*30*				
DESERT COTTONTAILS SUMMER SEASON 1995																	
07/27/95	DESERT COTTONTAIL	SYAU1	BZ	LANDFILL	OU7	13	L	0		2	93		1				1
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			12	J	0		4	322		4				4
07/26/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	P	0		2	324		1				1
08/01/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	420		2				2
06/29/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	520		2				2
08/16/95	DESERT COTTONTAIL	SYAU1	IA	850 BLDG	OU1	8	K	0		2	520		1				1
06/21/95	DESERT COTTONTAIL	SYAU1	BZ			12	I	0		2	530		1				1
06/28/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	P	0		2	530		2				2
06/29/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	10	P	0		2	530		2				2
07/11/95	DESERT COTTONTAIL	SYAU1	BZ	C-1 DAM	OU5	7	N	0		2	530		2				2
08/30/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	P	0		2	530		1				1
06/12/95	DESERT COTTONTAIL	SYAU1	BZ	BA01A		7	K	0		2	540		1				1
06/22/95	DESERT COTTONTAIL	SYAU1	IA	CONTYARD		8	L	1		2	540		4				4
06/26/95	DESERT COTTONTAIL	SYAU1	BZ	BG01A		8	L	0		2	540		1				1
06/26/95	DESERT COTTONTAIL	SYAU1	BZ	BA01A		7	K	0		2	540		1				1
07/05/95	DESERT COTTONTAIL	SYAU1	IA	CONTYARD		8	L	0		2	540		4				4
07/07/95	DESERT COTTONTAIL	SYAU1	IA	CONTYARD		8	L	0		2	540		5				5
07/10/95	DESERT COTTONTAIL	SYAU1	IA	CONTYARD		8	L	0		2	540		4				4
07/11/95	DESERT COTTONTAIL	SYAU1	IA	850 BLDG		8	L	0		2	540		4				4
07/11/95	DESERT COTTONTAIL	SYAU1	BZ	BA01A		7	J	0		2	540		1				1
07/31/95	DESERT COTTONTAIL	SYAU1	BZ			8	L	0		4	540		5				5
07/31/95	DESERT COTTONTAIL	SYAU1	BZ			8	N	0		4	540		1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
07/31/95	DESERT COTTONTAIL	SYAU1	BZ			8	N	0		4	540		2				2
07/31/95	DESERT COTTONTAIL	SYAU1	BZ			7	P	0		4	540		5				5
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			12	O	0		4	540		1			1	
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			12	Q	0		4	540		2				2
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			10	Q	1		4	540		2				2
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			8	L	0		4	540		4				4
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			13	P	1		4	540		1			1	
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			12	Q	0		4	540		1				1
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			8	N	0		4	540		1				1
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			5	J	0		4	540		1				1
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			7	P	0		4	540		1				1
08/01/95	DESERT COTTONTAIL	SYAU1	BZ			8	O	0		4	540		2				2
08/16/95	DESERT COTTONTAIL	SYAU1	IA	CONT YRD		8	L	0		2	540		4				4
08/17/95	DESERT COTTONTAIL	SYAU1	BZ	POND C-1	OU5	7	N	0		2	540		1				1
06/29/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	10	P	0		2	550		2				2
TOTAL SUMMER OBSERVATIONS													*80*				
DESERT COTTONTAILS FALL SEASON 1995																	
10/18/95	DESERT COTTONTAIL	SYAU1	BZ			9	E	0		2	323		1				1
11/15/95	DESERT COTTONTAIL	SYAU1	BZ	RG01A	OU1	8	M	0		2	324		1				1
09/28/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	420		2				2
09/28/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	10	P	0		2	420		1				1
09/28/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	10	O	5		2	420		1				1
10/27/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	420		4				4
11/28/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	420		4				4
10/03/95	DESERT COTTONTAIL	SYAU1	IA	850 BLDG	OU1	8	K	0		2	520		1				1
10/04/95	DESERT COTTONTAIL	SYAU1	IA	CONT YRD		8	L	0		2	520		4				4
09/01/95	DESERT COTTONTAIL	SYAU1	BZ	RA02B	OU6	12	Q	0		2	530		3				3
09/13/95	DESERT COTTONTAIL	SYAU1	BZ	BA01A		7	M	0		2	530		1				1
09/29/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	P	0		2	530		2				2
11/21/95	DESERT COTTONTAIL	SYAU1	BZ	RW01B		7	P	0		2	530	110	1				1
11/28/95	DESERT COTTONTAIL	SYAU1	BZ	RW01A		7	P	0		2	530		2				2
09/15/95	DESERT COTTONTAIL	SYAU1	BZ	RG01A	OU1	9	N	0		2	540		1				1
10/03/95	DESERT COTTONTAIL	SYAU1	IA	CONT YRD		8	L	0		2	540		3				3
10/11/95	DESERT COTTONTAIL	SYAU1	IA	CONT YRD		8	L	0		2	540		1				1
10/13/95	DESERT COTTONTAIL	SYAU1	IA	CONT YRD		8	L	0		2	540		1				1
10/13/95	DESERT COTTONTAIL	SYAU1	BZ			14	N	18		2	540		1				1
10/16/95	DESERT COTTONTAIL	SYAU1	IA	CONT YRD		8	L	0		2	540		2				2
10/18/95	DESERT COTTONTAIL	SYAU1	IA	CONT YRD		8	L	0		2	540		2				2
10/18/95	DESERT COTTONTAIL	SYAU1	BZ	POND A-4	OU6	13	Q	0		2	540		2				2
10/23/95	DESERT COTTONTAIL	SYAU1	BZ	CONT YRD		8	L	0		2	540		2				2
10/24/95	DESERT COTTONTAIL	SYAU1	BZ	CONT YRD		8	L	0		2	540		2				2
TOTAL FALL OBSERVATIONS													*45*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
MUSKRAT OBSERVATIONS 1995																	
02/22/95	MUSKRAT	ONZI1	BZ	RW02B		4	N	1		2	30		1				1
04/07/95	MUSKRAT	ONZI1	BZ	BA01A		7	J	0		2	30		1				1
08/15/85	MUSKRAT	ONZI1	BZ	POND D-1		3	R	1		2	54		1				1
06/23/95	MUSKRAT	ONZI1	BZ	LINDSAY		13	H	1	5	2	54		1				1
08/15/95	MUSKRAT	ONZI1	BZ	POND D-1		4	R	1		2	54		1				1
09/28/95	MUSKRAT	ONZI1	BZ	POND A-2	OU6	12	O	1		2	54		1				1
10/18/95	MUSKRAT	ONZI1	BZ	POND B-4	OU6	10	P	5	1	2	54		2			1	1
11/28/95	MUSKRAT	ONZI1	BZ	POND B-1	OU6	10	N	5		2	54		1				1
TOTAL 1995 OBSERVATIONS													*9*				
PORCUPINE OBSERVATIONS 1995																	
02/14/95	PORCUPINE	ERDO1	BZ	BS02B		14	I	0		2	230		1				1
05/18/95	PORCUPINE	ERDO1	BZ			15	J	0		2	230		1				1
TOTAL 1995 OBSERVATIONS													*2*				
BLACK-TAILED PRAIRIE DOG OBSERVATIONS 1995																	
04/28/95	BLACK-TAILED PRAIRIE DOG	CYLU1	BZ	OU2 PDT	OU2	9	N	0		2	322		1		1		
TOTAL 1995 OBSERVATIONS													*1*				
COYOTES WINTER SEASON 1995																	
01/16/95	COYOTE	CALA1	BZ	RA03B		5	J	18		2	10		1				1
02/24/95	COYOTE	CALA1	BZ	RA03B		5	I	1		2	10		1				1
12/19/95	COYOTE	CALA1	BZ	RA02A		7	H	5		2	10		2				2
01/03/95	COYOTE	CALA1	BZ	LINDSAY		14	H	1	5	2	20		3				3
01/20/95	COYOTE	CALA1	BZ			4	P	5		2	20		1				1
01/24/95	COYOTE	CALA1	BZ	ANT. SPR	OU5	6	K	5		2	20		1				1
01/26/95	COYOTE	CALA1	BZ			3	I	1		2	20		1				1
01/30/95	COYOTE	CALA1	BZ			6	J	5		2	30		2				2
12/27/95	COYOTE	CALA1	BZ	POND A-2		12	O	1		2	54		1				1
02/23/95	COYOTE	CALA1	BZ	RS03B		5	P	1		2	110		2				2
12/22/95	COYOTE	CALA1	BZ	RW01A		7	P	1		2	110		1				11
02/14/95	COYOTE	CALA1	BZ	RW01B		13	S	0		2	210		1				1
01/24/95	COYOTE	CALA1	BZ	RW02B		4	K	5		2	212		1				1
12/22/95	COYOTE	CALA1	BZ			14	E	1		2	230		2				2
01/03/95	COYOTE	CALA1	BZ			2	N	1		2	322		1				1
01/03/95	COYOTE	CALA1	BZ			2	D	1		2	322		2				2
01/03/95	COYOTE	CALA1	BZ			3	D	1		2	322		1				1
01/03/95	COYOTE	CALA1	BZ			13	O	1		2	322		1				1
01/03/95	COYOTE	CALA1	BZ	BW01B		17	L	1		2	322	212	1				1
01/03/95	COYOTE	CALA1	BZ			15	J	1	5	2	322		2				2

115

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/03/95	COYOTE	CALA1	BZ			12	E	1		2	322	220	1				1
01/04/95	COYOTE	CALA1	BZ			17	I	1		2	322		1				1
01/12/95	COYOTE	CALA1	BZ	POND C-1	OU5	7	N	5		2	322		1				1
01/12/95	COYOTE	CALA1	BZ			9	G	5	1	2	322		1				1
01/17/95	COYOTE	CALA1	BZ			13	O	5		2	322		1				1
01/23/95	COYOTE	CALA1	BZ	RAO2A		6	H	1		2	322		1				1
01/24/95	COYOTE	CALA1	BZ	RG03B		3	N	0		2	322		1				1
01/25/95	COYOTE	CALA1	BZ	POND A-4	OU6	13	Q	5		1	322		1				1
01/26/95	COYOTE	CALA1	BZ			14	H	5		2	322		1				1
01/26/95	COYOTE	CALA1	BZ			15	H	5		2	322		1				1
01/26/95	COYOTE	CALA1	BZ			7	S	1	5	2	322		1				1
01/26/95	COYOTE	CALA1	BZ			4	T	1		2	322		1				1
01/30/95	COYOTE	CALA1	BZ			5	P	1		2	322		2				2
01/30/95	COYOTE	CALA1	BZ	LINDSAY		13	G	5	1	2	322		2				2
01/30/95	COYOTE	CALA1	BZ			15	K	1		2	322		1				1
02/21/95	COYOTE	CALA1	BZ			14	M	1		2	322		1				1
02/21/95	COYOTE	CALA1	BZ	BWOIR		17	L	1		2	322		1				1
02/22/95	COYOTE	CALA1	BZ		OU2	8	O	1		2	322	110	1				1
02/23/95	COYOTE	CALA1	BZ			15	M	1		2	322		1				1
12/14/95	COYOTE	CALA1	BZ			14	P	1		2	322		1				1
12/20/95	COYOTE	CALA1	BZ			10	E	1		2	322		1				1
12/20/95	COYOTE	CALA1	BZ			3	O	1		2	322		1				1
12/20/95	COYOTE	CALA1	BZ			5	R	1		2	322		1				1
12/22/95	COYOTE	CALA1	BZ			5	I	5		2	322		1				1
12/22/95	COYOTE	CALA1	BZ			4	I	1		2	322		1				1
12/22/95	COYOTE	CALA1	BZ			13	O	1		2	322		1				1
12/22/95	COYOTE	CALA1	BZ			11	N	1		2	322		1				1
01/30/95	COYOTE	CALA1	BZ	BX02B		12	H	1		2	323		1				1
12/21/95	COYOTE	CALA1	BZ	RG03B		3	L	0		2	323		1				1
12/21/95	COYOTE	CALA1	BZ			8	D	1		2	323		1				1
12/22/95	COYOTE	CALA1	BZ			13	E	1		2	323		1				1
12/22/95	COYOTE	CALA1	BZ			15	K	1		2	323		1				1
12/22/95	COYOTE	CALA1	BZ			15	O	0		2	323		1				1
12/22/95	COYOTE	CALA1	BZ			8	E	1		2	323		1				1
02/22/95	COYOTE	CALA1	BZ	POND D-2		2	T	0	5	2	324		2				2
12/19/95	COYOTE	CALA1	BZ			15	Q	1		2	520	322	1				1
TOTAL WINTER OBSERVATIONS													*67*				
COYOTES SPRING SEASON 1995																	
04/26/95	COYOTE	CALA1	BZ			4	R	5		2	10		1				1
05/15/95	COYOTE	CALA1	BZ	RA02A		6	H	1		2	10		1				1
04/20/95	COYOTE	CALA1	BZ	BA01B		5	I	5		2	20		1				1
04/25/95	COYOTE	CALA1	BZ	LINDSAY		13	G	1		2	30		1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
05/16/95	COYOTE	CALA1	BZ	RA01B		12	F	1		2	30		1				1
03/30/95	COYOTE	CALA1	BZ	BW01R		16	J	1		2	110		1				1
03/30/95	COYOTE	CALA1	BZ	BW01R		15	I	1		2	110		1				1
03/17/95	COYOYE	CALA1	BZ			13	F	1		2	230		1				1
03/30/95	COYOTE	CALA1	BZ	BS01B		14	G	1		2	230		1				1
05/10/95	COYOTE	CALA1	BZ			13	E	1		2	230		1				1
03/17/95	COYOTE	CALA1	BZ	SEP TRNC		13	L	1		2	322		1				1
03/17/95	COYOTE	CALA1	BZ			17	L	1	5	2	322		1				1
03/17/95	COYOTE	CALA1	BZ			6	I	1	5	2	322	20	2				2
03/23/95	COYOTE	CALA1	BZ	ANT SPRG		6	K	5		2	322		1				1
03/30/95	COYOTE	CALA1	BZ	BA01R		13	G	5		2	322		1				1
04/24/95	COYOTE	CALA1	BZ			6	L	5		2	322		1				1
04/25/95	COYOTE	CALA1	BZ			16	I	1		2	322		1				1
04/26/95	COYOTE	CALA1	BZ	RG03B		3	N	1		2	322		1				1
04/28/95	COYOTE	CALA1	BZ	RG02B		17	O	1		2	322		1				1
05/09/95	COYOTE	CALA1	BZ			5	H	5		2	322		2				2
05/10/95	COYOTE	CALA1	BZ			5	O	1		2	322		1				1
05/11/95	COYOTE	CALA1	BZ	IND.POND	OU6	13	U	1		2	322		1				1
05/15/95	COYOTE	CALA1	BZ			14	E	5		2	322	230	1				1
05/15/95	COYOTE	CALA1	BZ			13	G	1		2	322		1				1
05/24/95	COYOTE	CALA1	BZ	RG03B		2	M	17		2	322		1				1
05/31/95	COYOTE	CALA1	BZ			6	O	0		2	322		1				1
05/31/95	COYOTE	CALA1	BZ			5	I	0		2	322		1				1
05/31/95	COYOTE	CALA1	BZ			2	O	1		2	322		1				1
03/30/95	COYOTE	CALA1	BZ	BX01R		13	G	1		2	323		1				1
05/12/95	COYOTE	CALA1	BZ			5	G	1		2	323		1				1
05/18/95	COYOTE	CALA1	BZ			3	G	5		2	323		2				2
05/24/95	COYOTE	CALA1	BZ			3	F	1		2	323		1				1
03/28/95	COYOTE	CALA1	BZ	881 HILL		8	M	1		2	324		1				1
05/15/95	COYOTE	CALA1	BZ			7	P	0	5	2	530		1				1
TOTAL SPRING OBSERVATIONS													*37*				
COYOTES SUMMER SEASON 1995																	
07/07/95	COYOTE	CALA1	BZ	ANT SPRG		6	K	5		2	20		1				1
08/01/95	COYOTE	CALA1	BZ			7	P	1		4	110		1				1
08/29/95	COYOTE	CALA1	BZ			3	L	0		2	220		1				1
06/14/95	COYOTE	CALA1	BZ	BS02B		14	I	1		2	230		1				1
08/01/95	COYOTE	CALA1	BZ			14	H	1		4	230		2				2
07/31/95	COYOTE	CALA1	BZ			7	P	1		4	322		1			1	
07/31/95	COYOTE	CALA1	BZ			7	N	1	13	4	322		3				3
07/31/95	COYOTE	CALA1	BZ			13	G	1		4	322		2				2
08/01/95	COYOTE	CALA1	BZ			13	Q	1	5	4	322		3			1	2
08/01/95	COYOTE	CALA1	BZ			12	F	1		4	322		2				2

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
08/01/95	COYOTE	CALA1	BZ			17	M	1		4	322		1				1
08/01/95	COYOTE	CALA1	BZ			14	P	1		4	322		1				1
08/01/95	COYOTE	CALA1	BZ			10	N	1		4	322		1				1
09/30/95	COYOTE	CALA1	BZ			5	L	1		2	322		1				1
06/06/95	COYOTE	CALA1	BZ	BG01B		3	G	1		2	323		1				1
06/21/95	COYOTE	CALA1	BZ			14	L	1		2	323		3			3	
06/26/95	COYOTE	CALA1	BZ	BA01B		4	I	1		2	323		1				1
08/01/95	COYOTE	CALA1	BZ			12	P	1		4	324		1				1
09/13/95	COYOTE	CALA1	BZ	BD03B		4	Q	1		2	324		2				2
09/13/95	COYOTE	CALA1	BZ			2	T	0		2	324		1				1
06/06/95	COYOTE	CALA1	BZ	CTY PIT		9	C	1		2	420		1				1
TOTAL SUMMER OBSERVATIONS													*31*				
COYOTES FALL SEASON 1995																	
10/19/95	COYOTE	CALA1	BZ	BA01B		5	I	1		2	10		1				1
11/15/95	COYOTE	CALA1	BZ	RA03B		5	I	5		2	10		1				1
11/21/95	COYOTE	CALA1	BZ	RA01B		12	g	1		2	20		1				1
11/28/95	COYOTE	CALA1	BZ	ORCHARD		7	H	5		2	20		2				2
10/27/95	COYOTE	CALA1	BZ	RA04B		3	S	5		2	30		1				1
11/27/95	COYOTE	CALA1	BZ	RS03B		5	R	5		2	110		1				1
10/13/95	COYOTE	CALA1	BZ	RS01B		14	G	1		2	230		1				1
11/22/95	COYOTE	CALA1	BZ			14	J	1		2	230	322	1				1
10/24/95	COYOTE	CALA1	BZ	POND D-1		3	R	5		2	322		1				1
10/24/95	COYOTE	CALA1	BZ	RG03B		3	N	5		2	322		1				1
10/26/95	COYOTE	CALA1	BZ			6	N	5		2	322		1				1
11/14/95	COYOTE	CALA1	BZ			10	E	0		2	322		1				1
11/21/95	COYOTE	CALA1	BZ			12	N	1		2	322		1				1
10/11/95	COYOTE	CALA1	BZ			8	E	1		2	323		1				1
10/17/95	COYOTE	CALA1	BZ			2	H	4		2	323		3				3
TOTAL FALL OBSERVATIONS													*18*				
EXTENDED OBSERVATION AREA COYOTE OBSERVATIONS 1995																	
01/03/95	COYOTE	CALA1	EA		OU3			1	5	2	10		1				1
01/03/95	COYOTE	CALA1	EA					1		2	322		1				1
01/17/95	COYOTE	CALA1	EA		OU3			5		2	322		1				1
TOTAL 1995 EXTENDED AREA OBSERVATIONS													*3*				
MOUNTAIN LION OBSERVATIONS 1995																	
04/24/95	MOUNTAIN LION	FECO1	BZ			8	P	1		2	540		1				1
TOTAL 1995 OBSERVATIONS													*1*				
RACCOONS 1995																	
01/25/95	RACCOON	PRLO1	BZ	BG02A		8	N	1		2	322		1				1
05/11/95	RACCOON	PRLO1	BZ		OU6	12	P	1		2	212		1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
05/11/95	RACCOON	PRLO1	BZ	POND A-4	OU6	12	Q	1		2	93		1				1
06/07/95	RACCOON	PRLO1	IA			10	K	0		2	212		1				1
06/08/95	RACCOON	PRLO1	IA			10	K	0		2	212		2			1	2
06/14/95	RACCOON	PRLO1	BZ		OU6	11	P	0		2	212		1				1
06/20/95	RACCOON	PRLO1	BZ		OU6	11	P	0		2	212		1				1
06/20/95	RACCOON	PRLO1	BZ		OU6	10	P	0		2	212		2			1	1
06/23/95	RACCOON	PRLO1	IA			10	K	0		2	212		1				1
06/27/95	RACCOON	PRLO1	IA			10	K	0		2	212		2				2
07/19/95	RACCOON	PRLO1	IA			10	K	0		2	212		3			2	1
07/20/95	RACCOON	PRLO1	IA			10	K	0		2	212		1				1
07/31/95	RACCOON	PRLO1	BZ		OU6	7	M	1	0	4	110		3				3
08/01/95	RACCOON	PRLO1	BZ		OU6	12	Q	1	5	4	322	93	5				5
08/01/95	RACCOON	PRLO1	BZ	POND A-4	OU6	12	Q	1	5	4	93		3				3
08/01/95	RACCOON	PRLO1	BZ	POND A-2	OU6	12	O	1	5	4	322		1				1
08/28/95	RACCOON	PRLO1	BZ	RA01B		11	E	1		2	20		1				1
08/30/95	RACCOON	PRLO1	BZ		OU6	11	P	0		2	212		1				1
08/31/95	RACCOON	PRLO1	BZ		OU6	11	P	0		2	212		1				1
09/01/95	RACCOON	PRLO1	BZ		OU6	10	P	0		2	212		2			2	
09/06/95	RACCOON	PRLO1	BZ		OU6	11	P	0		2	212		1				1
09/12/95	RACCOON	PRLO1	BZ	RW03B		7	K	18		2	110		1			1	
09/14/95	RACCOON	PRLO1	BZ	BS01B		14	G	1		2	230		1				1
08/31/96	RACCOON	PRLO1	BZ		OU6	10	P	0		2	212		1			1	
N/A	RACCOON	PRLO1	IA			10	J	18		2	520		1	1			
N/A	RACCOON	PRLO1	IA			9	I	0		2	520		2				2
TOTAL 1995 OBSERVATIONS													*41*				
COOPER'S HAWK OBSERVATIONS 1995																	
09/12/95	COOPER'S HAWK	ACCO1	BZ	BG01R		15	O	1		2	322		1				1
09/14/95	COOPER'S HAWK	ACCO1	BZ	RW01B		15	R	5		2	110		1			1	
TOTAL 1995 OBSERVATIONS													*2*				
NORTHERN GOSHAWK OBSERVATIONS 1995																	
04/28/95	NORTHERN GOSHAWK	ACGE1	BZ	RS02B		15	K	5		2	322		1		1		
TOTAL 1995 OBSERVATIONS													*1*				
SHARP-SHINNED HAWK OBSERVATIONS 1995																	
04/24/95	SHARP-SHINNED HAWK	ACST1	BZ	RW03B		7	I	5		2	110		1				1
04/26/95	SHARP-SHINNED HAWK	ACST1	BZ	RA04B		5	P	1		2	324		1				1
04/28/95	SHARP-SHINNED HAWK	ACST1	BZ	WOM. CK.	OU5	8	N	1		2	322		1				1
04/28/95	SHARP-SHINNED HAWK	ACST1	BZ	BD01B		8	C	1		2	420		1				1
TOTAL 1995 OBSERVATIONS													*4*				
GOLDEN EAGLES WINTER SEASON 1995																	
01/24/95	GOLDEN EAGLE	AQCH1	BZ	BS03B		5	T	1		2	211		1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/30/95	GOLDEN EAGLE	AQCH1	BZ			4	P	0		1	322		1				1
01/30/95	GOLDEN EAGLE	AQCH1	BZ			2	O	0		1	322		1			1	
02/21/95	GOLDEN EAGLE	AQCH1	BZ	POND D-2				1		2	322	324	2				2
01/24/95	GOLDEN EAGLE	AQCH1	BZ			4	P	1		2	323	322	1				1
12/14/95	GOLDEN EAGLE	AQCH1	BZ			12	O	1	0	2	510	322	1				1
TOTAL WINTER OBSERVATIONS													*7*				
EXTENDED OBSERVATION AREA GOLDEN EAGLE OBSERVATIONS WINTER SEASON 1995																	
01/03/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	110	325	1				1
01/03/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	110	325	1				1
01/04/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	110	430	1				1
02/21/95	GOLDEN EAGLE	AQCH1	EA	HORS.FRM	OU3			0		2	110	325	1			1	
01/20/95	GOLDEN EAGLE	AQCH1	EA		OU3			1		2	322		2				2
01/24/95	GOLDEN EAGLE	AQCH1	EA		OU3			1		2	322	54	1				1
02/21/95	GOLDEN EAGLE	AQCH1	EA		OU3			1		2	322	520	1			1	
02/22/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	322		1				1
01/04/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	510	325	1				1
01/04/95	GOLDEN EAGLE	AQCH1	EA					0		2	510	322	1				2
01/05/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	510	322	1				1
01/26/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	510	322	1				1
01/26/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	510	322	1				1
01/26/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	510	325	1				1
02/22/95	GOLDEN EAGLE	AQCH1	EA		OU3			1	0	2	510	322	1				1
TOTAL EXTENDED AREA WINTER OBSERVATIONS													*16*				
GOLDEN EAGLES SPRING SEASON 1995																	
05/18/95	GOLDEN EAGLE	AQCH1	BZ	BA01B		5	I	1		2	20		1				1
04/28/95	GOLDEN EAGLE	AQCH1	BZ	RG02B		16	P	1		2	322		3				3
05/18/95	GOLDEN EAGEL	AQCH1	BZ	BG02A		8	N	1		2	322		1				1
05/31/95	GOLDEN EAGLE	AQCH1	BZ			4	P	0		2	323		1				1
03/31/95	GOLDEN EAGLE	AQCH1	BZ	RD02B		9	C	1		2	420		1				1
05/31/95	GOLDEN EAGLE	AQCH1	BZ			6	P	0		2	510	322	1				1
05/31/95	GOLDEN EAGLE	AQCH1	BZ			6	O	0	0	2	510	322	1				1
TOTAL SPRING OBSERVATIONS													*9*				
EXTENDED OBSERVATION AREA GOLDEN EAGLE OBSERVATIONS SPRING SEASON 1995																	
03/01/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	110	322	1				1
03/17/95	GOLDEN EAGLE	AQCH1	EA		OU3			0		2	110	322	2				2
03/17/95	GOLDEN EAGLE	AQCH1	EA		OU3			1		2	322	520	1			1	
TOTAL EXTENDED AREA SPRING OBSERVATIONS													*4*				
GOLDEN EAGLES SUMMER SEASON 1995																	
07/26/95	GOLDEN EAGLE	AQCH1	BZ	POND A-1	OU6	11	M	1		2	54	322	1				1
08/21/95	GOLDEN EAGLE	AQCH1	BZ		OU5	6	O	0		2	323		1			1	
06/21/95	GOLDEN EAGLE	AQCH1	BZ			2	I	0		2	510	323	1				1
TOTAL SUMMER OBSERVATIONS													*3*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
GOLDEN EAGLES FALL SEASON 1995																	
09/28/95	GOLDEN EAGLE	AQCH1	BZ	RG03B		4	P	0		2	322		1				1
TOTAL FALL OBSERVATIONS													*1*				
SHORT-EARED OWL OBSERVATIONS 1995																	
10/18/95	SHORT-EARED OWL	ASFL1	BZ			2	O	0		2	322		1				1
TOTAL 1995 OBSERVATIONS													*1*				
LONG-EARED OWL OBSERVATIONS 1995																	
03/28/95	LONG-EARED OWL	ASOT1	BZ	RW01A		7	N	0		2	110		1				1
TOTAL 1995 OBSERVATIONS													*1*				
BURROWING OWL OBSERVATIONS 1995																	
04/28/95	BURROWING OWL	ATCU1	BZ	RG02B		17	O	0		2	322		1				1
10/02/95	BURROWING OWL	ATCU1	BZ			15	M	0		2	540	323	1				1
TOTAL 1995 OBSERVATIONS													*2*				
RED-TAILED HAWKS WINTER SEASON 1995																	
12/19/95	RED-TAILED HAWK	BUJA1	BZ	BA01B		6	K	1		2	10		1				1
12/21/95	RED-TAILED HAWK	BUJA1	BZ	RA04B		5	O	1		2	10	323	1				1
01/03/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		17	K	0		2	110	322	1				1
01/20/95	RED-TAILED HAWK	BUJA1	BZ		OU1	7	K	5		2	110	322	1				1
01/24/95	RED-TAILED HAWK	BUJA1	BZ		OU5	7	M	1	5	2	110		1				1
01/30/95	RED-TAILED HAWK	BUJA1	BZ			4	T	0		1	110		1				1
02/21/95	RED-TAILED HAWK	BUJA1	BZ	BW01B		14	T	1		2	110		1				1
02/23/95	RED-TAILED HAWK	BUJA1	BZ			10	F	1		2	110	322	1				1
12/22/95	RED-TAILED HAWK	BUJA1	BZ	RW01A		6	K	1		2	110		1				1
12/22/95	RED-TAILED HAWK	BUJA1	BZ			7	N	0		2	110		1				1
01/20/95	RED-TAILED HAWK	BUJA1	BZ	RS03B		6	S	1		2	212		1				1
12/20/95	RED-TAILED HAWK	BUJA1	BZ	RS01B		15	G	1		2	230		1				1
01/06/95	RED-TAILED HAWK	BUJA1	BZ	POND B-4	OU6	12	Q	1	5	2	322		1				1
01/11/95	RED-TAILED HAWK	BUJA1	BZ	POND B-3	OU6	10	P	5		2	322		1				1
01/19/95	RED-TAILED HAWK	BUJA1	BZ	RW0IA		7	K	1		2	322		1				1
01/24/95	RED-TAILED HAWK	BUJA1	BZ	RG02B		17	P	1		2	323		1				1
12/21/95	RED-TAILED HAWK	BUJA1	BZ	RG03B		4	P	1		2	323		1				1
01/25/95	RED-TAILED HAWK	BUJA1	IA		OU8	11	K	1		2	520		1				1
12/27/95	RED-TAILED HAWK	BUJA1	IA			10	K	1		2	520		1				1
02/14/95	RED-TAILED HAWK	BUJA1	BZ	RA02B	OU6	10	O	1		2	550		2				2
TOTAL WINTER OBSERVATIONS													*21*				
EXTENDED OBSERVATION AREA RED-TAILED HAWK OBSERVATIONS WINTER SEASON 1995																	
01/03/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	322	1				1
01/03/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	325	1				1
01/03/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		3	110	322	1				1
01/04/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		1	110	322	1				1
01/04/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	322	1				1
01/04/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	210	1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/05/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		1	110	322	2				2
01/17/95	RED-TAILED HAWK	BUJA1	EA		OU3			1		2	322	430	1				1
01/20/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	322	510	1				1
01/20/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	322	1				1
01/20/95	RED-TAILED HAWK (DARK)	BUJA1	EA					0		2	110		1				1
01/24/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	322		1				1
01/26/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		1	110	322	1				1
01/26/95	RED-TAILED HAWK	BUJA1	EA		OU3			11		1	110	322	1				1
02/21/95	RED-TAILED HAWK	BUJA1	EA		OU3		.	1	5	2	322	54	1				1
02/22/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	322	1				1
02/23/95	RED-TAILED HAWK	BUJA1	EA		OU3			1		2	110	430	1				1
TOTAL EXTENDED AREA WINTER OBSERVATIONS													*18*				
RED-TAILED HAWKS SPRING SEASON 1995																	
03/17/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		17	L	0		2	110	322	1				1
03/17/95	RED-TAILED HAWK	BUJA1	BZ	RW02B		5	P	1		2	322		1				1
03/17/95	RED-TAILED HAWK	BUJA1	BZ			5	U	10		2	110	322	1				1
03/29/95	RED-TAILED HAWK	BUJA1	BZ	RW01B		14	R	5		2	110		1				1
03/29/95	RED-TAILED HAWK	BUJA1	BZ	RW01B		14	R	5		2	110		1				1
03/30/95	RED-TAILED HAWK	BUJA1	BZ	RG02A	OU5	7	G	5		2	322		1				1
03/30/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		16	J	0		2	110		1				1
03/31/95	RED-TAILED HAWK	BUJA1	BZ	RA02A	OU6	7	I	5		2	20		1				1
03/31/95	RED-TAILED HAWK	BUJA1	BZ	RS02B		15	K	1		2	322		1				1
03/31/95	RED-TAILED HAWK	BUJA1	BZ	RG03B		2	K	5		2	322		1				1
04/07/95	RED-TAILED HAWK	BUJA1	BZ			8	B	6		2	323		2	1	1		
04/20/95	RED-TAILED HAWK	BUJA1	BZ			5	O	0		2	510	322	1				1
04/24/95	RED-TAILED HAWK	BUJA1	BZ	RW03B		7	I	5		2	110		1				1
04/25/95	RED-TAILED HAWK	BUJA1	BZ	BA01R		11	E	5		2	10		1				1
04/26/95	RED-TAILED HAWK	BUJA1	BZ	RW02B		5	P	0		2	510	322	2				2
04/28/95	RED-TAILED HAWK	BUJA1	BZ	NEW LFIL		10	E	0		2	110	322	1				1
04/28/95	RED-TAILED HAWK	BUJA1	BZ	WOM. CK.	OU5	7	O	0		2	110		1				1
04/28/95	RED-TAILED HAWK	BUJA1	BZ	RG02B		16	P	17		2	322		1				1
05/10/95	RED-TAILED HAWK	BUJA1	BZ	TR10		4	K	1		2	110	322	1				1
05/11/95	RED-TAILED HAWK	BUJA1	BZ			5	G	1		2	322		1				1
05/12/95	RED-TAILED HAWK	BUJA1	BZ	POND C-2	OU5	7	Q	0		2	510	322	1				1
05/16/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		15	I	0		2	110		2				2
05/24/95	RED-TAILED HAWK	BUJA1	BZ	RG03B		2	M	1		2	322	510	1		1		
05/31/95	RED-TAILED HAWK	BUJA1	BZ		OU5	7	G	5	0	2	322	510	1				1
TOTAL SPRING OBSERVATIONS													*27*				
EXTENDED OBSERVATION AREA RED-TAILED HAWK OBSERVATIONS SPRING SEASON 1995																	
03/01/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	322	1				1
03/17/95	RED-TAILED HAWK	BUJA1	EA					0		2	110	322	1				1
03/17/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	110	322	1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
04/05/95	RED-TAILED HAWK	BUJA1	EA					10		2	110	322	2	1	1		
03/17/95	RED-TAILED HAWK	BUJA1	EA		OU3			1		2	322		1				1
04/28/95	RED-TAILED HAWK	BUJA1	EA		OU3			0		2	510	322	2				2
TOTAL EXTENDED AREA SPRING OBSERVATIONS													*8*				
RED-TAILED HAWKS SUMMER SEASON 1995																	
06/06/95	RED-TAILED HAWK	BUJA1	BZ	POND A-3	OU6	12	P	1		2	54	322	1				1
06/06/95	RED-TAILED HAWK	BUJA1	BZ	POND C-2	OU5	7	P	5		2	54	322	1				1
06/08/95	RED-TAILED HAWK	BUJA1	BZ	BWO1R		15	I	0		2	110		1				1
06/14/95	RED-TAILED HAWK	BUJA1	BZ	BW01B		13	T	1		2	110		1				1
06/15/95	RED-TAILED HAWK	BUJA1	BZ			5	O	0		2	110	322	1				1
06/16/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		15	I	0	1	2	110		2				2
06/20/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		15	I	0		2	110		2	1	1		
06/30/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		15	I	1		2	110		1				1
07/07/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		15	I	1		2	110		1				1
07/07/95	RED-TAILED HAWK	BUJA1	BZ	BW01R		15	I	1		2	110		1				1
07/26/95	RED-TAILED HAWK	BUJA1	BZ	RW01A		7	k	0		2	110		1				1
08/21/95	RED-TAILED HAWK	BUJA1	BZ			6	U	0		2	110		1			1	
06/28/95	RED-TAILED HAWK	BUJA1	BZ	RW03B		6	G	1		2	210		1				1
06/15/95	RED-TAILED HAWK	BUJA1	BZ	BS01B		15	G	1		2	230		1				1
06/15/95	RED-TAILED HAWK	BUJA1	BZ	BS01B		13	F	1		2	230		1				1
06/21/95	RED-TAILED HAWK	BUJA1	BZ			15	G	5		2	230		1				1
06/16/95	RED-TAILED HAWK	BUJA1	BZ	BG01R		15	P	1		2	322		1				1
06/21/95	RED-TAILED HAWK	BUJA1	BZ			4	P	5		2	322		1				1
07/05/95	RED-TAILED HAWK	BUJA1	BZ		OU5	7	G	1		2	322		1				1
07/07/95	RED-TAILED HAWK	BUJA1	BZ			7	H	1		2	322		1				1
08/16/95	RED-TAILED HAWK	BUJA1	BZ	BG01R		15	P	1		2	322		1			1	
06/20/95	RED-TAILED HAWK	BUJA1	BZ			15	Q	0		2	510	322	1				1
07/07/95	RED-TAILED HAWK	BUJA1	BZ	128 PDT		17	P	0		2	510	322	2				2
07/11/95	RED-TAILED HAWK	BUJA1	BZ			8	N	0		2	510	322	1				1
08/01/95	RED-TAILED HAWK	BUJA1	BZ	RA01B		13	G	0		2	560	30	1			1	
TOTAL SUMMER OBSERVATIONS													*28*				
RED-TAILED HAWKS FALL SEASON 1995																	
09/29/95	RED-TAILED HAWK	BUJA1	BZ	RA01B		11	E	1		2	10		1				1
10/27/95	RED-TAILED HAWK	BUJA1	BZ	POND D-2		2	T	1		2	54		1				1
09/14/95	RED-TAILED HAWK	BUJA1	BZ	RW01B		15	R	5		2	110		1				1
09/29/95	RED-TAILED HAWK	BUJA1	BZ			6	U	0		2	110		1			1	
10/09/95	RED-TIALED HAWK	BUJA1	BZ	RS03B		5	R	1		2	110		1				1
10/12/95	RED-TAILED HAWK	BUJA1	BZ	NW LFILL		10	F	0		2	110	323	1				1
10/17/95	RED-TAILED HAWK	BUJA1	BZ			5	P	0		2	110		1				1
10/18/95	RED-TAILED HAWK	BUJA1	BZ			6	U	0		2	110		1				1
11/14/95	RED-TAILED HAWK (DARK)	BUJA1	BZ	POND C-1		7	N	0		2	110		1				1
10/27/95	RED-TAILED HAWK	BUJA1	BZ	RW01A		7	J	1	0	2	210	110	2				2

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
10/13/95	RED-TAILED HAWK	BUJA1	BZ	RS02B		17	L	1		2	230		1				1
10/04/95	RED-TAILED HAWK	BUJA1	BZ	LANDFILL	OU7	13	L	5		2	322		1				1
10/09/95	RED-TAILED HAWK	BUJA1	BZ			4	P	1		2	322		1				1
10/09/95	RED-TAILED HAWK	BUJA1	BZ		OU5	6	O	1		2	322		1				1
10/13/95	RED-TAILED HAWK	BUJA1	BZ	RG02B		17	O	1		2	322		1				1
10/24/95	RED-TAILED HAWK	BUJA1	BZ			9	S	1		2	322		1				1
10/27/95	RED-TAILED HAWK	BUJA1	BZ			13	Q	1		2	322		2				2
09/29/95	RED-TAILED HAWK	BUJA1	BZ			4	P	1		2	323	322	1				1
10/18/95	RED-TAILED HAWK	BUJA1	BZ			9	E	1		2	323		1				1
11/16/95	RED-TAILED HAWK	BUJA1	BZ	BX01B		10	R	1		2	323		1				1
11/16/95	RED-TAILED HAWK (DARK)	BUJA1	BZ	BX01B		10	Q	1		2	323		1				1
10/17/95	RED-TAILED HAWK	BUJA1	BZ			8	Q	0		2	510	322	1				1
TOTAL FALL OBSERVATIONS													*24*				
EXTENDED OBSERVATION AREA RED-TAILED HAWK OBSERVATIONS FALL SEASON 1995																	
10/13/95	RED-TAILED HAWK	BUJA1	EA					1		2	322		2				2
TOTAL EXTENDED AREA FALL OBSERVATIONS													*2*				
ROUGHLEGGED HAWKS WINTER SEASON 1995																	
01/03/95	ROUGHLEGGED HAWK	BULA1	BZ	ORCHARD		6	I	0		2	20		1				1
01/03/95	ROUGHLEGGED HAWK	BULA1	BZ			17	L	0		2	110	322	1				1
12/20/95	ROUGHLEGGED HAWK	BULA1	BZ	RW03B		7	F	1		2	110		1				1
12/22/95	ROUGHLEGGED HAWK	BULA1	BZ	RWO1B		13	S	0		2	110		1				1
01/26/95	ROUGHLEGGED HAWK	BULA1	BZ	BS02B		16	M	1		2	230	322	1				1
01/30/95	ROUGHLEGGED HAWK	BULA1	BZ			14	J	1	5	2	230	320	1				1
02/14/95	ROUGHLEGGED HAWK	BULA1	BZ	BS02B		16	L	1		2	230		1				1
02/22/95	ROUGHLEGGED HAWK	BULA1	BZ	BS01B		13	F	1		2	230		1				1
01/03/95	ROUGHLEGGED HAWK	BULA1	BZ	POND A-4	OU6	12	Q	1		2	322	54	1				1
01/03/95	ROUGHLEGGED HAWK	BULA1	BZ			16	G	1	5	2	322		1				1
01/03/95	ROUGHLEGGED HAWK	BULA1	BZ		OU3	13	U	1		2	322		1				1
01/11/95	ROUGHLEGGED HAWK	BULA1	BZ	POND A-1	OU6	12	N	5		2	322		1				1
01/17/95	ROUGHLEGGED HAWK	BULA1	BZ	BG01R		15	P	1		2	322		1				1
01/23/95	ROUGHLEGGED HAWK	BULA1	BZ		OU3	17	O	1		2	322		1				1
01/26/95	ROUGHLEGGED HAWK	BULA1	BZ			7	Q	1		2	322		1				1
01/30/95	ROUGHLEGGED HAWK	BULA1	BZ			4	H	1		2	322	560	1				1
02/21/95	ROUGHLEGGED HAWK	BULA1	BZ	BG01R		15	P	1		2	322		1				1
01/04/95	ROUGHLEGGED HAWK	BULA1	BZ					0		2	510	322	1				2
01/24/95	ROUGHLEGGED HAWK	BULA1	BZ	881 HILL	OU1	8	N	0		2	510	322	1				1
01/26/95	ROUGHLEGGED HAWK	BULA1	BZ					0		2	510	322	1				1
01/30/95	ROUGHLEGGED HAWK	BULA1	BZ		OU5	7	F	0	1	2	510	322	1				1
TOTAL WINTER OBSERVATIONS													*21*				
EXTENDED OBSERVATION AREA ROUGHLEGGED HAWK OBSERVATIONS WINTER SEASON 1995																	
01/03/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110	322	2				2
01/04/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110	322	1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/04/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110	322	1				1
01/04/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110	322	1				1
01/05/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		1	110	322	1				1
01/05/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		1	110	322	1				1
01/05/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110	322	2				2
01/20/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110	322	1				1
01/24/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			5		2	110	322	1				1
01/26/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		1	110	322	2				2
01/26/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110	325	2				2
02/21/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	110		1				1
02/21/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	322	322	1				1
02/22/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			1		2	322		1				1
01/17/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			1		2	325	322	1				1
01/03/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			0		2	510	325	1				1
01/30/95	ROUGHLEGGED HAWK	BULA1	EA					0		2	510	322	1				1
TOTAL EXTENDED AREA WINTER OBSERVATIONS													*21*				
ROUGHLEGGED HAWKS SPRING SEASON 1995																	
03/17/95	ROUGHLEGGED HAWK	BULA1	BZ			13	E	5		2	230	322	1				1
TOTAL SPRING OBSERVATIONS													*1*				
EXTENDED OBSERVATION AREA ROUGHLEGGED HAWK OBSERVATIONS SPRING SEASON 1995																	
03/17/95	ROUGHLEGGED HAWK	BULA1	EA		OU3			1		2	322		1				1
TOTAL EXTENDED AREA SPRING OBSERVATIONS													*1*				
ROUGHLEGGED HAWKS FALL SEASON 1995																	
11/14/95	ROUGHLEGGED HAWK	BULA1	BZ	ANT SPRG		5	I	1		2	20		1				1
09/28/95	ROUGHLEGGED HAWK	BULA1	BZ	RS03B		4	T	0		2	110		1				1
11/28/95	ROUGHLEGGED HAWK	BULA1	BZ	RS02B		15	F	1		2	230		1				1
09/30/95	ROUGHLEGGED HAWK	BULA1	BZ			7	T	1		2	322		1				1
10/24/95	ROUGHLEGGED HAWK (DARK)	BULA1	BZ			4	N	1		2	322		1				1
10/18/95	ROUGHLEGGED HAWK	BULA1	BZ			2	F	1		2	323		1				1
TOTAL FALL OBSERVATIONS													*6*				
EXTENDED OBSERVATION AREA ROUGHLEGGED HAWK OBSERVATIONS FALL SEASON 1995																	
10/18/95	ROUGHLEGGED HAWK	BULA1	EA					0		2	110	325	1				1
10/13/95	ROUGHLEGGED HAWK	BULA1	EA					1		2	322		1				1
TOTAL EXTENDED AREA FALL OBSERVATIONS													*2*				
FERRUGINOUS HAWKS WINTER SEASON 1995																	
12/20/95	FERRUGINOUS HAWK	BURE1	BZ	BD03B		4	Q	1		2	324		1				1
TOTAL WINTER OBSERVATIONS													*1*				
EXTENDED OBSERVATION AREA FERRUGINOUS HAWK OBSERVATIONS FALL SEASON 1995																	
01/03/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		3	110	322	1				1
01/04/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		1	110	322	1				1
01/04/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	110	520	1				1
01/04/95	FERRUGINOUS HAWK	BURE1	EA					0		2	110	430	2				2

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/05/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		1	110	322	2				2
01/17/95	FERRUGINOUS HAWK	BURE1	EA		OU3			1		2	110	322	1				1
01/20/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	110	322	4				4
01/20/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	110	322	1				1
01/20/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	110	322	1				1
01/26/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	110	325	1				1
01/26/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	110	325	1				1
01/26/95	FERRUGINOUS HAWK	BURE1	EA					0		2	110	322	1				1
02/23/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	110	325	1				1
01/20/95	FERRUGINOUS HAWK	BURE1	EA		OU3			1	0	2	322	510	1				1
01/24/95	FERRUGINOUS HAWK	BURE1	EA		OU3			1	0	2	322	325	1				1
01/26/95	FERRUGINOUS HAWK	BURE1	EA		OU3			1		1	322		1				1
02/21/95	FERRUGINOUS HAWK	BURE1	EA		OU3			5		2	322		1				1
01/17/95	FERRUGINOUS HAWK	BURE1	EA		OU3			1	5	2	325		1				1
01/20/95	FERRUGINOUS HAWK	BURE1	EA		OU3			1		2	325		1				1
01/20/95	FERRUGINOUS HAWK	BURE1	EA					0		2	510	322	1				1
01/24/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	510	322	1				1
01/26/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	510	322	1				1
02/22/95	FERRUGINOUS HAWK	BURE1	EA		OU3			0		2	510	322	1				1
TOTAL EXTENDED AREA WINTER OBSERVATIONS													*28*				
SWAINSON'S HAWKS SPRING SEASON 1995																	
05/08/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	0		2	110		1				1
05/10/95	SWAINSON'S HAWK	BUSW1	BZ		OU6	11	M	0		2	110		1				1
05/11/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	10		2	110		2	1	1		
05/24/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	10		2	110		1				1
05/11/95	SWAINSON'S HAWK	BUSW1	BZ		OU6	10	P	1		2	322		1				1
05/12/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	12	M	1		2	322		1				1
04/05/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	12	N	0		2	510	322	1				1
05/16/95	SWAINSON'S HAWK	BUSW1	BZ	RA02B		12	N	6		2	510	322	2	1	1		
05/24/95	SWAINSON'S HAWK	BUSW1	PA		OU4	10	M	1		2	520		1				1
TOTAL SPRING OBSERVATIONS													*11*				
SWAINSON'S HAWKS SUMMER SEASON 1995																	
06/06/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	12	N	8		2	110		1				1
06/22/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	8		2	110		1				1
06/29/95	SWAINSON'S HAWK	BUSW1	BZ	RA02B	OU6	12	N	8		2	110		1		1		
07/03/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	7		2	110		2		1	1	
07/06/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	7		2	110		4	1	1	2	
07/11/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	19		2	110		3		1	2	
07/27/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	0		2	110		2			2	
08/01/95	SWAINSON'S HAWK	BUSW1	BZ	RA02B	OU6	12	M	0		2	110		2			2	
06/22/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	9	N	1		2	322	540	1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/12/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-1	OU6	11	M	12	1	2	510	110	1				1
06/19/95	SWAINSON'S HAWK	BUSW1	BZ	RG01A	OU1	8	L	0		2	510	324	1				1
07/27/95	SWAINSON'S HAWK	BUSW1	BZ	POND A-2	OU6	12	O	0		2	510	322	1				1
08/07/95	SWAINSON'S HAWK	BUSW1	BZ	CONT YRD		8	L	1		2	520	324	1				1
TOTAL SUMMER OBSERVATIONS													*21*				
SWAINSON'S HAWKS FALL SEASON 1995																	
09/28/95	SWAINSON'S HAWK	BUSW1	BZ	RA02B		12	M	18		2	110		1			1	
09/01/95	SWAINSON'S HAWK	BUSW1	BZ		OU6	11	O	1		2	324		1				1
TOTAL FALL OBSERVATIONS													*2*				
GREAT HORNED OWLS WINTER SEASON 1995																	
01/16/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		13	S	0		2	110		1				1
01/16/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		13	T	0		2	110		3				3
01/17/95	GREAT HORNED OWL	BUVI1	BZ	BW01B		13	R	0		2	110		1				1
01/19/95	GREAT HORNED OWL	BUVI1	BZ	RW0IA		7	K	0		2	110		1				1
01/19/95	GREAT HORNED OWL	BUVI1	BZ	RA02B	OU6	11	P	0		2	110		1				1
01/19/95	GREAT HORNED OWL	BUVI1	BZ	RA02B	OU6	12	M	0		2	110		1				1
01/24/95	GREAT HORNED OWL	BUVI1	BZ	BS03B		5	R	0		2	110		1				1
01/25/95	GREAT HORNED OWL	BUVI1	BZ	BW01R		16	J	0		2	110		1				1
01/25/95	GREAT HORNED OWL	BUVI1	BZ	RS01B		13	F	0		2	110		1				1
02/14/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		13	R	0		2	110		1				1
02/21/95	GREAT HORNED OWL	BUVI1	BZ	BW01R		17	L	0		2	110		1				1
02/21/95	GREAT HORNED OWL	BUVI1	BZ	BW01B		14	S	0		2	110		2				2
02/21/95	GREAT HORNED OWL	BUVI1	BZ	BW01B		14	S	0		2	110		1				1
02/22/95	GREAT HORNED OWL	BUVI1	BZ	RW03B		7	G	0		2	110		1				1
02/22/95	GREAT HORNED OWL	BUVI1	BZ	RW02B		5	O	0		2	110		2				2
02/22/95	GREAT HORNED OWL	BUVI1	BZ	RW02B		4	K	0		2	110		1				1
02/23/95	GREAT HORNED OWL	BUVI1	BZ	RS03B		5	R	0		2	110		1				1
12/20/95	GREAT HORNED OWL	BUVI1	BZ	RW03B		7	J	0		2	110		1				1
12/20/95	GREAT HORNED OWL	BUVI1	BZ	BD03B		4	Q	0		2	110	324	1				1
12/21/95	GREAT HORNED OWL	BUVI1	BZ	RS03B		5	R	0		2	110		1				1
12/27/95	GREAT HORNED OWL	BUVI1	BZ	RA02B	OU6	12	M	0		2	110		1				1
12/27/95	GREAT HORNED OWL	BUVI1	BZ	RA02B	OU6	11	P	0		2	110		2				2
01/20/95	GREAT HORNED OWL	BUVI1	BZ	RS03B		6	S	0		2	212		1				1
01/25/95	GREAT HORNED OWL	BUVI1	BZ	BS01B		14	G	0		2	230		1				1
12/19/95	GREAT HORNED OWL	BUVI1	BZ	BS01B		14	G	0		2	230		1				1
12/20/95	GREAT HORNED OWL	BUVI1	BZ	RS01B		13	F	0		2	230		1				1
01/03/95	GREAT HORNED OWL	BUVI1	BZ			15	E	0		2	322	560	1				1
01/03/95	GREAT HORNED OWL	BUVI1	BZ	LINDSAY		13	H	0		2	520		2				2
01/25/95	GREAT HORNED OWL	BUVI1	BZ	RA01B		13	G	0		2	520		1				1
TOTAL WINTER OBSERVATIONS													*35*				
GREAT HORNED OWLS SPRING SEASON 1995																	

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
03/14/95	GREAT HORNED OWL	BUVI1	BZ	POND A-1	OU6	11	M	0		2	110		1				1
03/23/95	GREAT HORNED OWL	BUVI1	BZ	BW01A		7	L	0		2	110		2				2
03/28/95	GREAT HORNED OWL	BUVI1	BZ	RA02B	OU6	11	N	0		2	110		2				2
03/29/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		13	T	0		2	110		1				1
03/30/95	GREAT HORNED OWL	BUVI1	BZ	BW01B		13	T	0		2	110		1				1
03/30/95	GREAT HORNED OWL	BUVI1	BZ	BW01R		15	I	0		2	110		1				1
03/31/95	GREAT HORNED OWL	BUVI1	BZ	RW02B		4	L	0		2	110		1				1
04/25/95	GREAT HORNED OWL	BUVI1	BZ	BW01B		13	T	0		2	110		2				2
04/28/95	GREAT HORNED OWL	BUVI1	BZ	RA01B		11	E	0		2	110		1				1
05/08/95	GREAT HORNED OWL	BUVI1	BZ	POND A-1	OU6	11	M	0		2	110		3				3
05/11/95	GREAT HORNED OWL	BUVI1	BZ		OU6	12	P	0		2	110		1				1
05/15/95	GREAT HORNED OWL	BUVI1	BZ	LINDSAY2		11	E	0		2	110		1				1
05/15/95	GREAT HORNED OWL	BUVI1	BZ	BS03B		5	R	0		2	110		1				1
05/15/95	GREAT HORNED OWL	BUVI1	BZ			5	T	0		2	110		1				1
05/16/95	GREAT HORNED OWL	BUVI1	BZ	BW01A		7	L	0		2	110		1				1
05/24/95	GREAT HORNED OWL	BUVI1	BZ	RW02B		4	L	0		2	110		1				1
05/25/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		13	R	0		2	110		1				1
05/31/95	GREAT HORNED OWL	BUVI1	BZ	BWO1B		13	R	0		2	110		1				1
03/28/95	GREAT HORNED OWL	BUVI1	BZ	RA01B		11	E	0		2	120		1				1
04/03/95	GREAT HORNED OWL	BUVI1	BZ	CTY PIT		7	C	0		2	120		1				1
04/27/95	GREAT HORNED OWL	BUVI1	BZ	BS01B		13	F	0		2	230		1				1
05/18/95	GREAT HORNED OWL	BUVI1	BZ	BS02B		15	J	0		2	230		1				1
TOTAL SPRING OBSERVATIONS													*27*				
GREAT HORNED OWLS SUMMER SEASON 1995																	
06/05/95	GREAT HORNED OWL	BUVI1	BZ	BW01A		7	K	0		2	110		1				1
06/08/95	GREAT HORNED OWL	BUVI1	BZ	BWO1R		16	J	0		2	110		1				1
06/12/95	GREAT HORNED OWL	BUVI1	BZ	BS03B		5	R	0		2	110		1				1
06/12/95	GREAT HORNED OWL	BUVI1	BZ	BW01A		7	L	0		2	110		1				1
06/15/95	GREAT HORNED OWL	BUVI1	BZ			6	S	0		2	110		1				1
06/29/95	GREAT HORNED OWL	BUVI1	BZ	BS03B		5	R	0		2	110		1				1
08/01/95	GREAT HORNED OWL	BUVI1	BZ			8	O	0		4	110		1				1
08/16/95	GREAT HORNED OWL	BUVI1	BZ	BW01B		13	T	0		2	110		1				1
08/16/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		14	R	0		2	110		1				1
06/07/95	GREAT HORNED OWL	BUVI1	BZ	BS02B		15	J	0		2	230		1				1
06/21/95	GREAT HORNED OWL	BUVI1	BZ			15	G	0		2	230		1				1
08/24/95	GREAT HORNED OWL	BUVI1	BZ	BS02B		14	I	0		2	230		1				1
07/31/95	GREAT HORNED OWL	BUVI1	BZ			9	N	1		4	322		1				1
08/01/95	GREAT HORNED OWL	BUVI1	BZ			11	N	0		4	322	510	1				1
08/01/95	GREAT HORNED OWL	BUVI1	BZ			14	P	1		4	322		1				1
07/21/95	GREAT HORNED OWL	BUVI1	BZ	130 TRLS	OU11	8	G	18		2	510		1			1	
08/01/95	GREAT HORNED OWL	BUVI1	BZ			8	N	0		4	510		1				1
08/28/95	GREAT HORNED OWL	BUVI1	BZ	L RNCH H		13	G	0		2	520		1				1

108

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
TOTAL SUMMER OBSERVATIONS													*18*				
GREAT HORNED OWLS FALL SEASON 1995																	
09/14/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		13	T	0		2	110		1				1
09/28/95	GREAT HORNED OWL	BUVI1	BZ			3	S	0		2	110		2				2
10/12/95	GREAT HORNED OWL	BUVI1	BZ	RW03B		7	G	0		2	110		1				1
10/13/95	GREAT HORNED OWL	BUVI1	BZ	BW01R		14	I	0		2	110		1				1
10/18/95	GREAT HORNED OWL	BUVI1	BZ			7	F	0		2	110		1				1
11/21/95	GREAT HORNED OWL	BUVI1	BZ	RW01B		7	N	0		2	110	212	1				1
11/22/95	GREAT HORNED OWL	BUVI1	BZ	RW03B		7	G	0		2	110		2				2
11/27/95	GREAT HORNED OWL	BUVI1	BZ	RS03B		5	R	0		2	110		1				1
11/27/95	GREAT HORNED OWL	BUVI1	BZ	RA04B		3	S	0		2	110		1				1
11/28/95	GREAT HORNED OWL	BUVI1	BZ	RA02B		12	M	0		2	110		2				2
11/22/95	GREAT HORNED OWL	BUVI1	BZ	BS01B		14	G	0		2	230		1				1
10/18/95	GREAT HORNED OWL	BUVI1	BZ	LINDSAY		13	G	0		2	520		1				1
TOTAL WINTER OBSERVATIONS													*15*				
TURKEY VLUTURE OBSERVATIONS 1995																	
10/05/95	TURKEY VULTURE	CAAU1	BZ			15	G	1		2	230		2				2
01/23/95	TURKEY VULTURE	CAAU1	BZ	RG02A		7	F	1		2	322		2				2
TOTAL 1995 OBSERVATIONS													*4*				
NORTHERN HARRIERS WINTER SEASON 1995																	
01/16/95	NORTHERN HARRIER	CICY1	BZ	RA03B		6	K	1	5	2	10		2		1	1	
02/14/95	NORTHERN HARRIER	CICY1	BZ	BA01R		12	F	1		2	20	30	1				1
02/23/95	NORTHERN HARRIER	CICY1	BZ	BA01B		5	I	5		2	20		1				1
12/19/95	NORTHERN HARRIER	CICY1	BZ	RA03B		5	J	5		2	20		1		1		
12/19/95	NORTHERN HARRIER	CICY1	BZ	RA01B		12	F	5		2	20		1		1		
02/24/95	NORTHERN HARRIER	CICY1	BZ	RA03B		5	I	1	5	2	30		1				1
01/16/95	NORTHERN HARRIER	CICY1	BZ	RW01B		13	R	1	5	2	110		1		1		
01/19/95	NORTHERN HARRIER	CICY1	BZ	RW0IA		7	K	1		2	110		1				1
12/27/95	NORTHERN HARRIER	CICY1	BZ	RS02B		17	N	1		2	230		1		1		
01/03/95	NORTHERN HARRIER	CICY1	BZ	POND D-1		3	R	5		2	322	30	1		1		
01/12/95	NORTHERN HARRIER	CICY1	BZ			7	F	5		2	322	220	1		1		
01/16/95	NORTHERN HARRIER	CICY1	BZ	TR10		4	K	1	5	2	322		1		1		
01/19/95	NORTHERN HARRIER	CICY1	BZ	RA02B		11	N	5		2	322		1		1		
01/24/95	NORTHERN HARRIER	CICY1	BZ		OU6	12	O	1	5	2	322		1		1		
01/25/95	NORTHERN HARRIER	CICY1	BZ	POND A-4	OU6	13	Q	5		1	322		1				1
01/26/95	NORTHERN HARRIER	CICY1	BZ	POND B-5	OU6	11	P	5		2	322		1		1		
01/31/95	NORTHERN HARRIER	CICY1	BZ		OU5	7	M	5		2	322		1	1			
02/01/95	NORTHERN HARRIER	CICY1	BZ	N.LFILL		11	F	5		2	322	420	1	1			

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
12/20/95	NORTHERN HARRIER	CICY1	BZ	RG02A	OU5	7	F	5		2	322		1		1		
12/22/95	NORTHERN HARRIER	CICY1	BZ			13	G	5		2	322	323	1		1		
TOTAL WINTER OBSERVATIONS													*21*				
NORTHERN HARRIERS SPRING SEASON 1995																	
03/29/95	NORTHERN HARRIER	CICY1	BZ	RW01B		14	R	5		2	110		1				1
04/26/95	NORTHERN HARRIER	CICY1	BZ	RS03B		5	P	1		2	210		1				1
05/24/95	NORTHERN HARRIER	CICY1	BZ	RW02B		4	L	5		2	210		1		1		
05/18/95	NORTHERN HARRIER	CICY1	BZ	BG01B		5	G	5		2	323		1				1
TOTAL SPRING OBSERVATIONS													*4*				
NORTHERN HARRIERS SUMMER SEASON 1995																	
08/24/95	NORTHERN HARRIER	CICY1	BZ	BA01R		13	G	5		2	20		1				1
08/29/95	NORTHERN HARRIER	CICY1	BZ	RA03B		5	I	5		2	20		1		1		
08/28/95	NORTHERN HARRIER	CICY1	BZ	RS02B		15	K	5		2	230		1		1		
08/23/95	NORTHERN HARRIER	CICY1	BZ	130 TRLS	OU11	8	G	1		2	520	323	1				1
TOTAL SUMMER OBSERVATIONS													*4*				
NORTHERN HARRIERS FALL SEASON 1995																	
11/21/95	NORTHERN HARRIER	CICY1	BZ	RA01B		11	E	1		2	10		1		1		
09/14/95	NORTHERN HARRIER	CICY1	BZ	BA01R		13	G	5		2	20		1				1
10/27/95	NORTHERN HARRIER	CICY1	BZ	POND A-1	OU6	12	N	5		2	54		1			1	
11/27/95	NORTHERN HARRIER	CICY1	BZ	POND D-2		2	T	5		2	54		1		1		
09/14/95	NORTHERN HARRIER	CICY1	BZ	RW01B		15	P	5		2	110		1		1		
09/28/95	NORTHERN HARRIER	CICY1	BZ	RA02B	OU6	12	P	5		2	210		1				1
11/27/95	NORTHERN HARRIER	CICY1	BZ	RS03B		4	T	5		2	211		1		1		
09/14/95	NORTHERN HARRIER	CICY1	BZ	BS01B		15	H	5		2	230		1				1
09/14/95	NORTHERN HARRIER	CICY1	BZ	BS02B		15	J	5		2	230		1				1
10/18/95	NORTHERN HARRIER	CICY1	BZ			14	J	1	5	2	230	322	1				1
09/18/95	NORTHERN HARRIER	CICY1	BZ	BG01R		15	O	5		2	322		1		1		
09/18/95	NORTHERN HARRIER	CICY1	BZ	BG01R		15	P	0		2	322		1		1		
09/26/95	NORTHERN HARRIER	CICY1	BZ	BG02B		10	D	5		2	322		1				1
09/30/95	NORTHERN HARRIER	CICY1	BZ			5	F	1		2	322	120	1			1	
10/02/95	NORTHERN HARRIER	CICY1	BZ	LANDFILL	OU7	13	L	1	5	2	322		2				2
10/31/95	NORTHERN HARRIER	CICY1	BZ			14	U	5		2	322		1		1		
09/14/95	NORTHERN HARRIER	CICY1	BZ	BX02R		14	J	1		2	323		1				1
10/26/95	NORTHERN HARRIER	CICY1	BZ	BX01B		10	Q	1		2	323		1				1
11/22/95	NORTHERN HARRIER	CICY1	BZ	BX02R		14	J	1		2	323		1		1		
11/27/95	NORTHERN HARRIER	CICY1	BZ	D-2 DAM		2	U	5		2	530		1				1
TOTAL FALL OBSERVATIONS													*21*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
PRAIRIE FALCON OBSERVATIONS 1995																	
12/19/95	PRAIRIE FALCON	FAME1	BZ	BS01B		13	F	1	5	2	230		1				1
11/22/95	PRAIRIE FALCON	FAME1	BZ	RG02A	OU5	7	I	5	1	2	322	510	2	1	1		
12/14/95	PRAIRIE FALCON	FAME1	BZ	BG01R		15	Q	1	0	2	510	322	1				1
TOTAL 1995 OBSERVATIONS													*4*				
AMERICAN PEREGRINE FALCON OBSERVATIONS 1995																	
05/23/95	AMERICAN PEREGRINE FALCON	FAPE1	BZ	RA03B		4	R	5		2	30		1				1
10/31/95	AMERICAN PEREGRINE FALCON	FAPE1	BZ			12	F	1		2	322		1				1
TOTAL 1995 OBSERVATIONS													*2*				
AMERICAN KESTRELS WINTER SEASON 1995																	
01/19/95	AMERICAN KESTREL	FASP1	BZ	RA02B	OU6	12	M	5		2	110		1	1			
01/30/95	AMERICAN KESTREL	FASP1	BZ		OU5	7	I	1	5	2	110		1	1			
01/04/95	AMERICAN KESTREL	FASP1	BZ	881 HILL	OU1	8	N	1		2	322		1	1			
01/12/95	AMERICAN KESTREL	FASP1	BZ		OU2	8	O	5		2	322		1	1			
01/24/95	AMERICAN KESTREL	FASP1	BZ		OU7	12	M	5		2	323		1	1			
01/24/95	AMERICAN KESTREL	FASP1	BZ	BD02B		4	U	1		2	324		1				1
02/22/95	AMERICAN KESTREL	FASP1	BZ	BD02B		3	U	1		2	324		1				1
01/04/95	AMERICAN KESTREL	FASP1	BZ		OU3	9	U	0		2	510	322	1				1
01/06/95	AMERICAN KESTREL	FASP1	BZ			12	Q	0		2	510	322	1				1
01/20/95	AMERICAN KESTREL	FASP1	BZ		OU1	7	K	0		2	510	322	1				1
01/24/95	AMERICAN KESTREL	FASP1	BZ			2	I	0		2	510	322	1	1			
01/26/95	AMERICAN KESTREL	FASP1	BZ	POND B-5	OU6	11	P	0		2	510	322	1	1			
01/26/95	AMERICAN KESTREL	FASP1	BZ		OU5	7	J	0		2	510	322	1				1
01/30/95	AMERICAN KESTREL	FASP1	BZ			11	U	0		2	510	322	1				1
12/14/95	AMERICAN KESTREL	FASP1	BZ			15	P	0		2	510	322	1				1
02/23/95	AMERICAN KESTREL	FASP1	BZ	RA01B		13	G	0		2	520		1				1
01/03/95	AMERICAN KESTREL	FASP1	BZ	POND A-3	0U6	12	P	0		2	540	510	1		1		
TOTAL WINTER OBSERVATIONS													*16*				
EXTENDED OBSERVATION AREA AMERICAN KESTREL OBSERVATIONS WINTER SEASON 1995																	
01/03/95	AMERICAN KESTREL	FASP1	EA		OU3			1		2	110	325	1				1
01/26/95	AMERICAN KESTREL	FASP1	EA		OU3			12		1	110	322	1				1
01/03/95	AMERICAN KESTREL	FASP1	EA					1		2	322		1				1
02/21/95	AMERICAN KESTREL	FASP1	EA		OU3			0		2	510	322	1				1
TOTAL EXTENDED AREA WINTER OBSERVATIONS													*4*				
AMERICAN KESTRELS SPRING SEASON 1995																	
03/30/95	AMERICAN KESTREL	FASP1	BZ	BA01R		13	H	1		2	20	30	1		1		
03/17/95	AMERICAN KESTREL	FASP1	BZ			8	U	0		2	110	322	1		1		
03/28/95	AMERICAN KESTREL	FASP1	BZ	RA02B	OU6	11	M	6		2	110		2	1	1		
03/29/95	AMERICAN KESTREL	FASP1	BZ			5	F	0		2	110		1	1			

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
04/25/95	AMERICAN KSETREL	FASP1	BZ	BW01R		16	J	6		2	110		2	1	1		
04/26/95	AMERICAN KESTREL	FASP1	BZ	RW02B		4	L	0		2	110		1				1
04/28/95	AMERICAN KESTREL	FASP1	BZ		OU3	9	U	0		2	110	322	1				1
05/10/95	AMERICAN KESTREL	FASP1	BZ		OU6	11	M	0		2	110		1				1
03/17/95	AMERICAN KESTREL	FASP1	BZ			13	F	0		2	210	230	1	1			
04/28/95	AMERICAN KESTREL	FASP1	BZ	RS02B		16	M	5		2	230		1	1			
04/25/95	AMERICAN KESTREL	FASP1	BZ		OU6	12	P	1		2	322		1				1
04/25/95	AMERICAN KESTREL	FASP1	BZ	BA01R		13	G	1		2	322		1				1
05/09/95	AMERICAN KESTREL	FASP1	BZ	130 TRLS	OU11	8	G	1		2	322	520	1				1
03/17/95	AMERICAN KESTREL	FASP1	BZ			5	U	0		2	510	322	1	1			
03/30/95	AMERICAN KESTREL	FASP1	BZ			10	U	0		2	510	322	1		1		
03/30/95	AMERICAN KESTREL	FASP1	BZ			11	U	0		2	510	322	1	1			
03/30/95	AMERICAN KESTREL	FASP1	BZ			12	U	0		2	510	322	1				1
03/30/95	AMERICAN KESTREL	FASP1	BZ					0		2	510	430	1	1			
04/20/95	AMERICAN KESTREL	FASP1	BZ			9	N	0		2	510		1				1
04/28/95	AMERICAN KESTREL	FASP1	BZ	POND B-5	OU6	11	P	0		2	510	322	1	1			
04/28/95	AMERICAN KESTREL	FASP1	BZ		OU3	13	U	0		2	510	322	1				1
04/28/95	AMERICAN KESTREL	FASP1	BZ	POND C-1	OU5	7	N	0		2	510	322	1				1
04/28/95	AMERICAN KESTREL	FASP1	BZ	RG02B		16	O	0		2	510	322	1	1			
05/24/95	AMERICAN KESTREL	FASP1	BZ		OU5	7	K	5		2	510	322	1				1
05/31/95	AMERICAN KESTREL	FASP1	BZ			13	U	0		2	510	322	1				1
05/31/95	AMERICAN KESTREL	FASP1	BZ	128 PDT		17	O	5		2	510	322	1				1
OTTAL SPRING OBSERVATIONS													*28*				
EXTENDED OBSERVATION AREA AMERICAN KESTREL OBSERVATIONS SPRING SEASON 1995																	
04/28/95	AMERICAN KESTREL	FASP1	EA		OU3			0		2	510	322	1				1
05/10/95	AMERICAN KESTREL	FASP1	EA					0		2	510	322	1				1
TOTAL EXTENDED AREA SPRING OBSERVATIONS													*2*				
AMERICAN KESTRELS SUMMER SEASON 1995																	
06/07/95	AMERICAN KESTREL	FASP1	BZ	BW01B		14	S	1		2	110		1				1
06/29/95	AMERICAN KESTREL	FASP1	BZ	BW01B		13	T	1		2	110		1				1
07/05/95	AMERICAN KESTREL	FASP1	BZ			13	H	5		2	230		1				1
06/05/95	AMERICAN KESTREL	FASP1	BZ	LANDFILL	OU7	13	L	1		2	322		1				1
06/28/95	AMERICAN KESTREL	FASP1	BZ	BA01R		13	G	0		2	322		1		1		
06/28/95	AMERICAN KESTREL	FASP1	BZ	BX01B		12	S	1		2	323		1				1
08/17/95	AMERICAN KESTREL	FASP1	BZ			2	F	1		2	323		1				1
06/05/95	AMERICAN KESTREL	FASP1	BZ	BD03B		2	R	1		2	324		1				1
06/05/95	AMERICAN KESTREL	FASP1	BZ			5	U	1		2	324		1				1
06/21/95	AMERICAN KESTREL	FASP1	BZ	LANDFILL	OU7	13	K	5		2	420		1				1
07/27/95	AMERICAN KESTREL	FASP1	BZ	LANDFILL	OU7	12	K	0		2	510	420	1		1		
08/28/95	AMERICAN KESTREL	FASP1	BZ		OU6	13	Q	0		2	510	322	2	1	1		
06/23/95	AMERICAN KESTREL	FASP1	BZ	L RNCH H		13	G	0		2	520		1		1		
TOTAL SUMMER OBSERVATIONS													*14*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
AMERICAN KESTRELS FALL SEASON 1995																	
10/12/95	AMERICAN KESTREL	FASP1	BZ	LINDSAY		13	H	5		2	20	30	1				1
09/14/95	AMERICAN KESTREL	FASP1	BZ	RW01B		15	R	5		2	110		1				1
09/14/95	AMERICAN KESTREL	FASP1	BZ	BX02R		15	J	1		2	322		1		1		
10/02/95	AMERICAN KESTREL	FASP1	BZ	POND A-3	OU6	12	P	5		2	322		1				1
10/03/95	AMERICAN KESTREL	FASP1	BZ	LANDFILL	OU7	13	L	1		2	322		1				1
10/09/95	AMERICAN KESTREL	FASP1	BZ	903 PAD	OU1	9	M	1		2	322		1				1
10/13/95	AMERICAN KESTREL	FASP1	BZ	RG02B		17	O	1		2	322		1				1
10/27/95	AMERICAN KESTREL	FASP1	BZ	RW01A		7	J	0		2	510	110	1	1			
11/22/95	AMERICAN KESTREL	FASP1	BZ			13	G	0		2	520		1				1
TOTAL FALL OBSERVATIONS													*9*				
BALD EAGLES WINTER SEASON 1995																	
01/25/95	BALD EAGLE	HALE1	BZ	BW01R		17	L	1		2	110		1				1
01/25/95	BALD EAGLE	HALE1	BZ	BW01R		16	J	1		2	110		2			1	1
02/21/95	BALD EAGLE	HALE1	BZ	BW01R		17	L	1		2	110		1				1
02/21/95	BALD EAGLE	HALE1	BZ	BW01R		16	I	1		2	110		1			1	
02/21/95	BALD EAGLE	HALE1	BZ	BW01B		15	T	1		2	110		1			1	
01/25/95	BALD EAGLE	HALE1	BZ	BS01B		14	G	1		2	230		2			2	
01/03/95	BALD EAGLE	HALE1	BZ	WAL. CK.		13	R	1		2	322		1				1
01/16/95	BALD EAGLE	HALE1	BZ			13	Q	1		2	322		1				1
01/19/95	BALD EAGLE	HALE1	BZ			12	S	1		2	322		1			1	
01/23/95	BALD EAGLE	HALE1	BZ		OU5	7	F	1		2	322	110	1			1	
01/24/95	BALD EAGLE	HALE1	BZ			9	R	1		2	322		1				1
01/25/95	BALD EAGLE	HALE1	BZ		OU5	6	J	1		1	322		1				1
01/25/95	BALD EAGLE	HALE1	BZ	BW01R		17	L	1		2	322		1				1
02/22/95	BALD EAGLE	HALE1	BZ	RA04B		1	R	1		2	322		1			1	
01/19/95	BALD EAGLE	HALE1	IA	T893A		9	K	1		2	520		2				2
TOTAL WINTER OBSERVATIONS													*18*				
EXTENDED OBSERVATION AREA BALD EAGLE OBSERVATIONS WINTER SEASON 1995																	
01/03/95	BALD EAGLE	HALE1	EA		OU3			0		1	110	322	1				1
01/03/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	322	1				1
01/03/95	BALD EAGLE	HALE1	EA		OU3			10	6	3	110	322	2	1	1		
01/04/95	BALD EAGLE	HALE1	EA		OU3			0		1	110	322	2	1	1		
01/04/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	210	1			1	
01/04/95	BALD EAGLE	HALE1	EA		OU3			0		3	110	322	1			1	
01/04/95	BALD EAGLE	HALE1	EA		OU3			0		3	110	322	1			1	
01/04/95	BALD EAGLE	HALE1	EA		OU3			0		3	110	322	1			1	
01/04/95	BALD EAGLE	HALE1	EA		OU3			0	5	3	110	54	2	1	1		
01/05/95	BALD EAGLE	HALE1	EA		OU3			0		1	110	322	4	1	1	2	
01/06/95	BALD EAGLE	HALE1	EA		OU3			0	0	1	110	322	2	1	1	3	
01/17/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	322	2	1	1		

133

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
01/20/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	54	1		1		
01/20/95	BALD EAGLE	HALE1	EA		OU3			1		2	110	54	1	1			
01/20/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	322	1			1	
01/20/95	BALD EAGLE	HALE1	EA					0		2	110	322	1				1
01/23/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	322	3			2	1
01/24/95	BALD EAGLE	HALE1	EA	SNAG	OU3			0		2	110	54	1				1
01/24/95	BALD EAGLE	HALE1	EA	SNAG	OU3			1	0	2	110	54	1				1
01/26/95	BALD EAGLE	HALE1	EA		OU3			1		1	110	322	1			1	
01/26/95	BALD EAGLE	HALE1	EA		OU3			1	0	1	110	322	1				1
01/26/95	BALD EAGLE	HALE1	EA		OU3			1	0	1	110	322	1				1
02/21/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	322	1				1
02/21/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	54	1				1
02/22/95	BALD EAGLE	HALE1	EA		OU3			0		2	110	322	2			2	
02/22/95	BALD EAGLE	HALE1	EA		OU3			1	0	2	110	322	2				2
02/23/95	BALD EAGLE	HALE1	EA		OU3			0		2	110		1			1	
02/23/95	BALD EAGLE	HALE1	EA		OU3			1		2	110	430	3				3
01/05/95	BALD EAGLE	HALE1	EA					1		3	322		1				1
01/06/95	BALD EAGLE	HALE1	EA		OU3			1		1	322		1			1	
TOTAL EXTENDED AREA WINTER OBSERVATIONS													*44*				
EXTENDED OBSERVATION AREA BALD EAGLE OBSERVATIONS SPRING SEASON 1995																	
03/01/95	BALD EAGLE	HALE1	EA		OU3			5	0	2	110	54	2				2
03/01/95	BALD EAGLE	HALE1	EA		OU3			1		2	322	430	1			1	
03/01/95	BALD EAGLE	HALE1	EA		OU3			1		2	322		1			1	
TOTAL EXTENDED AREA SPRING OBSERVATIONS													*4*				
BALD EAGLES FALL SEASON 1995																	
10/09/95	BALD EAGLE	HALE1	BZ	RS03B		5	T	1		2	210		1				1
11/14/95	BALD EAGLE	HALE1	BZ	BG01B		6	G	1		2	322		2				2
TOTAL FALL OBSERVATIONS													*3*				
UPLAND GAMEBIRD OBSERVATIONS 1995																	
01/24/95	RING-NECKED PHEASANT	PHCO1	BZ	BW01A		7	K	18		2	110		1				1
03/23/95	RING-NECKED PHEASANT	PHCO1	BZ	BW01A		7	K	0		2	110		1	1			
04/27/95	RING-NECKED PHEASANT	PHCO1	BZ	BW01A		7	K	0		2	110		1				1
04/26/95	RING-NECKED PHEASANT	PHCO1	BZ	RW02B		4	L	0		2	210		1	1			
01/24/95	RING-NECKED PHEASANT	PHCO1	BZ	RW02B		4	M	1		2	212		1	1			
TOTAL 1995 OBSERVATIONS													*5*				
WESTERN GREBE OBSERVATIONS 1995																	
04/28/95	WESTERN GREBE	AEOC1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
TOTAL 1995 OBSERVATIONS													*1*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
WOOD DUCK OBSERVATIONS 1995																	
08/02/95	WOOD DUCK	AISP1	BZ	POND A-2	OU6	12	O	5		2	54		2		1	1	
TOTAL 1995 OBSERVATIONS													*2*	*2*			
NORTHERN PINTAIL OBSERVATIONS 1995																	
02/22/95	NORTHERN PINTAIL	ANAC1	BZ	POND D-2		2	T	5		2	54		5				5
TOTAL 1995 OBSERVATIONS													*5*				
AMERICAN WIGEON OBSERVATIONS 1995																	
01/19/95	AMERICAN WIGEON	ANAM1	BZ	RA02B		10	O	5		2	54		2	1	1		
01/26/95	AMERICAN WIGEON	ANAM1	BZ	POND B-3	OU6	10	O	5		2	54		2	1	1		
01/30/95	AMERICAN WIGEON	ANAM1	BZ	POND B-3		10	O	5		2	54		2	1	1		
04/03/95	AMERICAN WIGEON	ANAM1	BZ	POND D-2		2	T	5		2	54		4	3	1		
10/18/95	AMERICAN WIGEON	ANAM1	BZ	POND A-1	OU6	12	N	5		2	54		2				2
10/27/95	AMERICAN WIGEON	ANAM1	BZ	POND A-1	OU6	12	N	5		2	54		8	4	4		
11/28/95	AMERICAN WIGEON	ANAM1	BZ	POND A-2	OU6	12	O	5		2	54		29	15	14		
11/28/95	AMERICAN WIGEON	ANAM1	BZ	POND A-2	OU6	12	O	5		2	54		4	2	2		
12/27/95	AMERICAN WIGEON	ANAM1	BZ	POND B-3	OU6	10	O	5		2	54		1	1			
TOTAL 1995 OBSERVATIONS													*54*				
NORTHERN SHOVELER OBSERVATIONS 1995																	
04/28/95	NORTHERN SHOVELER	ANCL1	BZ	POND A-2	OU6	12	O	5		2	54		3	2	1		
06/05/95	NORTHERN SHOVELER	ANCL1	BZ	POND D-1		3	R	5		2	54		1				1
06/21/95	NORTHERN SHOVELER	ANCL1	BZ	POND D-1		4	R	5		2	54		1	1			
TOTAL 1995 OBSERVATIONS													*5*				
GREEN-WINGED TEAL WINTER SEASON 1995																	
12/27/95	GREEN-WINGED TEAL	ANCR1	BZ	POND B-4		10	P	5		2	54		3	1	2		
TOTAL WINTER OBSERVATIONS													*3*				
GREEN-WINGED TEAL SPRING SEASON 1995																	
05/09/95	GREEN-WINGED TEAL	ANCR1	BZ	RA03B		5	I	5		2	46		1		1		
03/17/95	GREEN-WINGED TEAL	ANCR1	BZ	LANDFILL	OU7	13	L	5		2	54		12	4	4		4
03/17/95	GREEN-WINGED TEAL	ANCR1	BZ	POND C-2	OU5	7	P	5		2	54		1	1	1		
03/17/95	GREEN-WINGED TEAL	ANCR1	BZ	POND D-2		2	T	5		2	54		2	1	1		
03/20/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		13	7	6		
03/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-1	OU6	12	N	5		2	54		2	1	1		
03/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		3	2	1		
03/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-3	OU6	12	P	5		2	54		8	6	2		
03/28/95	GREENWINGED TEAL	ANCR1	BZ	POND B-4	OU6	10	P	5		2	54		4	2	2		
03/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND B-1	OU6	10	N	5		2	54		4	2	2		
03/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND C-1	OU5	7	N	5		2	54		2	1	1		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
03/31/95	GREEN-WINGED TEAL	ANCR1	BZ	POND D-2		2	T	5		2	54		2	1	1		
04/03/95	GREEN-WINGED TEAL	ANCR1	BZ	LINDSAY		13	H	5		2	54		2	1	1		
04/03/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		5	3	2		
04/03/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-1	OU6	12	N	5		2	54		7	5	2		
04/03/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-4	OU6	12	Q	5		2	54		2	1	1		
04/03/95	GREEN-WINGED TEAL	ANCR1	BZ	POND C-2	OU5	7	P	5		2	54		9				9
04/03/95	GREEN-WINGED TEAL	ANCR1	BZ	POND D-2		2	T	5		2	54		9	5	4		
04/03/95	GREEN-WINGED TEAL	ANCR1	BZ	POND D-1		4	R	5		2	54		2	1	1		
04/20/95	GREEN-WINGED TEAL	ANCR1	BZ	POND D-2		2	T	5		2	54		6	3	3		
04/25/95	GREENWINGED TEAL	ANCR1	BZ	POND A-3	OU6	12	P	5		2	54		12	8	4		
04/27/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		17	11	7		
04/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		6	3	3		
04/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND C-2	OU5	7	P	5		2	54		5	3	2		
05/16/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-3	OU6	12	O	5		2	54		2	2			
05/23/95	GREEN-WINGED TEAL	ANCR1	BZ	POND D-2		2	T	5		2	54		2				2
05/31/95	GREEN-WINGED TEAL	ANCR1	BZ	POND D-2		2	T	5		2	54		1	1			
TOTAL SPRING OBSERVATIONS													*141*				
GREEN-WINGED TEAL FALL SEASON 1995																	
10/09/95	GREEN-WINGER TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		3		1	2	
10/09/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-1	OU6	12	N	5		2	54		1	1			
10/18/95	GREEN-WINGED TEAL	ANCR1	BZ	POND B-4	OU6	10	P	5		2	54		3	3			
10/18/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
10/27/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-1	OU6	12	N	5		2	54		2	1	1		
10/27/95	GREEN-WINGED TEAL	ANCR1	BZ	POND B-4	OU6	10	P	5		2	54		7	3	4		
10/27/95	GREEN-WINGED TEAL	ANCR1	BZ	POND B-3	OU6	10	O	5		2	54		4	1	3		
11/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND A-2	OU6	12	O	5		2	54		4	3	1		
11/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND B-5	OU6	12	Q	5		2	54		3	1	2		
11/28/95	GREEN-WINGED TEAL	ANCR1	BZ	POND B-1		10	N	5		2	54		2	1	1		
TOTAL FALL OBSERVATIONS													*31*				
CINNAMON TEAL OBSERVATIONS 1995																	
05/10/95	CINNAMON TEAL	ANCY1	BZ	POND D-2		2	T	5		2	54		2	1	1		
05/17/95	CINNAMON TEAL	ANCY1	BZ	POND C-1	OU5	7	N	5		2	54		1	1			
TOTAL 1995 OBSERVATIONS													*3*				
BLUE-WINGED TEAL SPRING SEASON 1995																	
04/25/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
05/23/95	BLUE-WINGED TEAL	ANDI1	BZ	POND D-1		3	R	1		2	54		4	2	2		
05/31/95	BLUEWINGED TEAL	ANDI1	BZ	POND D-2		2	T	5		2	54		1	1			
TOTAL SPRING OBSERVATIONS													*7*				
BLUE-WINGED TEAL SUMMER SEASON 1995																	
06/05/95	BLUE-WINGED TEAL	ANDI1	BZ	POND D-2		2	T	5		2	54		4	4			

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/12/95	BLUE-WINGED TEAL	ANDI1	BZ	POND B-2	OU6	10	O	5		2	54		1	1			
06/12/95	BLUE-WINGED TEAL	ANDI1	BZ	POND B-3	OU6	10	O	5		2	54		2	1	1		
06/15/95	BLUE-WINGED TEAL	ANDI1	BZ	POND D-2		2	U	5		2	54		3	2	1		
06/19/95	BLUE-WINGED TEAL	AND11	BZ	POND D-2		2	T	5		2	54		2	1	1		
06/21/95	BLUE-WINGED TEAL	ANDI1	BZ	POND D-2		2	T	5		2	54		2	1	1		
06/23/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
06/29/95	BLUE-WINGED TEAL	ANDI1	BZ	POND B-5	OU6	12	Q	5		2	54		2	1	1		
07/31/95	BLUE-WINGED TEAL	ANDI1	BZ	POND C-1	OU5	7	N	0		4	54		1				1
08/16/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-2	OU6	12	O	5		2	54		1		1		
TOTAL SUMMER OBSERVATIONS													*20*				
BLUE-WINGED TEAL FALL SEASON 1995																	
09/18/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-2	OU6	12	O	5		2	54		3				3
09/28/95	BLUE-WINGED TEAL	ANDI1	BZ	POND D-2		2	T	2		2	54		4				4
09/28/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-2	OU6	12	O	5		2	54		1				1
09/28/95	BLUE-WINGED TEAL	ANDI1	BZ	POND B-3	OU6	10	O	5		2	54		2				2
09/28/95	BLUE-WINGED TEAL	ANDI1	BZ	POND B-1	OU6	10	N	5		2	54		2				2
10/10/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-1	OU6	12	N	5		2	54		2				2
10/27/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-1	OU6	12	N	5		2	54		10	5	5		
10/27/95	BLUE-WINGED TEAL	ANDI1	BZ	POND A-4	OU6	12	Q	5		2	54		2				2
11/27/95	BLUE-WINGED TEAL	ANDI1	BZ	POND D-2		2	T	5		2	54		7				7
TOTAL FALL OBSERVATIONS													*33*				
MALLARDS WINTER SEASON 1995																	
12/27/95	MALLARD	ANPL1	BZ	RA02B		10	O	1		2	30		1	1			
02/22/95	MALLARD	ANPL1	BZ	RW01A		7	L	5		2	43		1		1		
01/03/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	O	5		2	54		4	2	2		
01/06/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	P	5		2	54		2	1	1		
01/19/95	MALLARD	ANPL1	BZ	RA02B	OU6	10	P	5		2	54		3	2	1		
01/19/95	MALLARD	ANPL1	BZ	RA02B	OU6	11	Q	5		2	54		1	1			
01/24/95	MALLARD	ANPL1	BZ		OU5	7	P	5		2	54		3	1	2		
01/26/95	MALLARD	ANPL1	BZ	POND B-2	OU6	10	O	1		2	54	322	8				8
01/26/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		7	4	3		
01/30/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	O	5		2	54		4	2	2		
02/22/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		3	1	2		
02/22/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		17	16	1		
02/22/95	MALLARD	ANPL1	BZ	RW01A	OU5	7	N	5	1	2	54		6	1	1		4
02/22/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		45	25	20		
02/24/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2				2
02/24/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		1	1			
12/27/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		1				1
02/22/95	MALLARD	ANPL1	BZ	RW01A	OU1	7	O	1		2	110		4	3	1		
TOTAL WINTER OBSERVATIONS													*113*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
MALLARDS SPRING SEASON 1995																	
05/16/95	MALLARD	ANPL1	BZ	RA01B		12	F	0		2	10		2	1	1		
05/16/95	MALLARD	ANPL1	BZ	RA01B		11	E	0		2	20		2	1	1		
04/07/95	MALLARD	ANPL1	BZ	BA01A		7	K	1		2	30		3				3
04/28/95	MALLARD	ANPL1	BZ	RA01B		12	F	5		2	30		3	2	1		
05/16/95	MALLARD	ANPL1	BZ	RA02B	OU6	11	P	5		2	30		1		1		
05/16/95	MALLARD	ANPL1	BZ	BA01A		7	I	5		2	30		1				1
05/23/95	MALLARD	ANPL1	BZ	RA04B		2	T	5		2	30		1	1			
04/28/95	MALLARD	ANPL1	BZ	RS01B		14	G	1		2	41		2	1	1		
04/28/95	MALLARD	ANPL1	BZ	RS01B		14	G	5		2	41	210	2				2
05/17/95	MALLARD	ANPL1	BZ			11	F	5		2	41		6				6
05/31/95	MALLARD	ANPL1	BZ	BW01B		13	S	5		2	41		1				1
04/25/95	MALLARD	ANPL1	BZ	BA01R		13	G	5		2	42		1		1		
04/25/95	MALLARD	ANPL1	BZ	BA01R		12	F	5		2	42		1	1			
04/27/95	MALLARD	ANPL1	BZ	RW01B		13	S	5		2	42		2	1	1		
04/27/95	MALLARD	ANPL1	BZ	BS01B		14	G	0		2	42		2				2
04/24/95	MALLARD	ANPL1	BZ	RW01A		7	N	5		2	43		2	1	1		
05/15/95	MALLARD	ANPL1	BZ			14	H	5		2	43		1	1			
05/11/95	MALLARD	ANPL1	BZ		OU6	12	O	5		2	44		4	2	2		
05/11/95	MALLARD	ANPL1	BZ	WCBYPASS	OU5	7	P	5		2	47		2	1	1		
05/12/95	MALLARD	ANPL1	BZ			14	P	0		2	47		2	1	1		
05/17/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	47		1	1			
05/17/95	MALLARD	ANPL1	BZ	EASTGATE	OU2	9	N	5		2	47		1		1		
05/24/95	MALLARD	ANPL1	BZ			15	P	5		2	47		2	1	1		
04/27/95	MALLARD	ANPL1	BZ	BS01B		15	H	0		2	51		2				2
04/28/95	MALLARD	ANPL1	BZ	RS01B		14	H	5		2	51		3	2	1		
05/18/95	MALLARD	ANPL1	BZ			7	I	5		2	51		1	1			
03/17/95	MALLARD	ANLP1	BZ	POND A-1	OU6	12	N	5		2	54		3	2	1		
03/17/95	MALLARD	ANLP1	BZ	POND A-2	OU6	12	O	5		2	54		6	3	3		
03/17/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		2	1	1		
03/17/95	MALLARD	ANPL1	BZ	POND A-4	OU6	12	Q	5		2	54		6	4	2		
03/17/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		2	1	1		
03/17/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2	1	1		
03/17/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		14	7	7		
03/20/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		10	6	4		
03/20/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		2	1	1		
03/23/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2	1	1		
03/28/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		2	1	1		
03/28/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
03/28/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
03/28/95	MALLARD	ANPL1	BZ	POND A-4	OU6	13	Q	5		2	54		4	2	2		
03/28/95	MALLARD	ANPL1	BZ	POND B-5	OU6	12	Q	5		2	54		7	4	3		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
03/28/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		2	1	1		
03/28/95	MALLARD	ANPL1	BZ	POND B-2	OU6	10	O	5		2	54		2	1	1		
03/28/95	MALLARD	ANPL1	BZ	POND B-1	OU6	10	N	5		2	54		3	2	1		
03/28/95	MALLARD	ANPL1	BZ	LINDSAY		13	H	5		2	54		2	1	1		
03/28/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
03/28/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2	1	1		
03/30/95	MALLARD	ANPL1	BZ	LINDSAY		13	H	5		2	54		2	1	1		
03/31/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		28	14	14		
04/03/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
04/03/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		2	1	1		
04/03/95	MALLARD	ANPL1	BZ	POND A-4	OU6	12	Q	5		2	54		4	2	2		
04/03/95	MALLARD	ANPL1	BZ	POND B-5	OU6	12	Q	5		2	54		2	1	1		
04/03/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2	1	1		
04/03/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		8	6	2		
04/03/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		19	10	9		
04/20/95	MALLARD	ANPL1	BZ	POND D-1		4	R	5		2	54		2				2
04/24/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		4	3	1		
04/25/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		4	2	2		
04/25/95	MALLARD	ANPL1	BZ	BS02B		13	H	5		2	54		1				1
04/25/95	MALLARD	ANPL1	BZ	BA01R		13	H	5		2	54		1	1			
04/26/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		2	1	1		
04/26/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		2	1	1		
04/27/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		1				1
04/27/95	MALLARD	ANPL1	BZ	POND B-1	OU6	10	N	5		2	54		2	1	1		
04/27/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	0		2	54		2	1	1		
04/28/95	MALLARD	ANPL1	BZ	LFILL PD	OU7	13	L	5		2	54		2	1	1		
04/28/95	MALLARD	ANPL1	BZ	POND A-4	OU6	12	Q	5		2	54		2	1	1		
04/28/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		3	2	1		
04/28/95	MALLARD	ANPL1	BZ	POND B-5	OU6	11	P	5		2	54		4	2	2		
04/28/95	MALLARD	ANPL1	BZ	POND B-2	OU6	10	N	5		2	54		2	1	1		
04/28/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		5	3	2		
04/28/95	MALLARD	ANPL1	BZ	RA01B		11	E	5		2	54		2	2			
04/28/95	MALLARD	ANPL1	BZ	LINDSAY		13	H	5		2	54		4	4			
05/09/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		5	5			
05/10/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		4	2	2		
05/10/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		1	1			
05/10/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		7	5	2		
05/10/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
05/10/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		2	1	1		
05/10/95	MALLARD	ANPL1	BZ	POND D-1		3	R	5		2	54		2	2			
05/11/95	MALLARD	ANPL1	BZ	POND B-2	OU6	10	O	5		2	54		2	2			
05/11/95	MALLARD	ANPL1	BZ	POND A-4	OU6	13	Q	1		2	54		2	1	1		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
05/11/95	MALLARD	ANPL1	BZ	POND B-5	OU6	11	Q	5		2	54		3	2	1		
05/11/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5	0	2	54		10	9	1		
05/11/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		4	3	1		
05/11/95	MALLARD	ANPL1	BZ	IND POND	OU6	13	U	5		2	54		3	3			
05/11/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2	2			
05/12/95	MALLARD	ANPL1	BZ	L.POND		13	H	5		2	54		1	1			
05/12/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		1	1			
05/15/95	MALLARD	ANPL1	BZ	LINDSAY2		11	E	5		2	54		4	3	1		
05/15/95	MALLARD	ANPL1	BZ	SNWBERPD		11	D	5		2	54		1	1			
05/15/95	MALLARD	ANPL1	BZ			13	H	5		2	54		2	2			
05/15/95	MALLARD	ANPL1	BZ	LINDSAY		13	H	5		2	54		2				1
05/16/95	MALLARD	ANPL1	BZ	RA01B		13	H	5		2	54		2				1
05/16/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
05/16/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	O	5		2	54		9	8	1		
05/16/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		4	2	2		
05/16/95	MALLARD	ANPL1	BZ	POND B-2	OU6	10	O	5		2	54		1	1			
05/16/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2	1	1		
05/18/95	MALLARD	ANPL1	BZ	LINDSAY2		11	E	5		2	54		1	1			
05/23/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		2	2			
05/24/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		3	3			
05/31/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	M	5		2	54		2	2			
05/31/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		4	3	1		
05/16/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	0		2	93		3	2	1		
05/16/95	MALLARD	ANPL1	BZ	POND B-5	OU6	11	Q	0		2	93		4	2	2		
05/11/95	MALLARD	ANPL1	BZ	WAL CK	OU6	13	T	1		2	110	322	2	2			
05/16/95	MALLARD	ANPL1	BZ	BW01R		16	K	0		2	110	43	2	1	1		
05/25/95	MALLARD	ANPL1	BZ	RW01B		15	O	18		2	110		1		1		
05/25/95	MALLARD	ANPL1	BZ	RW01B		15	O	1		2	110		1	1			
05/31/95	MALLARD	ANPL1	BZ	RW01A		7	L	1		2	110		5				5
05/24/95	MALLARD	ANPL1	BZ	RW02B		4	N	5		2	210		2	1	1		
03/17/95	MALLARD	ANPL1	BZ	POND B-5	OU6	12	Q	1		2	322		1				1
04/20/95	MALLARD	ANPL1	BZ	BD03B		4	Q	1		2	324		2				2
04/28/95	MALLARD	ANPL1	BZ	BD01B		8	C	1		2	420		2				2
TOTAL MALLARD SPRING OBSERVATIONS													*360*				
MALLARDS SUMMER SEASON 1995																	
06/06/95	MALLARD	ANPL1	BZ	BA01B		6	J	1		2	20		2				2
06/19/95	MALLARD	ANPL1	BZ	BA01R		13	H	1		2	20		1				1
06/23/95	MALLARD	ANPL1	BZ	RA01B		13	G	1		2	20		4	2	2		
06/23/95	MALLARD	ANPL1	BZ	RA01B		13	G	5		2	30		1		1		
06/26/95	MALLARD	ANPL1	BZ	BA01A		7	K	0		2	30		1				1
06/14/95	MALLARD	ANPL1	BZ	BA01R		13	G	0		2	42		1				1
07/06/95	MALLARD	ANPL1	BZ	BA01R		13	G	5	1	2	42		2	1	1		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/01/95	MALLARD	ANPL1	BZ	IND.POND	OU6	13	U	5		2	54		1	1			
06/05/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		3	3			
06/05/95	MALLARD	ANPL1	BZ	LANDFILL	OU7	13	L	5		2	54		4	4			
06/05/95	MALLARD	ANPL1	BZ	BW01A		7	N	5		2	54		3				3
06/05/95	MALLARD	ANPL1	BZ	POND D-1		3	R	5		2	54		2	1	1		
06/06/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		6	5	1		
06/06/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		1	1			
06/06/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		6	4	2		
06/06/95	MALLARD	ANPL1	BZ	LANDFILL	OU7	12	L	5		2	54		1	1			
06/07/95	MALLARD	ANPL1	BZ	BA01R		13	H	5		2	54		2	1	1		
06/07/95	MALLARD	ANPL1	BZ	BA01R		13	H	5		2	54		1				1
06/12/95	MALLARD	ANPL1	BZ	POND B-2	OU6	10	O	5		2	54		1		1		
06/12/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		1	1			
06/13/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	0		2	54		7	6	1		
06/13/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
06/15/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5	0	2	54		4	4			
06/15/95	MALLARD	ANPL1	BZ	POND D-2		2	U	5		2	54		1	1			
06/19/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5	1	2	54		13	4	3	6	
06/21/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		4	3	1		
06/21/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		3	2	1		
06/21/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		1	1			
06/21/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		1	1			
06/21/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		6		1	5	
06/23/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
06/23/95	MALLARD	ANPL1	BZ	POND A-2	OU6	10	O	5	0	2	54	530	2	2			
06/23/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	O	5		2	54		1	1			
06/26/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		1		1		
06/29/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		6		1	5	
06/29/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	O	5		2	54		7	5	2		
06/29/95	MALLARD	ANPL1	BZ	POND B-5	OU6	12	Q	5		2	54		4	4			
06/29/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		3	2	1		
06/29/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	O	5		2	54		1		1		
06/29/95	MALLARD	ANPL1	BZ	POND B-1	OU6	10	N	5		2	54		1	1			
07/07/95	MALLARD	ANPL1	BZ	LANDFILL	OU7	12	L	5		2	54		2	1	1		
07/07/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	P	5		2	54		7	5	2		
07/07/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		3				3
07/07/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	O	5		2	54		2				2
07/07/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		7				7
07/07/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		5		1	4	
07/10/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		8	1	3		4
07/26/95	MALLARD	ANPL1	BZ	POND C-2	OU5	7	P	5		2	54		6				6
07/26/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		1		1		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
07/27/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		10		9	1	
07/27/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		1		1		
07/31/95	MALLARD	ANPL1	BZ	POND D-2		2	T	0		4	54		5				5
08/01/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		5		5		
08/01/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		1		1		
08/01/95	MALLARD	ANPL1	BZ	POND B-5	OU6	12	Q	5		2	54		3				3
08/15/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		8				8
08/16/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		1		1		
08/16/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		2		2		
08/24/95	MALLARD	ANPL1	BZ	BA01R		13	H	5		2	54		1				1
06/06/95	MALLARD	ANPL1	BZ	LANDFILL	OU7	12	L	0		2	93		4	4			
06/23/95	MALLARD	ANPL1	BZ	POND B-5	OU6	11	Q	0		2	93		2	1	1		
06/07/95	MALLARD	ANPL1	BZ	BW01B		14	Q	1		2	110		3	3			
06/07/95	MALLARD	ANPL1	BZ	BW01B		14	R	1		2	110		2				2
06/12/95	MALLARD	ANPL1	BZ	BW01A		7	L	1		2	110		1				1
06/20/95	MALLARD	ANPL1	BZ	BW01B		13	T	1		2	110		3	2	1		
06/20/95	MALLARD	ANPL1	BZ	BW01B		13	T	0		2	110		2	1	1		
06/15/95	MALLARD	ANPL1	BZ	RS03B		5	S	1		2	210		1		1		
06/05/95	MALLARD	ANPL1	BZ	BS03B		4	T	0		2	211		1				1
06/05/95	MALLARD	ANPL1	BZ	BS03B		4	T	1		2	211		2				2
06/15/95	MALLARD	ANPL1	BZ	BS01B		15	G	1		2	230		1				1
06/13/95	MALLARD	ANPL1	BZ	BG01B		2	F	1		2	323		1				1
06/21/95	MALLARD	ANPL1	BZ	POND D-1		4	R	8		2	324		1				
06/26/95	MALLARD	ANPL1	BZ			2	U	8		2	324		1		1		
TOTAL SUMMER OBSERVATIONS													*217*				
MALLARDS FALL SEASON 1995																	
09/01/95	MALLARD	ANLP1	BZ	POND A-1	OU6	12	N	5		2	54		15				15
09/01/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		5				5
09/01/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	O	5		2	54		1				1
09/15/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		5				5
09/18/95	MALLARD	ANPL1	BZ	POND A-4	OU6	12	Q	5		2	54		20				20
09/28/95	MALLARD	ANPL1	BZ	POND D-2		2	T	2		2	54		2				2
09/28/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		9				9
09/28/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		2				2
09/28/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	O	5		2	54		9				9
09/28/95	MALLARD	ANPL1	BZ	POND A-4	OU6	12	P	5		2	54		20				20
09/28/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	O	5		2	54		8				8
09/28/95	MALLARD	ANPL1	BZ	POND B-1	OU6	10	N	5		2	54		8				8
09/29/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		7	1	6		
09/30/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		1		1		
10/03/95	MALLARD	ANPL1	BZ	LANDFILL	OU7	13	L	5		2	54		5				5
10/04/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		6				6

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
10/09/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	O	5		2	54		1	1			
10/09/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		9	4	5		
10/09/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		6	3	3		
10/10/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		7				7
10/10/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		6				6
10/11/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		5				5
10/13/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	M	5		2	54		7	5	2		
10/13/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		3		3		
10/13/95	MALLARD	ANPL1	BZ	POND C-1		7	N	0		2	54		8	4	4		
10/18/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		1		1		
10/18/95	MALLARD	ANPL1	BZ	POND D-1		3	R	5		2	54		1	1			
10/18/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5	12	2	54		6	4	2		
10/18/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		6	4	2		
10/18/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		2	2			
10/18/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		4	3	1		
10/18/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
10/27/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		5	2	3		
10/27/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		2				2
10/27/95	MALLARD	ANPL1	BZ	POND A-1	OU6	12	N	5		2	54		4	2	2		
10/27/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		4	2	2		
10/27/95	MALLARD	ANPL1	BZ	POND B-5	OU6	12	Q	5		2	54		2	1	1		
10/27/95	MALLARD	ANPL1	BZ	POND B-4	OU6	10	P	5		2	54		2				2
10/27/95	MALLARD	ANPL1	BZ	POND B-3	OU6	10	O	5		2	54		4	3	1		
11/21/95	MALLARD	ANPL1	BZ	POND C-1	OU5	7	N	5		2	54		2	1	1		
11/27/95	MALLARD	ANPL1	BZ	POND D-2		2	T	5		2	54		4	2	2		
11/28/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		8	6	2		
11/28/95	MALLARD	ANPL1	BZ	POND A-2	OU6	12	O	5		2	54		8	4	4		
11/28/95	MALLARD	ANPL1	BZ	POND B-5	OU6	12	Q	5		2	54		2	1	1		
11/28/95	MALLARD	ANPL1	BZ	POND B-2	OU6	10	O	5		2	54		2	1	1		
11/28/95	MALLARD	ANPL1	BZ	POND B-1	OU6	10	N	5		2	54		2	1	1		
09/01/95	MALLARD	ANPL1	BZ	POND B-5	OU6	11	Q	0		2	93		5				5
09/18/95	MALLARD	ANPL1	BZ	POND A-3	OU6	12	P	0		2	93		16	6	10		
10/13/95	MALLARD	ANPL1	BZ	BW01R		15	I	1		2	110		1				1
TOTAL FALL OBSERVATIONS													*270*				
GADWALLS SPRING SEASON 1995																	
05/23/95	GADWALL	ANST1	BZ	RA04B		2	T	5		2	30		1	1			
03/17/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		16	8	8		
03/31/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		9	7	2		
04/03/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		3				3
04/20/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		5	3	2		
05/10/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		4	2	2		

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
05/10/95	GADWALL	ANST1	BZ	POND A-3	OU6	12	P	5		2	54		1				1
05/11/95	GADWALL	ANST1	BZ	POND B-4	OU6	10	P	5		2	54		2	1	1		
05/31/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		1	1			
TOTAL SPRING OBSERVATIONS													*41*				
GADWALLS SUMMER SEASON 1995																	
06/06/95	GADWALL	ANST1	BZ	POND A-3	OU6	12	P	5		2	54		1	1			
06/13/95	GADWALL	ANST1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
06/15/95	GADWALL	ANST1	BZ	POND D-2		2	U	5		2	54		1	1			
06/23/95	GADWALL	ANST1	BZ	POND B-4	OU6	10	P	5		2	54		2	1	1		
TOTAL SUMMER OBSERVATIONS													*6*				
GADWALLS FALL SEASON 1995																	
10/10/95	GADWALL	ANST1	BZ	POND A-1	OU6	12	N	5		2	54		1				1
10/11/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		1	1			
10/18/95	GADWALL	ANST1	BZ	POND A-1	OU6	12	N	5		2	54		9	2	7		
10/27/95	GADWALL	ANST1	BZ	POND D-2		2	T	5		2	54		1	1			
11/28/95	GADWALL	ANST1	BZ	POND A-2	OU6	12	O	5		2	54		2	1	1		
TOTAL FALL OBSERVATIONS													*14*				
GREAT BLUE HERONS SPRING SEASON 1995																	
05/31/95	GREAT BLUE HERON	ARHE1	BZ	BWO1B		13	S	1		2	41		1				1
04/20/95	GREAT BLUE HERON	ARHE1	BZ	POND D-2		2	T	5		2	54		4				4
04/20/95	GREAT BLUE HERON	ARHE1	BZ	POND D-1		4	R	5		2	54		1				1
04/26/95	GREAT BLUE HERON	ARHE1	BZ	POND D-2		2	T	5		2	54		1				1
04/28/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
04/28/95	GREAT BLUE HERON	ARHE1	BZ	LINDSAY		13	H	5		2	54		1				1
05/10/95	GREAT BLUE HERON	ARHE1	BZ	POND D-2		2	T	5		2	54		1				1
05/10/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
05/11/95	GREAT BLUE HERON	ARHE1	BZ	POND B-1	OU6	10	N	5		2	54		1				1
05/11/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	5		2	54		2				2
05/15/95	GREAT BLUE HERON	ARHE1	BZ			13	H	5		2	54		1				1
05/18/95	GREAT BLUE HERON	ARHE1	BZ	LINDSAY2		11	E	5		2	54		1				1
05/31/95	GREAT BLUE HERON	ARHE1	BZ	POND D-2		2	T	5		2	54		1				1
05/16/95	GREAT BLUE HERON	ARHE1	BZ	POND A-4	OU6	12	Q	5		2	93		1				1
05/16/95	GREAT BLUE HERON	ARHE1	BZ	POND B-5	OU6	11	Q	5		2	93		1				1
05/23/95	GREAT BLUE HERON	ARHE1	BZ	POND D-1		3	R	5		2	93		1				1
05/31/95	GREAT BLUE HERON	ARHE1	BZ	POND C-1	OU5	7	P	5		2	93		1				1
03/28/95	GREAT BLUE HERON	ARHE1	BZ	RA02B	OU6	11	N	1		2	110		1				1
05/16/95	GREAT BLUE HERON	ARHE1	BZ	BW01R		17	L	1		2	110		1				1
05/25/95	GREAT BLUE HERON	ARHE1	BZ	RW01B		15	P	1		2	110		1				1
05/24/95	GREAT BLUE HERON	ARHE1	BZ	RG03B		4	P	1		2	322		1				1
05/15/95	GREAT BLUE HERON	ARHE1	BZ	BD02B		2	U	1		2	324		2				2
TOTAL SPRING OBSERVATIONS													*27*				

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
GREAT BLUE HERONS SUMMER SEASON 1995																	
07/06/95	GREAT BLUE HERON	ARHE1	BZ	BA01R		13	H	5		2	20		1				1
06/05/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
06/06/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
06/13/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	P	5		2	54		1				1
06/19/95	GREAT BLUE HERON	ARHE1	BZ	POND D-2		2	T	5		2	54		1				1
06/21/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
06/21/95	GREAT BLUE HERON	ARHE1	BZ	POND B-2	OU6	10	O	5		2	54		1				1
06/23/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	P	0		2	54		1				1
06/23/95	GREAT BLUE HERON	ARHE1	BZ	LINDSAY		13	H	5		2	54		1				1
06/23/95	GREAT BLUE HERON	ARHE1	BZ	RW01B		13	U	5		2	54		1				1
06/29/95	GREAT BLUE HERON	ARHE1	BZ	POND A-4	OU6	13	Q	0		2	54		1				1
07/07/95	GREAT BLUE HERON	ARHE1	BZ	POND A-4	OU6	13	Q	5		2	54		1				1
07/07/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	P	5		2	54		1				1
07/07/95	GREAT BLUE HERON	ARHE1	BZ	POND B-5	OU6	11	Q	5		2	54		1				1
07/07/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
07/10/95	GREAT BLUE HERON	ARHE1	BZ	POND A-2	OU6	12	O	5		2	54		2				2
07/10/95	GREAT BLUE HERON	ARHE1	BZ	POND A-4	OU6	12	Q	5		2	54		1				1
07/26/95	GREAT BLUE HERON	ARHE1	BZ	POND C-2	OU5	7	P	1		2	54		1				1
07/26/95	GREAT BLUE HERON	ARHE1	BZ	POND C-1	OU5	7	N	5		2	54		2				2
07/27/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	O	5		2	54		1				1
08/01/95	GREAT BLUE HERON	ARHE1	BZ	POND B-5	OU6	11	Q	5		2	54		1			1	
08/01/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	P	5		4	54		1				1
08/01/95	GREAT BLUE HERON	ARHE1	BZ	POND B-5	OU6	12	Q	5		4	54		1				1
08/01/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	O	5		4	54		1				1
08/16/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	P	5		2	54		1				1
08/28/95	GREAT BLUE HERON	ARHE1	BZ	POND A-4	OU6	12	Q	5		2	54		1				1
08/28/95	GREAT BLUE HERON	ARHE1	BZ	RA01B		11	E	5		2	54		1				1
06/15/95	GREAT BLUE HERON	ARHE1	BZ	POND D-2		2	T	5		2	93		1				1
06/21/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	O	5		2	93		1				1
08/01/95	GREAT BLUE HERON	ARHE1	BZ	POND B-1	OU6	10	N	5		2	93		1				1
06/07/95	GREAT BLUE HERON	ARHE1	BZ	BW01B		13	T	1		2	110		1				1
06/21/95	GREAT BLUE HERON	ARHE1	BZ			12	R	1		2	110		1				1
06/13/95	GREAT BLUE HERON	ARHE1	BZ	LINDSAY2		11	E	1		2	322	54	1				1
06/21/95	GREAT BLUE HERON	ARHE1	BZ		OU2	8	P	5		2	322		1				1
08/01/95	GREAT BLUE HERON	ARHE1	BZ	POND A-4	OU6	12	Q	0		4	322		1				1
06/06/95	GREAT BLUE HERON	ARHE1	BZ	BG01B		5	G	1		2	323		1				1
06/14/95	GREAT BLUE HERON	ARHE1	BZ	BX02R		15	K	1		2	323		1				1
06/05/95	GREAT BLUE HERON	ARHE1	BZ			2	U	1		2	324		1				1
08/01/95	GREAT BLUE HERON	ARHE1	BZ	POND A-3	OU6	12	O	0		2	510	322	1				1
TOTAL SUMMER OBSERVATIONS													*41*				

146

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
GREAT BLUE HERONS FALL SEASON 1995																	
09/18/95	GREAT BLUE HERON	ARHE1	BZ	POND C-1	OU5	7	N	5		2	54		1				1
09/28/95	GREAT BLUE HERON	ARHE1	BZ	POND A-4	OU6	12	P	5		2	54		1				1
10/10/95	GREAT BLUE HERON	ARHE1	BZ	POND A-2	OU6	12	O	5		2	54		1				1
TOTAL FALL OBSERVATIONS													*3*				
LESSER SCAUP OBSERVATIONS 1995																	
02/22/95	LESSER SCAUP	AYAF1	BZ	POND D-2		2	T	5		2	54		10				10
03/28/95	LESSER SCAUP	AYAF1	BZ	POND A-4	OU6	13	Q	5		2	54		5				5
03/28/95	LESSER SCAUP	AYAF1	BZ	POND C-2	OU5	7	P	5		2	54		4				4
04/27/95	LESSER SCAUP	AYAF1	BZ	POND A-2	OU6	12	O	5		2	54		2	2			
04/28/95	LESSER SCAUP	AYAF1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
04/28/95	LESSER SCAUP	AYAF1	BZ	POND A-2	OU6	12	O	5		2	54		4	3	1		
05/11/95	LESSER SCAUP	AYAF1	BZ	POND B-5	OU6	11	Q	5		2	54		2	2			
TOTAL 1995 OBSERVATIONS													*29*				
REDHEAD OBSERVATIONS 1995																	
12/14/95	REDHEAD	AYAM1	BZ	POND A-2	OU6	12	O	5		2	54		1		1		
02/22/95	REDHEAD	AYAM1	BZ	POND D-2		2	T	5		2	54		4	2	2		
03/17/95	REDHEAD	AYAM1	BZ	POND A-4	OU6	12	Q	5		2	54		23	20	3		
03/17/95	REDHEAD	AYAM1	BZ	POND A-3	OU6	12	P	5		2	54		2	2			
03/20/95	REDHEAD	AYAM1	BZ	POND A-2	OU6	12	O	5		2	54		1	1			
TOTAL 1995 OBSERVATIONS													*31*				
RING-NECKED DUCK SPRING SEASON 1995																	
02/22/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		7	6	1		
03/17/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		20	15	5		
03/28/95	RING-NECKED DUCK	AYCO1	BZ	POND A-4	OU6	13	Q	5		2	54		5	3	2		
03/31/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		21	12	9		
04/03/95	RING-NECKED DUCK	AYCO1	BZ	POND A-4	OU6	12	Q	5		2	54		3	2			
04/03/95	RING-NECKED DUCK	AYCO1	BZ	POND C-2	OU5	7	P	5		2	54		9				9
04/03/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		33	17	16		
04/20/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		22	13	9		
04/25/95	RING-NECKED DUCK	AYCO1	BZ	POND A-2	OU6	12	O	5		2	54		5	3	2		
04/25/95	RING-NECKED DUCK	AYCO1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
04/26/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		12				12
04/27/95	RING-NECKED DUCK	AYCO1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
05/10/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		2	2			
05/31/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		2	2			
TOTAL SPRING OBSERVATIONS													*145*				
RING-NECKED DUCK FALL SEASON 1995																	
10/27/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		15				15

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
11/27/95	RING-NECKED DUCK	AYCO1	BZ	POND D-2		2	T	5		2	54		3	1	2		
TOTAL FALL OBSERVATIONS													*18*				
GREATER SCAUP OBSERVATIONS 1995																	
03/31/95	GREATER SCAUP	AYMA1	BZ	POND D-2		2	T	5		2	54		1				1
TOTAL 1995 OBSERVATIONS													*1*				
CANADA GEESE WINTER SEASON 1995																	
12/21/95	CANADA GOOSE	BRCA1	BZ	POND D-2		2	T	1		2	54		5				1
12/21/95	CANADA GOOSE	BRCA1	BZ	POND D-2		2	T	1		2	54		18				18
01/19/95	CANADA GOOSE	BRCA1	BZ	RW0IA		7	K	1		2	210		8				8
01/03/95	CANADA GOOSE	BRCA1	EA					1		2	322		30				30
01/20/95	CANADA GOOSE	BRCA1	EA					1		2	322		75				75
02/22/95	CANADA GOOSE	BRCA1	BZ	BX01B		11	R	1		2	322		6				6
12/20/95	CANADA GOOSE	BRCA1	BZ	BD03B		4	Q	1		2	324		2				2
TOTAL WINTER OBSERVATIONS													*144*				
CANADA GEESE SPRING SEASON 1995																	
04/07/95	CANADA GOOSE	BRCA1	BZ	BA01A		7	J	1		2	30		2				2
03/17/95	CANADA GOOSE	BRCA1	BZ	POND B-3	OU6	10	O	5		2	54		2				2
03/17/95	CANADA GOOSE	BRCA1	BZ	POND A-4	OU6	12	Q	5		2	54		2				2
03/17/95	CANADA GOOSE	BRCA1	BZ	POND B-2	OU6	10	O	5		2	54		2				2
03/17/95	CANADA GOOSE	BRCA1	BZ	POND D-2		2	T	5		2	54		2				2
04/03/95	CANADA GOOSE	BRCA1	BZ	POND A-4	OU6	12	Q	5		2	54		5				5
04/20/95	CANADA GOOSE	BRCA1	BZ	POND D-2		2	T	5		2	54		2				2
04/25/95	CANADA GOOSE	BRCA1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
04/25/95	CANADA GOOSE	BRCA1	BZ	POND C-1	OU5	7	N	0		2	54		2				2
04/28/95	CANADA GOOSE	BRCA1	BZ	POND C-2	OU5	7	P	5		2	54		2	1	1		
05/09/95	CANADA GOOSE	BRCA1	BZ	POND C-2	OU5	7	P	0		2	54		2	1	1		
05/10/95	CANADA GOOSE	BRCA1	BZ	POND C-2	OU5	7	P	5		2	54		2	1	1		
05/11/95	CANADA GOOSE	BRCA1	BZ	POND C-2	OU5	7	P	5	0	2	54		4				4
05/12/95	CANADA GOOSE	BRCA1	BZ	L.POND		13	H	5		2	54		2	1	1		
05/12/95	CANADA GOOSE	BRCA1	BZ	POND C-2	OU5	7	P	0		2	54		2	1	1		
05/16/95	CANADA GOOSE	BRCA1	BZ	POND A-3	OU6	12	P	1	0	2	54		2				2
05/17/95	CANADA GOOSE	BRCA1	BZ	POND C-2	OU5	7	P	5	0	2	54		6				6
05/18/95	CANADA GOOSE	BRCA1	BZ	LINDSAY		13	H	1		2	54		2	1	1		
05/31/95	CANADA GOOSE	BRCA1	BZ	POND D-2		2	T	5		2	54		3				3
04/03/95	CANADA GOOSE	BRCA1	BZ	CTY PIT		7	C	0		2	57		2				2
03/17/95	CANADA GOOSE	BRCA1	BZ	POND C-2	OU5	7	P	0		2	93		2				2
03/28/95	CANADA GOOSE	BRCA1	BZ	POND A-4	OU6	13	Q	5		2	93		2	1	1		
03/28/95	CANADA GOOSE	BRCA1	BZ	POND B-5	OU6	12	Q	0		2	93		2	1	1		
05/16/95	CANADA GOOSE	BRCA1	BZ	POND B-2	OU6	10	O	0		2	93		1			1	
05/25/95	CANADA GOOSE	BRCA1	BZ	RW01B		15	P	1		2	110		2				2

147

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
04/20/95	CANADA GOOSE	BRCA1	BZ	BS03B		5	T	1		2	211		8				8
03/14/95	CANADA GOOSE	BRCA1	BZ		OU5	7	F	1		2	322		2				2
04/25/95	CANADA GOOSE	BRCA1	BZ	BG01R		15	O	1		2	322		1				1
04/27/95	CANADA GOOSE	BRCA1	BZ	RA02B	OU6	12	P	0		2	322		2				2
04/28/95	CANADA GOOSE	BRCA1	BZ	POND A-3	OU6	12	P	0		2	322		2	1	1		
05/11/95	CANADA GOOSE	BRCA1	BZ	POND B-4	OU6	10	P	5		2	322		4	2	2		
04/28/95	CANADA GOOSE	BRCA1	BZ	BG02B		8	D	1		2	323		2				2
04/25/95	CANADA GOOSE	BRCA1	BZ	BR02A		7	J	1		2	324		2				2
03/31/95	CANADA GOOSE	BRCA1	BZ	RD02B		9	C	0		2	420		2	1	1		
03/17/95	CANADA GOOSE	BRCA1	BZ			8	L	1		2	520	322	5				5
03/28/95	CANADA GOOSE	BRCA1	BZ	POND B-2	OU6	10	O	0		2	540		2	1	1		
TOTAL SPRING OBSERVATIONS													*91*				
CANADA GEESE FALL SEASON 1995																	
11/15/95	CANADA GOOSE	BRCA1	BZ	RG01A	OU1	8	M	1		2	324		89				89
11/02/95	CANADA GOOSE	BRCA1	BZ			9	J	1		2	520		4				4
TOTAL FALL OBSERVATIONS													*93*				
BUFFLEHEADS SPRING SEASON 1995																	
03/17/95	BUFFLEHEAD	BUAL1	BZ	POND A-4	OU6	12	Q	5		2	54		6	3	3		
03/17/95	BUFFLEHEAD	BUAL1	BZ	POND A-3	OU6	12	P	5		2	54		3	2	1		
03/17/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		8	4	4		
03/20/95	BUFFLEHEAD	BUAL1	BZ	POND A-3	OU6	12	P	5		2	54		4	2	2		
03/28/95	BUFFLEHEAD	BUAL1	BZ	POND A-4	OU6	13	Q	5		2	54		13	5	8		
03/28/95	BUFFLEHEAD	BUAL1	BZ	POND B-5	OU6	12	Q	5		2	54		1	1			
03/28/95	BUFFLEHEAD	BUAL1	BZ	POND C-2	OU5	7	P	5		2	54		2	1	1		
03/31/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		8	4	4		
04/03/95	BUFFLEHEAD	BUAL1	BZ	POND A-4	OU6	12	Q	5		2	54		10	7	3		
04/03/95	BUFFLEHEAD	BUAL1	BZ	POND C-2	OU5	7	P	5		2	54		1	1	1		
04/03/95	BUFFLEHEAD	BUAL1	BZ	POND B-5	OU6	12	Q	5		2	54		2	1	1		
04/03/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		9	6	3		
04/20/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		18	9	9		
04/25/95	BUFFLEHEAD	BUAL1	BZ	POND A-3	OU6	12	P	5		2	54		2	1	1		
04/27/95	BUFFLEHEAD	BUAL1	BZ	POND A-4	OU6	12	Q	5		2	54		4	2	2		
04/28/95	BUFFLEHEAD	BUAL1	BZ	POND B-5	OU6	11	P	5		2	54		1		1		
04/28/95	BUFFLEHEAD	BUAL1	BZ	POND C-2	OU5	7	P	5		2	54		2	1	1		
05/10/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		4	2	2		
05/11/95	BUFFLEHEAD	BUAL1	BZ	POND B-5	OU6	11	Q	5		2	54		1		1		
05/23/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		6				6
TOTAL SPRING OBSERVATIONS													*105*				
BUFFLEHEADS FALL SEASON 1995																	
10/18/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		3	2	1		
10/18/95	BUFFLEHEAD	BUAL1	BZ	POND D-1		3	R	5		2	54		1	1			

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
10/27/95	BUFFLEHEAD	BUAL1	BZ	POND D-2		2	T	5		2	54		1	1			
10/27/95	BUFFLEHEAD	BUAL1	BZ	POND A-2	OU6	12	O	5		2	54		2		2		
10/27/95	BUFFLEHEAD	BUAL1	BZ	POND A-3	OU6	12	P	5		2	54		4		4		
10/27/95	BUFFLEHEAD	BUAL1	BZ	POND A-4	OU6	12	Q	5		2	54		6		6		
11/27/95	BUFFLEHEAD	BUAL1	BZ	POND D-1		3	R	5		2	54		7	5	2		
11/28/95	BUFFLEHEAD	BUAL1	BZ	POND A-3	OU6	12	P	5		2	54		4		4		
11/28/95	BUFFLEHEAD	BUAL1	BZ	POND A-2	OU6	12	O	5		2	54		1		1		
11/28/95	BUFFLEHEAD	BUAL1	BZ	POND B-2	OU6	10	O	5		2	54		1		1		
11/28/95	BUFFLEHEAD	BUAL1	BZ	POND C-2	OU5	7	P	5		2	54		2	2			
11/28/95	BUFFLEHEAD	BUAL1	BZ	POND A-4	OU6	12	Q	5		2	54		6	1	5		
11/28/95	BUFFLEHEAD	BUAL1	BZ	POND B-3	OU6	10	O	5		2	54		1		1		
TOTAL FALL OBSERVATIONS													*39*				
COMMON GOLDENEYES SPRING SEASON 1995																	
02/22/95	COMMON GOLDENEYE	BUCL1	BZ	POND D-2		2	T	5		2	54		13	9	4		
03/17/95	COMMON GOLDENEYE	BUCL1	BZ	POND A-4	OU6	12	Q	5		2	54		4		4		
03/17/95	COMMON GOLDENEYE	BUCL1	BZ	POND C-2	OU5	7	P	5		2	54		10	6	4		
03/17/95	COMMON GOLDENEYE	BUCL1	BZ	POND D-2		2	T	5		2	54		13	8	5		
04/03/95	COMMON GOLDENEYE	BUCL1	BZ	POND A-4	OU6	12	Q	5		2	54		2				2
04/03/95	COMMON GOLDENEYE	BUCL1	BZ	POND B-5	OU6	12	Q	5		2	54		3	2	1		
04/03/95	COMMON GOLDENEYE	BUCL1	BZ	POND D-2		2	T	5		2	54		6	2	4		
04/26/95	COMMON GOLDENEYE	BUCL1	BZ	POND D-2		2	T	5		2	54		2				2
TOTAL SPRING ONSERVATIONS													*53*				
COMMON GOLDENEYES FALL SEASON 1995																	
11/28/95	COMMON GOLDENEYE	BUCL1	BZ	POND C-2	OU5	7	P	5		2	54		3	1	2		
11/28/95	COMMON GOLDENEYE	BUCL1	BZ	POND A-2	OU6	12	O	5		2	54		3	2	1		
11/28/95	COMMON GOLDENEYE	BUCL1	BZ	POND B-5	OU6	12	Q	5		2	54		2		2		
TOTAL FALL OBSERVATIONS													*8*				
SNOW GOOSE OBSERVATIONS 1995																	
01/03/95	SNOW GOOSE	CHCA1	BZ			3	D	1		2	322		14				14
TOTAL 1995 OBSERVATIONS													*14*				
AMERICAN COOTS SPRING SEASON 1995																	
04/20/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		1				1
04/26/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		5				5
04/28/95	AMERICAN COOT	FUAM1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
05/10/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		6				6
05/23/95	AMERICAN COOT	FUAM1	BZ	POND D-1		3	R	5		2	54		1				1
05/23/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		11				11
05/31/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	8		2	54		1		1		
05/31/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		10				10

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
05/31/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	8		2	54		1		1		
TOTAL SPRING OBSERVATIONS													*37*				
AMERICAN COOTS SUMMER SEASON 1995																	
06/05/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5	8	2	54		10		2		8
06/15/95	AMERICAN COOT	FUAM1	BZ	POND D-1		3	R	5		2	54		2				2
06/15/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	U	5	8	2	54		7		1		6
06/19/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		6				6
06/21/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		4				4
06/21/95	AMERICAN COOT	FUAM1	BZ	POND D-1		4	R	5		2	54		1				1
07/07/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		6			2	4
08/15/95	AMERICAN COOT	FUAM1	BZ	POND D-1		3	R	5		2	54		1				1
08/15/95	AMERICAN COOT	FUAM1	BZ	POND D-1		4	R	5	0	2	54		2				2
08/15/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		9			5	4
TOTAL SUMMER OBSERVATIONS													*48*				
AMERICAN COOTS FALL SEASON 1995																	
09/28/95	AMERICAN COOT	FUAM1	BZ	POND D-1		3	R	5		2	54		3				3
09/28/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		19				19
10/11/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		27				27
10/18/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		29				29
10/27/95	AMERICAN COOT	FUAM1	BZ	POND D-1		4	R	5		2	54		1				1
10/27/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		19				19
11/27/95	AMERICAN COOT	FUAM1	BZ	POND D-2		2	T	5		2	54		6				6
TOTAL FALL OBSERVATIONS													*104*				
SANDHILL CRANE OBSERVATIONS 1995																	
10/13/95	SANDHILL CRANE	GRCA1	BZ	RS01B		14	G	1		2	230		11				11
TOTAL 1995 OBSERVATIONS													*11*				
COMMON MERGANSER OBSERVATIONS 1995																	
04/03/95	COMMON MERGANSER	MEME1	BZ	POND D-2		2	T	5		2	54		4	1	3		
04/26/95	COMMON MERGANSER	MEME1	BZ	POND D-2		2	T	5		2	54		5				5
04/28/95	COMMON MERGANSER	MEME1	BZ	POND C-2	OU5	7	P	5		2	54		3				3
05/10/95	COMMON MERGANSER	MEME1	BZ	POND D-2		2	T	5		2	54		3	2	1		
06/05/95	COMMON MERGANSER	MEME1	BZ	BW01A		7	N	5		2	54		1				1
06/12/95	COMMON MERGANSER	MEME1	BZ	POND C-1	OU6	7	N	5		2	54		1		1		
TOTAL 1995 OBSERVATIONS													*17*				
BLACK-CROWNED NIGHT HERON OBSERVATIONS 1995																	
05/23/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	POND D-1		4	S	0		2	110	54	2	1	1		
05/24/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	POND D-1		4	S	0		2	110		2	1	1		
05/31/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	POND D-1		4	S	10		2	110	54	1				1
06/01/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	IND.POND	OU6	13	U	5		2	54		1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/05/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
06/05/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	POND D-1		3	R	5		2	54		1				1
06/07/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	BW01B		13	T	1		2	110		2				2
06/14/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	BW01B		13	T	1		2	110		1				1
08/01/95	BLACK-CROWNED NIGHT HERON	NYNY1	BZ	POND A-4	OU6	12	Q	5		4	54		2				2
TOTAL 1995 OBSERVATIONS													*13*				
AMERICAN WHITE PELICAN OBSERVATIONS 1995																	
05/23/95	AMERICAN WHITE PELICAN	PEER1	BZ	POND D-1		3	S	18		2	54		1	1			
06/05/95	AMERICAN WHITE PELICAN	PEER1	BZ	POND D-1		3	R	1		2	54		1				1
06/12/95	AMERICAN WHITE PELICAN	PEER1	BZ	BD03B		4	R	1		2	324		26				26
06/23/95	AMERICAN WHITE PELICAN	PEER1	BZ	RG02B		16	P	1		2	322		18				18
06/29/95	AMERICAN WHITE PELICAN	PEER1	BZ	POND A-4	OU6	13	Q	0		2	54		6				6
07/07/95	AMERICAN WHITE PELICAN	PEER1	BZ	POND A-4	OU6	13	Q	0		2	54		3				3
TOTAL 1995 OBSERVATIONS													*55*				
DOUBLE-CRESTED CORMORANTS SPRING SEASON 1995																	
04/20/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND D-1		4	R	5		2	54		1				1
05/10/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND D-2		2	T	5		2	54		3				3
05/31/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND D-2		2	T	5		2	54		1				1
05/31/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	RW01A		7	P	5		2	54		1				1
05/16/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND B-5	OU6	11	Q	0		2	93		1				1
05/16/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	BW01A		7	L	1		2	110		2				2
05/11/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND B-4	OU6	12	P	1		2	212	54	1				1
TOTAL SPRING OBSERVATIONS													*10*				
DOUBLE-CRESTED CORMORANTS SUMMER SEASON 1995																	
06/06/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-3	OU6	12	P	0	5	2	54		3				3
06/13/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-3	OU6	12	P	0		2	54		3				3
06/21/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND C-2	OU5	7	P	5		2	54		2				2
06/21/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-4	OU6	12	Q	5		2	54		1				1
06/23/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-4	OU6	13	Q	5	0	2	54		3				3
06/29/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-4	OU6	13	Q	0		2	54		1				1
06/29/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND B-5	OU6	12	Q	5		2	54		2				2
07/07/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-3	OU6	12	P	5		2	54		1				1
07/07/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND C-2	OU5	7	P	5		2	54		5				5
07/07/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND D-2		2	T	5		2	54		2				2
07/10/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-3	OU6	11	P	5		2	54		1				1
07/10/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-4	OU6	12	Q	5		2	54		1				1
07/26/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND C-2	OU5	7	P	5		2	54		2				2
07/27/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-3	OU6	12	P	5		2	54		1				1
08/01/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-3	OU6	12	O	0		2	54		3				3
08/01/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-3	OU6	12	P	5		2	54		1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
08/01/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND B-5	OU6	12	Q	5	0	2	54		3				3
08/15/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND D-1		4	R	1		2	54		1				1
08/15/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND D-2		2	T	5		2	54		1				1
08/15/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND D-1		3	R	5		2	54		1				1
08/28/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-4	OU6	12	Q	5		2	54		7				7
06/12/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND B-5	OU6	11	Q	0		2	93		1				1
06/21/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-4	OU6	12	Q	0		2	93		3				3
06/12/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	BW01A		7	M	1		2	110		2				2
06/21/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ			12	R	1		2	110		1				1
07/26/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	RW01A		7	P	1		2	210		2				2
06/28/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	BS02B		15	J	1		2	230		1				1
06/19/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	BD03B		3	Q	1		2	324		3				3
TOTAL SUMMER OBSERVATIONS													*58*				
DOUBLE-CRESTED CORMORANTS FALL SEASON 1995																	
09/01/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	POND A-4	OU6	12	Q	5		2	54		3				3
09/13/95	DOUBLE-CRESTED CORMORANT	PHAU1	BZ	BD03B		5	Q	1		2	324		1				1
TOTAL FALL OBSERVATIONS													*4*				
EARED GREBE OBSERVATIONS 1995																	
04/26/95	EARED GREBE	PONI1	BZ	POND D-1		4	R	5		2	54		1				1
10/18/95	EARED GREBE	PONI1	BZ	POND D-2		2	T	5		2	54		1				1
TOTAL 1995 OBSERVATIONS													*2*				
PIED-BILLED GREBES SPRING SEASON 1995																	
04/03/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		1				1
04/20/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		1				1
04/26/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		2				2
04/28/95	PIED-BILLED GREBE	POPO1	BZ	LFILL PD	OU7	13	L	5		2	54		1				1
04/28/95	PIED-BILLED GREBE	POPO1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
05/09/95	PIED-BILLED GREBE	POPO1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
05/10/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		1				1
05/10/95	PIED-BILLED GREBE	POPO1	BZ	POND D-1		3	R	5		2	54		2				2
05/10/95	PIED-BILLED GREBE	POPO1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
05/10/95	PIED-BILLED GREBE	POPO1	BZ	POND A-2	OU6	12	O	5		2	54		2				2
05/16/95	PIED-BILLED GREBE	POPO1	BZ	POND A-2	OU6	12	O	5		2	54		1				1
05/31/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		6				6
05/31/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	8		2	54		1		1		
TOTAL SPRING OBSERVATIONS													*21*				
PIED-BILLED GREBES SUMMER SEASON 1995																	
06/05/95	PIED-BILLED GREBE	POPO1	BZ	POND C-2	OU5	7	P	5		2	54		2				2
06/05/95	PIED-BILLED GREBE	POPO1	BZ	LANDFILL	OU7	13	L	5		2	54		1				1
06/05/95	PIED-BILLED GREBE	POPO1	BZ	POND D-1		3	R	5		2	54		1				1

SIGNIFICANT SPECIES DATABASE RECORDS SUMMARY FOR 1995

DATE	SPECIES	SPEC CODE	ADMN AREA	SITE NAME	OP_ UNIT	GRID N	GRID E	ACTI VTY1	ACTI VTY2	DAY_ NGHT	HAB TYPE	HAB TYPE2	GRUP SIZE	MALE	FMALE	YOUNG	UNCLA SSFD
06/05/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5	8	2	54		5		1		4
06/06/95	PIED-BILLED GREBE	POPO1	BZ	POND C-2	OU5	7	P	5		2	54		2				2
06/15/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	U	5	8	2	54		4		1		3
06/19/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		2				2
06/21/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		2				2
06/21/95	PIED-BILLED GREBE	POPO1	BZ	POND D-1		4	R	5		2	54		1				1
07/07/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		2				2
08/15/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		30			20	10
08/15/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		8				8
TOTAL SUMMER OBSERVATIONS													*60*				
PIED-BILLED GREBES FALL SEASON 1995																	
09/28/95	PIED-BILLED GREBE	POPO1	BZ	POND D-1		3	R	5		2	54		4				4
09/28/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		5				5
10/11/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		3			3	
10/18/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		1				1
10/18/95	PIED-BILLED GREBE	POPO1	BZ	POND D-1		3	R	5		2	54		3				3
10/18/95	PIED-BILLED GREBE	POPO1	BZ	POND C-2	OU5	7	P	5		2	54		1				1
10/27/95	PIED-BILLED GREBE	POPO1	BZ	POND D-1		4	R	5		2	54		1				1
11/27/95	PIED-BILLED GREBE	POPO1	BZ	POND D-2		2	T	5		2	54		4	2	2		
TOTAL FALL OBSERVATIONS													*22*				

APPENDIX B

LOGGERHEAD SHRIKE USE AREAS, BASED ON COMBINED MONITORING DATA

To determine area use year-round by loggerhead shrikes, data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After observation locations for loggerhead shrikes were evaluated, use areas were mapped.

Use levels for loggerhead shrikes year-round were assigned as follows:

- Average 1-2
- Heavy ≥ 3

LOGGERHEAD SHRIKE USE AREAS BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1994

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	LOGGERHEAD SHRIKE	4	P	1
SP	LOGGERHEAD SHRIKE	6	I	1
SU	LOGGERHEAD SHRIKE	7	F	1
FA	LOGGERHEAD SHRIKE	7	H	1
SP	LOGGERHEAD SHRIKE	7	I	1
FA	LOGGERHEAD SHRIKE	7	L	1
WI	LOGGERHEAD SHRIKE	7	L	1
FA	LOGGERHEAD SHRIKE	7	M	1
SU	LOGGERHEAD SHRIKE	8	F	1
FA	LOGGERHEAD SHRIKE	11	E	1
SU	LOGGERHEAD SHRIKE	11	E	1
SU	LOGGERHEAD SHRIKE	11	E	1
SU	LOGGERHEAD SHRIKE	11	E	1
SU	LOGGERHEAD SHRIKE	14	G	1
SU	LOGGERHEAD SHRIKE	14	G	1
SU	LOGGERHEAD SHRIKE	14	I	2
FA	LOGGERHEAD SHRIKE	15	G	1
IA	LOGGERHEAD SHRIKE	17	K	1
SU	LOGGERHEAD SHRIKE	17	K	1

MULE DEER SPRING USE AREAS, BASED ON COMBINED MONITORING DATA

To determine mule deer area use frequency during Spring (March through May), data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned.

Use levels for mule deer during the Summer season were assigned as follows:

- Average 1-10
- Elevated 11-25
- Heavy $\geq$ 26

MULE DEER SPRING USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MULE DEER	2	K	19
SP	MULE DEER	2	K	20
SP	MULE DEER	3	N	14
SP	MULE DEER	4	G	22
SP	MULE DEER	4	H	34
SP	MULE DEER	4	I	16
SP	MULE DEER	4	I	30
SP	MULE DEER	4	J	9
SP	MULE DEER	4	J	27
SP	MULE DEER	4	K	1
SP	MULE DEER	4	K	22
SP	MULE DEER	4	K	11
SP	MULE DEER	4	L	1
SP	MULE DEER	4	L	7
SP	MULE DEER	4	L	30
SP	MULE DEER	4	L	12
SP	MULE DEER	4	L	7
SP	MULE DEER	4	N	35
SP	MULE DEER	4	P	1
SP	MULE DEER	4	P	7
SP	MULE DEER	5	H	30
SP	MULE DEER	5	I	1
SP	MULE DEER	5	J	16
SP	MULE DEER	5	J	10
SP	MULE DEER	5	K	5
SP	MULE DEER	5	M	4
SP	MULE DEER	5	O	1
SP	MULE DEER	5	Q	5
SP	MULE DEER	5	Q	8
SP	MULE DEER	5	Q	30
SP	MULE DEER	5	T	3
SP	MULE DEER	6	F	16
SP	MULE DEER	6	F	25
SP	MULE DEER	6	H	11
SP	MULE DEER	6	I	13
SP	MULE DEER	6	I	8
SP	MULE DEER	6	J	6
SP	MULE DEER	6	J	17
SP	MULE DEER	6	K	7
SP	MULE DEER	6	L	6
SP	MULE DEER	6	Q	54
SP	MULE DEER	7	F	7
SP	MULE DEER	7	G	2
SP	MULE DEER	7	G	9
SP	MULE DEER	7	G	11
SP	MULE DEER	7	G	18
SP	MULE DEER	7	H	20

MULE DEER SPRING USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MULE DEER	7	I	10
SP	MULE DEER	7	I	14
SP	MULE DEER	7	J	6
SP	MULE DEER	7	K	24
SP	MULE DEER	7	K	15
SP	MULE DEER	7	L	2
SP	MULE DEER	7	M	29
SP	MULE DEER	7	N	2
SP	MULE DEER	7	N	2
SP	MULE DEER	7	N	12
SP	MULE DEER	7	N	1
SP	MULE DEER	7	N	4
SP	MULE DEER	7	O	29
SP	MULE DEER	7	O	11
SP	MULE DEER	7	P	18
SP	MULE DEER	7	P	46
SP	MULE DEER	7	Q	18
SP	MULE DEER	7	Q	27
SP	MULE DEER	8	D	17
SP	MULE DEER	8	L	2
SP	MULE DEER	8	L	5
SP	MULE DEER	8	N	5
SP	MULE DEER	8	N	16
SP	MULE DEER	8	O	2
SP	MULE DEER	8	P	9
SP	MULE DEER	8	P	9
SP	MULE DEER	8	Q	21
SP	MULE DEER	8	S	1
SP	MULE DEER	9	C	15
SP	MULE DEER	9	E	9
SP	MULE DEER	9	E	10
SP	MULE DEER	9	F	16
SP	MULE DEER	10	H	4
SP	MULE DEER	10	N	6
SP	MULE DEER	10	R	14
SP	MULE DEER	11	E	7
SP	MULE DEER	11	E	13
SP	MULE DEER	11	E	15
SP	MULE DEER	11	E	5
SP	MULE DEER	11	F	5
SP	MULE DEER	11	F	16
SP	MULE DEER	11	F	4
SP	MULE DEER	11	P	5
SP	MULE DEER	11	Q	4
SP	MULE DEER	11	Q	4
SP	MULE DEER	11	R	30
SP	MULE DEER	12	E	1

159

MULE DEER SPRING USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MULE DEER	12	F	2
SP	MULE DEER	12	F	16
SP	MULE DEER	12	F	8
SP	MULE DEER	12	F	8
SP	MULE DEER	12	G	3
SP	MULE DEER	12	I	5
SP	MULE DEER	12	I	7
SP	MULE DEER	12	J	10
SP	MULE DEER	12	J	15
SP	MULE DEER	12	K	5
SP	MULE DEER	12	N	4
SP	MULE DEER	12	O	5
SP	MULE DEER	12	O	15
SP	MULE DEER	12	P	2
SP	MULE DEER	12	P	3
SP	MULE DEER	12	P	3
SP	MULE DEER	12	P	6
SP	MULE DEER	12	P	7
SP	MULE DEER	12	S	8
SP	MULE DEER	13	F	2
SP	MULE DEER	13	F	3
SP	MULE DEER	13	F	7
SP	MULE DEER	13	F	9
SP	MULE DEER	13	F	14
SP	MULE DEER	13	F	19
SP	MULE DEER	13	F	1
SP	MULE DEER	13	G	8
SP	MULE DEER	13	G	21
SP	MULE DEER	13	G	1
SP	MULE DEER	13	G	5
SP	MULE DEER	13	H	2
SP	MULE DEER	13	H	4
SP	MULE DEER	13	H	7
SP	MULE DEER	13	H	9
SP	MULE DEER	13	H	4
SP	MULE DEER	13	J	20
SP	MULE DEER	13	K	13
SP	MULE DEER	13	L	6
SP	MULE DEER	13	O	7
SP	MULE DEER	13	T	22
SP	MULE DEER	14	E	1
SP	MULE DEER	14	E	2
SP	MULE DEER	14	F	2
SP	MULE DEER	14	F	8
SP	MULE DEER	14	F	8
SP	MULE DEER	14	F	11
SP	MULE DEER	14	F	11

MULE DEER SPRING USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MULE DEER	14	F	19
SP	MULE DEER	14	F	3
SP	MULE DEER	14	G	2
SP	MULE DEER	14	G	12
SP	MULE DEER	14	G	11
SP	MULE DEER	14	G	19
SP	MULE DEER	14	G	3
SP	MULE DEER	14	H	3
SP	MULE DEER	14	H	6
SP	MULE DEER	14	H	1
SP	MULE DEER	14	H	10
SP	MULE DEER	14	I	2
SP	MULE DEER	14	J	2
SP	MULE DEER	14	J	7
SP	MULE DEER	14	M	20
SP	MULE DEER	14	N	4
SP	MULE DEER	14	N	16
SP	MULE DEER	14	P	4
SP	MULE DEER	14	P	14
SP	MULE DEER	14	P	13
SP	MULE DEER	14	R	8
SP	MULE DEER	14	T	13
SP	MULE DEER	15	F	5
SP	MULE DEER	15	G	1
SP	MULE DEER	15	I	8
SP	MULE DEER	15	J	1
SP	MULE DEER	15	J	6
SP	MULE DEER	15	J	23
SP	MULE DEER	15	J	1
SP	MULE DEER	15	K	4
SP	MULE DEER	15	K	5
SP	MULE DEER	15	K	12
SP	MULE DEER	15	K	12
SP	MULE DEER	15	K	13
SP	MULE DEER	15	K	4
SP	MULE DEER	15	L	15
SP	MULE DEER	15	M	2
SP	MULE DEER	15	N	3
SP	MULE DEER	15	N	16
SP	MULE DEER	15	N	24
SP	MULE DEER	15	O	2
SP	MULE DEER	15	P	6
SP	MULE DEER	15	P	10
SP	MULE DEER	15	Q	4
SP	MULE DEER	15	R	8
SP	MULE DEER	16	I	37
SP	MULE DEER	16	J	11

MULE DEER SPRING USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MULE DEER	16	K	1
SP	MULE DEER	16	K	6
SP	MULE DEER	16	K	8
SP	MULE DEER	16	L	1
SP	MULE DEER	16	M	16
SP	MULE DEER	16	M	4
SP	MULE DEER	16	O	3
SP	MULE DEER	16	O	6
SP	MULE DEER	17	J	6
SP	MULE DEER	17	K	18
SP	MULE DEER	17	K	17

MULE DEER SUMMER USE AREAS, BASED ON COMBINED MONITORING DATA

To determine mule deer area use frequency during Summer (June through August), data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned.

Use levels for mule deer during the Summer season were assigned as follows:

- Average 1-10
- Elevated 11-25
- Heavy $\geq$ 26

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	2	M	3
SU	MULE DEER	2	M	1
SU	MULE DEER	2	M	2
SU	MULE DEER	2	M	4
SU	MULE DEER	2	N	1
SU	MULE DEER	2	O	2
SU	MULE DEER	2	P	1
SU	MULE DEER	2	R	8
SU	MULE DEER	2	R	1
SU	MULE DEER	2	U	3
SU	MULE DEER	3	G	1
SU	MULE DEER	3	N	1
SU	MULE DEER	3	N	1
SU	MULE DEER	3	N	1
SU	MULE DEER	3	O	1
SU	MULE DEER	3	S	3
SU	MULE DEER	3	T	1
SU	MULE DEER	4	G	1
SU	MULE DEER	4	G	6
SU	MULE DEER	4	H	1
SU	MULE DEER	4	I	14
SU	MULE DEER	4	J	1
SU	MULE DEER	4	J	2
SU	MULE DEER	4	K	7
SU	MULE DEER	4	L	1
SU	MULE DEER	4	L	1
SU	MULE DEER	4	L	1
SU	MULE DEER	4	L	10
SU	MULE DEER	4	L	2
SU	MULE DEER	4	L	3
SU	MULE DEER	4	L	4
SU	MULE DEER	4	L	1
SU	MULE DEER	4	M	1
SU	MULE DEER	4	M	1
SU	MULE DEER	4	M	1
SU	MULE DEER	4	N	2
SU	MULE DEER	4	N	3
SU	MULE DEER	4	N	3
SU	MULE DEER	4	N	1
SU	MULE DEER	4	N	3
SU	MULE DEER	4	O	2
SU	MULE DEER	4	O	2
SU	MULE DEER	4	P	3
SU	MULE DEER	4	P	5
SU	MULE DEER	4	Q	4
SU	MULE DEER	4	R	2
SU	MULE DEER	4	R	3

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	4	U	1
SU	MULE DEER	5	F	4
SU	MULE DEER	5	G	6
SU	MULE DEER	5	H	1
SU	MULE DEER	5	H	1
SU	MULE DEER	5	I	3
SU	MULE DEER	5	I	5
SU	MULE DEER	5	I	6
SU	MULE DEER	5	I	6
SU	MULE DEER	5	I	1
SU	MULE DEER	5	I	1
SU	MULE DEER	5	I	1
SU	MULE DEER	5	I	2
SU	MULE DEER	5	I	2
SU	MULE DEER	5	I	3
SU	MULE DEER	5	I	3
SU	MULE DEER	5	I	3
SU	MULE DEER	5	I	4
SU	MULE DEER	5	I	8
SU	MULE DEER	5	I	3
SU	MULE DEER	5	J	1
SU	MULE DEER	5	J	2
SU	MULE DEER	5	K	2
SU	MULE DEER	5	K	1
SU	MULE DEER	5	K	1
SU	MULE DEER	5	K	1
SU	MULE DEER	5	O	1
SU	MULE DEER	5	O	1
SU	MULE DEER	5	O	1
SU	MULE DEER	5	O	2
SU	MULE DEER	5	O	6
SU	MULE DEER	5	P	1
SU	MULE DEER	5	P	1
SU	MULE DEER	5	P	1
SU	MULE DEER	5	P	1
SU	MULE DEER	5	P	1
SU	MULE DEER	5	P	2
SU	MULE DEER	5	P	2
SU	MULE DEER	5	P	2
SU	MULE DEER	5	Q	1
SU	MULE DEER	5	Q	2
SU	MULE DEER	5	Q	2
SU	MULE DEER	5	Q	4
SU	MULE DEER	5	Q	1
SU	MULE DEER	5	Q	1
SU	MULE DEER	5	Q	1
SU	MULE DEER	5	Q	1

165

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	5	Q	2
SU	MULE DEER	5	R	2
SU	MULE DEER	5	R	2
SU	MULE DEER	5	R	3
SU	MULE DEER	5	R	1
SU	MULE DEER	5	R	1
SU	MULE DEER	5	R	3
SU	MULE DEER	5	R	3
SU	MULE DEER	5	S	5
SU	MULE DEER	5	S	1
SU	MULE DEER	5	S	1
SU	MULE DEER	5	S	1
SU	MULE DEER	5	S	1
SU	MULE DEER	5	S	5
SU	MULE DEER	5	U	1
SU	MULE DEER	5	U	8
SU	MULE DEER	6	F	2
SU	MULE DEER	6	H	1
SU	MULE DEER	6	H	2
SU	MULE DEER	6	H	1
SU	MULE DEER	6	H	4
SU	MULE DEER	6	I	2
SU	MULE DEER	6	I	7
SU	MULE DEER	6	I	1
SU	MULE DEER	6	I	2
SU	MULE DEER	6	I	4
SU	MULE DEER	6	J	1
SU	MULE DEER	6	J	4
SU	MULE DEER	6	J	7
SU	MULE DEER	6	K	1
SU	MULE DEER	6	K	1
SU	MULE DEER	6	L	2
SU	MULE DEER	6	L	1
SU	MULE DEER	6	M	6
SU	MULE DEER	6	M	5
SU	MULE DEER	6	O	4
SU	MULE DEER	6	P	2
SU	MULE DEER	6	Q	2
SU	MULE DEER	6	Q	3
SU	MULE DEER	6	S	3
SU	MULE DEER	6	S	14
SU	MULE DEER	6	S	5
SU	MULE DEER	6	U	1
SU	MULE DEER	7	E	2
SU	MULE DEER	7	F	4
SU	MULE DEER	7	G	1
SU	MULE DEER	7	G	1

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	7	H	2
SU	MULE DEER	7	H	1
SU	MULE DEER	7	H	1
SU	MULE DEER	7	I	1
SU	MULE DEER	7	I	3
SU	MULE DEER	7	I	3
SU	MULE DEER	7	I	9
SU	MULE DEER	7	I	2
SU	MULE DEER	7	I	4
SU	MULE DEER	7	J	6
SU	MULE DEER	7	J	1
SU	MULE DEER	7	J	1
SU	MULE DEER	7	J	2
SU	MULE DEER	7	J	5
SU	MULE DEER	7	J	6
SU	MULE DEER	7	J	2
SU	MULE DEER	7	K	1
SU	MULE DEER	7	K	2
SU	MULE DEER	7	K	3
SU	MULE DEER	7	K	1
SU	MULE DEER	7	K	1
SU	MULE DEER	7	K	1
SU	MULE DEER	7	K	2
SU	MULE DEER	7	K	2
SU	MULE DEER	7	K	3
SU	MULE DEER	7	K	6
SU	MULE DEER	7	L	2
SU	MULE DEER	7	L	2
SU	MULE DEER	7	L	2
SU	MULE DEER	7	L	3
SU	MULE DEER	7	L	5
SU	MULE DEER	7	L	1
SU	MULE DEER	7	L	2
SU	MULE DEER	7	L	2
SU	MULE DEER	7	L	4
SU	MULE DEER	7	L	3
SU	MULE DEER	7	M	1
SU	MULE DEER	7	M	1
SU	MULE DEER	7	M	1
SU	MULE DEER	7	M	2
SU	MULE DEER	7	M	2
SU	MULE DEER	7	M	10
SU	MULE DEER	7	M	2
SU	MULE DEER	7	M	2
SU	MULE DEER	7	M	1
SU	MULE DEER	7	N	1
SU	MULE DEER	7	N	5

161

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	7	N	2
SU	MULE DEER	7	O	1
SU	MULE DEER	7	O	2
SU	MULE DEER	7	O	2
SU	MULE DEER	7	O	6
SU	MULE DEER	7	O	1
SU	MULE DEER	7	O	2
SU	MULE DEER	7	O	5
SU	MULE DEER	7	O	1
SU	MULE DEER	7	P	6
SU	MULE DEER	7	Q	1
SU	MULE DEER	7	Q	3
SU	MULE DEER	8	D	1
SU	MULE DEER	8	G	2
SU	MULE DEER	8	J	3
SU	MULE DEER	8	K	3
SU	MULE DEER	8	L	1
SU	MULE DEER	8	L	2
SU	MULE DEER	8	L	2
SU	MULE DEER	8	L	2
SU	MULE DEER	8	L	3
SU	MULE DEER	8	L	1
SU	MULE DEER	8	M	3
SU	MULE DEER	8	M	1
SU	MULE DEER	8	M	3
SU	MULE DEER	8	N	1
SU	MULE DEER	8	N	2
SU	MULE DEER	8	N	3
SU	MULE DEER	8	N	1
SU	MULE DEER	8	P	1
SU	MULE DEER	8	S	5
SU	MULE DEER	9	Q	2
SU	MULE DEER	10	D	4
SU	MULE DEER	10	D	4
SU	MULE DEER	10	G	2
SU	MULE DEER	10	N	3
SU	MULE DEER	10	N	5
SU	MULE DEER	10	O	1
SU	MULE DEER	10	O	1
SU	MULE DEER	10	O	1
SU	MULE DEER	10	O	1
SU	MULE DEER	10	O	2
SU	MULE DEER	10	O	2
SU	MULE DEER	10	O	2
SU	MULE DEER	10	O	3
SU	MULE DEER	10	O	7
SU	MULE DEER	10	P	3

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	10	P	1
SU	MULE DEER	10	P	2
SU	MULE DEER	10	P	3
SU	MULE DEER	10	Q	1
SU	MULE DEER	10	Q	1
SU	MULE DEER	10	R	3
SU	MULE DEER	10	T	2
SU	MULE DEER	11	E	1
SU	MULE DEER	11	E	2
SU	MULE DEER	11	E	2
SU	MULE DEER	11	E	6
SU	MULE DEER	11	E	1
SU	MULE DEER	11	E	1
SU	MULE DEER	11	E	1
SU	MULE DEER	11	E	2
SU	MULE DEER	11	E	4
SU	MULE DEER	11	E	4
SU	MULE DEER	11	E	7
SU	MULE DEER	11	F	1
SU	MULE DEER	11	F	2
SU	MULE DEER	11	F	2
SU	MULE DEER	11	F	2
SU	MULE DEER	11	F	3
SU	MULE DEER	11	F	4
SU	MULE DEER	11	G	2
SU	MULE DEER	11	H	1
SU	MULE DEER	11	I	2
SU	MULE DEER	11	J	2
SU	MULE DEER	11	J	2
SU	MULE DEER	11	J	3
SU	MULE DEER	11	K	1
SU	MULE DEER	11	K	5
SU	MULE DEER	11	M	4
SU	MULE DEER	11	M	1
SU	MULE DEER	11	M	3
SU	MULE DEER	11	M	3
SU	MULE DEER	11	M	4
SU	MULE DEER	11	N	1
SU	MULE DEER	11	N	1
SU	MULE DEER	11	N	1
SU	MULE DEER	11	N	1
SU	MULE DEER	11	N	2
SU	MULE DEER	11	N	2
SU	MULE DEER	11	O	1
SU	MULE DEER	11	P	2
SU	MULE DEER	11	Q	1
SU	MULE DEER	11	Q	5

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	11	Q	1
SU	MULE DEER	11	S	1
SU	MULE DEER	11	S	1
SU	MULE DEER	11	T	2
SU	MULE DEER	12	F	1
SU	MULE DEER	12	F	2
SU	MULE DEER	12	F	2
SU	MULE DEER	12	F	4
SU	MULE DEER	12	F	1
SU	MULE DEER	12	F	2
SU	MULE DEER	12	F	4
SU	MULE DEER	12	F	5
SU	MULE DEER	12	F	1
SU	MULE DEER	12	F	1
SU	MULE DEER	12	G	2
SU	MULE DEER	12	G	1
SU	MULE DEER	12	G	2
SU	MULE DEER	12	G	4
SU	MULE DEER	12	J	3
SU	MULE DEER	12	J	8
SU	MULE DEER	12	M	1
SU	MULE DEER	12	N	1
SU	MULE DEER	12	N	2
SU	MULE DEER	12	N	1
SU	MULE DEER	12	O	2
SU	MULE DEER	12	O	1
SU	MULE DEER	12	O	1
SU	MULE DEER	12	O	1
SU	MULE DEER	12	O	6
SU	MULE DEER	12	O	5
SU	MULE DEER	12	P	1
SU	MULE DEER	12	R	1
SU	MULE DEER	12	R	5
SU	MULE DEER	12	S	2
SU	MULE DEER	13	E	1
SU	MULE DEER	13	E	1
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	2
SU	MULE DEER	13	F	2
SU	MULE DEER	13	F	3
SU	MULE DEER	13	F	4
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	1

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	1
SU	MULE DEER	13	F	10
SU	MULE DEER	13	F	2
SU	MULE DEER	13	G	1
SU	MULE DEER	13	G	2
SU	MULE DEER	13	G	2
SU	MULE DEER	13	G	2
SU	MULE DEER	13	G	2
SU	MULE DEER	13	G	3
SU	MULE DEER	13	G	4
SU	MULE DEER	13	G	1
SU	MULE DEER	13	G	1
SU	MULE DEER	13	G	1
SU	MULE DEER	13	G	4
SU	MULE DEER	13	G	6
SU	MULE DEER	13	G	9
SU	MULE DEER	13	G	4
SU	MULE DEER	13	H	1
SU	MULE DEER	13	H	2
SU	MULE DEER	13	H	3
SU	MULE DEER	13	H	3
SU	MULE DEER	13	H	5
SU	MULE DEER	13	H	1
SU	MULE DEER	13	H	1
SU	MULE DEER	13	H	2
SU	MULE DEER	13	H	2
SU	MULE DEER	13	J	3
SU	MULE DEER	13	L	2
SU	MULE DEER	13	M	2
SU	MULE DEER	13	P	1
SU	MULE DEER	13	P	7
SU	MULE DEER	13	P	3
SU	MULE DEER	13	Q	4
SU	MULE DEER	13	S	2
SU	MULE DEER	13	S	1
SU	MULE DEER	13	T	1
SU	MULE DEER	13	T	2
SU	MULE DEER	13	U	3
SU	MULE DEER	14	E	1
SU	MULE DEER	14	E	2
SU	MULE DEER	14	E	2
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	2

171

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	14	F	2
SU	MULE DEER	14	F	3
SU	MULE DEER	14	F	3
SU	MULE DEER	14	F	4
SU	MULE DEER	14	F	6
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	1
SU	MULE DEER	14	F	15
SU	MULE DEER	14	F	3
SU	MULE DEER	14	F	3
SU	MULE DEER	14	F	3
SU	MULE DEER	14	F	4
SU	MULE DEER	14	F	4
SU	MULE DEER	14	F	4
SU	MULE DEER	14	F	4
SU	MULE DEER	14	F	2
SU	MULE DEER	14	F	2
SU	MULE DEER	14	G	2
SU	MULE DEER	14	G	3
SU	MULE DEER	14	G	5
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	1
SU	MULE DEER	14	G	2
SU	MULE DEER	14	G	2
SU	MULE DEER	14	G	2
SU	MULE DEER	14	G	2
SU	MULE DEER	14	G	2
SU	MULE DEER	14	G	3
SU	MULE DEER	14	G	3
SU	MULE DEER	14	G	3
SU	MULE DEER	14	G	3
SU	MULE DEER	14	G	4
SU	MULE DEER	14	G	4
SU	MULE DEER	14	G	4
SU	MULE DEER	14	G	2
SU	MULE DEER	14	G	3
SU	MULE DEER	14	G	15
SU	MULE DEER	14	H	1

172

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	14	H	2
SU	MULE DEER	14	H	5
SU	MULE DEER	14	H	1
SU	MULE DEER	14	H	1
SU	MULE DEER	14	H	2
SU	MULE DEER	14	H	2
SU	MULE DEER	14	I	1
SU	MULE DEER	14	I	1
SU	MULE DEER	14	I	1
SU	MULE DEER	14	I	2
SU	MULE DEER	14	J	1
SU	MULE DEER	14	J	1
SU	MULE DEER	14	J	1
SU	MULE DEER	14	J	2
SU	MULE DEER	14	J	2
SU	MULE DEER	14	J	3
SU	MULE DEER	14	L	1
SU	MULE DEER	14	L	2
SU	MULE DEER	14	M	3
SU	MULE DEER	14	P	1
SU	MULE DEER	14	Q	1
SU	MULE DEER	14	Q	3
SU	MULE DEER	14	Q	5
SU	MULE DEER	14	R	1
SU	MULE DEER	14	R	4
SU	MULE DEER	14	S	1
SU	MULE DEER	14	S	1
SU	MULE DEER	14	T	2
SU	MULE DEER	15	F	4
SU	MULE DEER	15	F	2
SU	MULE DEER	15	G	1
SU	MULE DEER	15	G	1
SU	MULE DEER	15	G	1
SU	MULE DEER	15	G	1
SU	MULE DEER	15	G	1
SU	MULE DEER	15	G	1
SU	MULE DEER	15	G	9
SU	MULE DEER	15	G	3
SU	MULE DEER	15	G	4
SU	MULE DEER	15	H	1
SU	MULE DEER	15	H	2
SU	MULE DEER	15	I	2
SU	MULE DEER	15	I	3
SU	MULE DEER	15	I	1
SU	MULE DEER	15	I	4
SU	MULE DEER	15	J	1
SU	MULE DEER	15	J	1

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	15	J	3
SU	MULE DEER	15	J	8
SU	MULE DEER	15	J	2
SU	MULE DEER	15	K	1
SU	MULE DEER	15	K	2
SU	MULE DEER	15	K	1
SU	MULE DEER	15	L	2
SU	MULE DEER	15	L	8
SU	MULE DEER	15	M	1
SU	MULE DEER	15	N	2
SU	MULE DEER	15	N	2
SU	MULE DEER	15	N	4
SU	MULE DEER	15	N	8
SU	MULE DEER	15	O	1
SU	MULE DEER	15	O	1
SU	MULE DEER	15	O	3
SU	MULE DEER	15	O	7
SU	MULE DEER	15	O	1
SU	MULE DEER	15	O	2
SU	MULE DEER	15	O	2
SU	MULE DEER	15	P	1
SU	MULE DEER	15	P	1
SU	MULE DEER	15	Q	2
SU	MULE DEER	15	Q	4
SU	MULE DEER	15	Q	7
SU	MULE DEER	16	F	1
SU	MULE DEER	16	J	1
SU	MULE DEER	16	J	1
SU	MULE DEER	16	J	1
SU	MULE DEER	16	J	2
SU	MULE DEER	16	J	2
SU	MULE DEER	16	J	3
SU	MULE DEER	16	K	1
SU	MULE DEER	16	K	1
SU	MULE DEER	16	K	1
SU	MULE DEER	16	L	1
SU	MULE DEER	16	L	1
SU	MULE DEER	16	L	1
SU	MULE DEER	16	L	1
SU	MULE DEER	16	L	2
SU	MULE DEER	16	L	3
SU	MULE DEER	16	L	4
SU	MULE DEER	16	L	6
SU	MULE DEER	16	L	2
SU	MULE DEER	16	M	1
SU	MULE DEER	16	N	3
SU	MULE DEER	16	O	1

MULE DEER SUMMER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MULE DEER	16	P	2
SU	MULE DEER	16	P	3
SU	MULE DEER	17	H	2
SU	MULE DEER	17	K	5
SU	MULE DEER	17	K	1
SU	MULE DEER	17	K	4
SU	MULE DEER	17	K	6
SU	MULE DEER	17	K	1
SU	MULE DEER	17	L	1
SU	MULE DEER	17	L	2
SU	MULE DEER	17	L	3
SU	MULE DEER	17	M	2
SU	MULE DEER	17	M	2
SU	MULE DEER	17	M	29
SU	MULE DEER	17	N	3

MULE DEER FALL USE AREAS, BASED ON COMBINED MONITORING DATA

To determine mule deer area use frequency during Fall (September through November), data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned.

Use levels for mule deer during the Summer season were assigned as follows:

- Average 1-10
- Elevated 11-25
- Heavy $\geq$ 26

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	2	F	4
FA	MULE DEER	2	H	6
FA	MULE DEER	2	I	1
FA	MULE DEER	2	J	4
FA	MULE DEER	2	J	10
FA	MULE DEER	2	K	3
FA	MULE DEER	2	K	14
FA	MULE DEER	2	K	2
FA	MULE DEER	2	L	8
FA	MULE DEER	2	O	3
FA	MULE DEER	3	F	3
FA	MULE DEER	3	I	2
FA	MULE DEER	3	K	1
FA	MULE DEER	3	K	3
FA	MULE DEER	3	M	11
FA	MULE DEER	3	N	1
FA	MULE DEER	3	P	2
FA	MULE DEER	3	R	1
FA	MULE DEER	4	H	1
FA	MULE DEER	4	I	1
FA	MULE DEER	4	K	1
FA	MULE DEER	4	K	6
FA	MULE DEER	4	K	21
FA	MULE DEER	4	K	1
FA	MULE DEER	4	K	1
FA	MULE DEER	4	K	2
FA	MULE DEER	4	K	6
FA	MULE DEER	4	L	2
FA	MULE DEER	4	L	6
FA	MULE DEER	4	L	10
FA	MULE DEER	4	L	16
FA	MULE DEER	4	M	1
FA	MULE DEER	4	M	2
FA	MULE DEER	4	M	14
FA	MULE DEER	4	M	3
FA	MULE DEER	4	M	3
FA	MULE DEER	4	M	5
FA	MULE DEER	4	M	5
FA	MULE DEER	4	N	1
FA	MULE DEER	4	N	4
FA	MULE DEER	4	O	2
FA	MULE DEER	4	O	4
FA	MULE DEER	4	P	1
FA	MULE DEER	4	P	14
FA	MULE DEER	4	Q	1
FA	MULE DEER	4	Q	8
FA	MULE DEER	4	T	2

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	5	F	1
FA	MULE DEER	5	F	3
FA	MULE DEER	5	F	10
FA	MULE DEER	5	G	6
FA	MULE DEER	5	H	4
FA	MULE DEER	5	H	7
FA	MULE DEER	5	H	10
FA	MULE DEER	5	I	1
FA	MULE DEER	5	I	2
FA	MULE DEER	5	I	2
FA	MULE DEER	5	I	3
FA	MULE DEER	5	I	4
FA	MULE DEER	5	I	5
FA	MULE DEER	5	I	5
FA	MULE DEER	5	I	7
FA	MULE DEER	5	I	9
FA	MULE DEER	5	I	15
FA	MULE DEER	5	I	19
FA	MULE DEER	5	I	1
FA	MULE DEER	5	I	11
FA	MULE DEER	5	I	3
FA	MULE DEER	5	I	4
FA	MULE DEER	5	I	4
FA	MULE DEER	5	I	5
FA	MULE DEER	5	I	5
FA	MULE DEER	5	J	16
FA	MULE DEER	5	K	1
FA	MULE DEER	5	K	3
FA	MULE DEER	5	K	6
FA	MULE DEER	5	L	5
FA	MULE DEER	5	N	1
FA	MULE DEER	5	N	3
FA	MULE DEER	5	O	1
FA	MULE DEER	5	O	1
FA	MULE DEER	5	O	2
FA	MULE DEER	5	O	5
FA	MULE DEER	5	P	1
FA	MULE DEER	5	P	1
FA	MULE DEER	5	P	1
FA	MULE DEER	5	P	1
FA	MULE DEER	5	P	2
FA	MULE DEER	5	P	11
FA	MULE DEER	5	P	1
FA	MULE DEER	5	P	13
FA	MULE DEER	5	P	9
FA	MULE DEER	5	Q	1
FA	MULE DEER	5	Q	2

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	5	Q	3
FA	MULE DEER	5	Q	12
FA	MULE DEER	5	Q	4
FA	MULE DEER	5	R	2
FA	MULE DEER	5	R	6
FA	MULE DEER	5	T	2
FA	MULE DEER	5	T	3
FA	MULE DEER	6	F	4
FA	MULE DEER	6	F	12
FA	MULE DEER	6	G	2
FA	MULE DEER	6	G	4
FA	MULE DEER	6	G	3
FA	MULE DEER	6	H	1
FA	MULE DEER	6	H	1
FA	MULE DEER	6	H	2
FA	MULE DEER	6	H	11
FA	MULE DEER	6	I	2
FA	MULE DEER	6	I	2
FA	MULE DEER	6	I	3
FA	MULE DEER	6	I	3
FA	MULE DEER	6	I	7
FA	MULE DEER	6	I	8
FA	MULE DEER	6	I	26
FA	MULE DEER	6	I	18
FA	MULE DEER	6	I	2
FA	MULE DEER	6	I	3
FA	MULE DEER	6	I	5
FA	MULE DEER	6	I	6
FA	MULE DEER	6	J	10
FA	MULE DEER	6	J	11
FA	MULE DEER	6	K	1
FA	MULE DEER	6	K	1
FA	MULE DEER	6	L	8
FA	MULE DEER	6	M	21
FA	MULE DEER	6	N	4
FA	MULE DEER	6	N	6
FA	MULE DEER	6	N	22
FA	MULE DEER	6	N	1
FA	MULE DEER	6	O	2
FA	MULE DEER	6	P	9
FA	MULE DEER	6	S	3
FA	MULE DEER	6	T	8
FA	MULE DEER	6	U	2
FA	MULE DEER	7	F	2
FA	MULE DEER	7	F	9
FA	MULE DEER	7	F	2
FA	MULE DEER	7	F	3

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	7	G	1
FA	MULE DEER	7	G	1
FA	MULE DEER	7	G	6
FA	MULE DEER	7	H	1
FA	MULE DEER	7	H	3
FA	MULE DEER	7	H	4
FA	MULE DEER	7	H	6
FA	MULE DEER	7	I	1
FA	MULE DEER	7	I	5
FA	MULE DEER	7	I	2
FA	MULE DEER	7	I	6
FA	MULE DEER	7	I	8
FA	MULE DEER	7	J	9
FA	MULE DEER	7	J	4
FA	MULE DEER	7	J	7
FA	MULE DEER	7	K	1
FA	MULE DEER	7	K	2
FA	MULE DEER	7	K	3
FA	MULE DEER	7	K	5
FA	MULE DEER	7	K	2
FA	MULE DEER	7	K	4
FA	MULE DEER	7	L	1
FA	MULE DEER	7	L	3
FA	MULE DEER	7	M	1
FA	MULE DEER	7	M	1
FA	MULE DEER	7	M	1
FA	MULE DEER	7	N	2
FA	MULE DEER	7	N	7
FA	MULE DEER	7	N	3
FA	MULE DEER	7	O	1
FA	MULE DEER	7	O	1
FA	MULE DEER	7	O	5
FA	MULE DEER	7	O	11
FA	MULE DEER	7	P	1
FA	MULE DEER	7	P	12
FA	MULE DEER	7	P	2
FA	MULE DEER	7	Q	2
FA	MULE DEER	7	R	1
FA	MULE DEER	7	R	2
FA	MULE DEER	7	R	9
FA	MULE DEER	8	D	6
FA	MULE DEER	8	F	10
FA	MULE DEER	8	H	1
FA	MULE DEER	8	K	1
FA	MULE DEER	8	K	3
FA	MULE DEER	8	K	5
FA	MULE DEER	8	L	1

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	8	M	1
FA	MULE DEER	8	N	10
FA	MULE DEER	8	N	2
FA	MULE DEER	8	N	5
FA	MULE DEER	8	O	2
FA	MULE DEER	8	P	2
FA	MULE DEER	8	Q	2
FA	MULE DEER	8	Q	3
FA	MULE DEER	8	Q	8
FA	MULE DEER	9	D	7
FA	MULE DEER	9	E	6
FA	MULE DEER	9	G	7
FA	MULE DEER	9	N	11
FA	MULE DEER	9	O	3
FA	MULE DEER	9	R	5
FA	MULE DEER	9	S	1
FA	MULE DEER	9	U	7
FA	MULE DEER	10	D	1
FA	MULE DEER	10	D	3
FA	MULE DEER	10	D	6
FA	MULE DEER	10	F	6
FA	MULE DEER	10	F	6
FA	MULE DEER	10	F	8
FA	MULE DEER	10	G	6
FA	MULE DEER	10	G	2
FA	MULE DEER	10	G	6
FA	MULE DEER	10	H	3
FA	MULE DEER	10	O	6
FA	MULE DEER	10	O	2
FA	MULE DEER	10	O	21
FA	MULE DEER	10	O	4
FA	MULE DEER	10	O	5
FA	MULE DEER	10	P	1
FA	MULE DEER	10	P	3
FA	MULE DEER	10	P	11
FA	MULE DEER	10	P	15
FA	MULE DEER	10	R	1
FA	MULE DEER	10	R	1
FA	MULE DEER	10	R	2
FA	MULE DEER	11	E	1
FA	MULE DEER	11	E	1
FA	MULE DEER	11	E	1
FA	MULE DEER	11	E	1
FA	MULE DEER	11	F	1
FA	MULE DEER	11	F	2
FA	MULE DEER	11	F	5
FA	MULE DEER	11	G	10

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	11	G	3
FA	MULE DEER	11	G	3
FA	MULE DEER	11	G	5
FA	MULE DEER	11	G	5
FA	MULE DEER	11	G	6
FA	MULE DEER	11	G	9
FA	MULE DEER	11	I	6
FA	MULE DEER	11	I	15
FA	MULE DEER	11	I	3
FA	MULE DEER	11	K	4
FA	MULE DEER	11	M	11
FA	MULE DEER	11	M	3
FA	MULE DEER	11	P	4
FA	MULE DEER	11	P	5
FA	MULE DEER	11	P	7
FA	MULE DEER	11	P	18
FA	MULE DEER	11	Q	2
FA	MULE DEER	11	R	3
FA	MULE DEER	12	D	15
FA	MULE DEER	12	F	1
FA	MULE DEER	12	F	4
FA	MULE DEER	12	F	4
FA	MULE DEER	12	F	1
FA	MULE DEER	12	F	1
FA	MULE DEER	12	G	5
FA	MULE DEER	12	H	6
FA	MULE DEER	12	I	12
FA	MULE DEER	12	I	2
FA	MULE DEER	12	I	6
FA	MULE DEER	12	J	3
FA	MULE DEER	12	J	1
FA	MULE DEER	12	J	4
FA	MULE DEER	12	N	1
FA	MULE DEER	12	N	8
FA	MULE DEER	12	N	10
FA	MULE DEER	12	N	3
FA	MULE DEER	12	N	5
FA	MULE DEER	12	O	4
FA	MULE DEER	12	O	7
FA	MULE DEER	12	O	1
FA	MULE DEER	12	O	4
FA	MULE DEER	12	O	5
FA	MULE DEER	12	P	11
FA	MULE DEER	12	P	15
FA	MULE DEER	12	Q	1
FA	MULE DEER	12	Q	2
FA	MULE DEER	12	R	3

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	12	R	3
FA	MULE DEER	13	E	3
FA	MULE DEER	13	E	6
FA	MULE DEER	13	F	3
FA	MULE DEER	13	F	5
FA	MULE DEER	13	F	8
FA	MULE DEER	13	F	9
FA	MULE DEER	13	F	10
FA	MULE DEER	13	F	1
FA	MULE DEER	13	F	12
FA	MULE DEER	13	F	6
FA	MULE DEER	13	F	6
FA	MULE DEER	13	G	1
FA	MULE DEER	13	G	1
FA	MULE DEER	13	G	2
FA	MULE DEER	13	G	6
FA	MULE DEER	13	G	8
FA	MULE DEER	13	G	2
FA	MULE DEER	13	G	5
FA	MULE DEER	13	H	1
FA	MULE DEER	13	H	1
FA	MULE DEER	13	H	2
FA	MULE DEER	13	H	2
FA	MULE DEER	13	H	2
FA	MULE DEER	13	H	4
FA	MULE DEER	13	H	18
FA	MULE DEER	13	H	1
FA	MULE DEER	13	H	4
FA	MULE DEER	13	H	8
FA	MULE DEER	13	I	9
FA	MULE DEER	13	K	2
FA	MULE DEER	13	K	4
FA	MULE DEER	13	L	3
FA	MULE DEER	13	M	6
FA	MULE DEER	13	N	4
FA	MULE DEER	13	P	6
FA	MULE DEER	13	P	7
FA	MULE DEER	13	Q	3
FA	MULE DEER	13	R	4
FA	MULE DEER	13	S	7
FA	MULE DEER	13	T	5
FA	MULE DEER	14	E	3
FA	MULE DEER	14	F	2
FA	MULE DEER	14	F	6
FA	MULE DEER	14	F	8
FA	MULE DEER	14	F	1
FA	MULE DEER	14	F	1

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	14	F	10
FA	MULE DEER	14	F	2
FA	MULE DEER	14	G	1
FA	MULE DEER	14	G	3
FA	MULE DEER	14	G	3
FA	MULE DEER	14	G	31
FA	MULE DEER	14	G	1
FA	MULE DEER	14	G	1
FA	MULE DEER	14	G	6
FA	MULE DEER	14	H	2
FA	MULE DEER	14	H	3
FA	MULE DEER	14	H	1
FA	MULE DEER	14	H	3
FA	MULE DEER	14	H	4
FA	MULE DEER	14	H	7
FA	MULE DEER	14	J	6
FA	MULE DEER	14	J	6
FA	MULE DEER	14	J	7
FA	MULE DEER	14	K	2
FA	MULE DEER	14	L	4
FA	MULE DEER	14	L	6
FA	MULE DEER	14	M	1
FA	MULE DEER	14	N	3
FA	MULE DEER	14	N	3
FA	MULE DEER	14	O	3
FA	MULE DEER	14	O	2
FA	MULE DEER	14	O	2
FA	MULE DEER	14	P	5
FA	MULE DEER	14	Q	10
FA	MULE DEER	15	F	6
FA	MULE DEER	15	G	1
FA	MULE DEER	15	G	3
FA	MULE DEER	15	G	6
FA	MULE DEER	15	G	6
FA	MULE DEER	15	G	7
FA	MULE DEER	15	G	7
FA	MULE DEER	15	G	1
FA	MULE DEER	15	G	3
FA	MULE DEER	15	H	1
FA	MULE DEER	15	H	1
FA	MULE DEER	15	H	7
FA	MULE DEER	15	H	10
FA	MULE DEER	15	H	7
FA	MULE DEER	15	I	2
FA	MULE DEER	15	I	5
FA	MULE DEER	15	I	12
FA	MULE DEER	15	J	2

MULE DEER FALL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MULE DEER	15	J	3
FA	MULE DEER	15	J	2
FA	MULE DEER	15	K	1
FA	MULE DEER	15	K	1
FA	MULE DEER	15	K	1
FA	MULE DEER	15	L	23
FA	MULE DEER	15	L	3
FA	MULE DEER	15	N	2
FA	MULE DEER	15	N	3
FA	MULE DEER	15	P	1
FA	MULE DEER	15	P	4
FA	MULE DEER	15	P	2
FA	MULE DEER	15	P	4
FA	MULE DEER	15	Q	2
FA	MULE DEER	15	Q	5
FA	MULE DEER	15	R	1
FA	MULE DEER	15	R	5
FA	MULE DEER	15	S	2
FA	MULE DEER	15	S	3
FA	MULE DEER	16	H	6
FA	MULE DEER	16	I	1
FA	MULE DEER	16	I	2
FA	MULE DEER	16	J	1
FA	MULE DEER	16	J	1
FA	MULE DEER	16	J	1
FA	MULE DEER	16	K	2
FA	MULE DEER	16	K	3
FA	MULE DEER	16	L	1
FA	MULE DEER	16	L	1
FA	MULE DEER	16	L	3
FA	MULE DEER	16	L	3
FA	MULE DEER	16	L	7
FA	MULE DEER	16	N	1
FA	MULE DEER	16	N	3
FA	MULE DEER	16	P	4
FA	MULE DEER	16	P	1
FA	MULE DEER	17	I	2
FA	MULE DEER	17	L	2
FA	MULE DEER	17	L	3
FA	MULE DEER	17	L	1
FA	MULE DEER	17	M	1
FA	MULE DEER	17	M	1
FA	MULE DEER	17	M	2
FA	MULE DEER	17	N	3

186

MULE DEER WINTER USE, AREAS BASED ON COMBINED MONITORING DATA

To determine mule deer area use frequency during Winter (December through February), data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned.

Use levels for mule deer during the Summer season were assigned as follows:

- Average 1-10
- Elevated 11-25
- Heavy $\geq$ 26

186

MULE DEER WINTER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	MULE DEER	2	F	10
WI	MULE DEER	2	G	20
WI	MULE DEER	2	K	7
WI	MULE DEER	2	N	2
WI	MULE DEER	2	R	1
WI	MULE DEER	3	K	1
WI	MULE DEER	3	L	3
WI	MULE DEER	3	P	18
WI	MULE DEER	4	I	1
WI	MULE DEER	4	J	23
WI	MULE DEER	4	L	20
WI	MULE DEER	4	N	26
WI	MULE DEER	4	N	15
WI	MULE DEER	4	O	20
WI	MULE DEER	4	P	22
WI	MULE DEER	4	P	2
WI	MULE DEER	4	U	25
WI	MULE DEER	5	F	6
WI	MULE DEER	5	F	11
WI	MULE DEER	5	F	13
WI	MULE DEER	5	H	17
WI	MULE DEER	5	I	8
WI	MULE DEER	5	I	16
WI	MULE DEER	5	I	14
WI	MULE DEER	5	I	5
WI	MULE DEER	5	I	19
WI	MULE DEER	5	J	28
WI	MULE DEER	5	O	5
WI	MULE DEER	5	P	1
WI	MULE DEER	5	P	1
WI	MULE DEER	5	P	2
WI	MULE DEER	5	P	26
WI	MULE DEER	5	P	13
WI	MULE DEER	5	Q	12
WI	MULE DEER	5	R	1
WI	MULE DEER	5	T	3
WI	MULE DEER	6	F	2
WI	MULE DEER	6	F	2
WI	MULE DEER	6	G	7
WI	MULE DEER	6	G	16
WI	MULE DEER	6	H	10
WI	MULE DEER	6	H	1
WI	MULE DEER	6	I	6
WI	MULE DEER	6	I	15
WI	MULE DEER	6	I	52
WI	MULE DEER	6	I	18
WI	MULE DEER	6	I	17

MULE DEER WINTER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	MULE DEER	6	O	9
WI	MULE DEER	6	P	2
WI	MULE DEER	6	Q	2
WI	MULE DEER	6	Q	14
WI	MULE DEER	6	S	13
WI	MULE DEER	6	U	9
WI	MULE DEER	7	I	2
WI	MULE DEER	7	F	10
WI	MULE DEER	7	G	9
WI	MULE DEER	7	H	10
WI	MULE DEER	7	H	9
WI	MULE DEER	7	I	15
WI	MULE DEER	7	I	9
WI	MULE DEER	7	I	8
WI	MULE DEER	7	J	1
WI	MULE DEER	7	J	2
WI	MULE DEER	7	J	1
WI	MULE DEER	7	J	5
WI	MULE DEER	7	J	4
WI	MULE DEER	7	K	1
WI	MULE DEER	7	K	12
WI	MULE DEER	7	K	17
WI	MULE DEER	7	K	9
WI	MULE DEER	7	K	12
WI	MULE DEER	7	K	17
WI	MULE DEER	7	K	13
WI	MULE DEER	7	L	10
WI	MULE DEER	7	L	6
WI	MULE DEER	7	L	25
WI	MULE DEER	7	M	2
WI	MULE DEER	7	M	26
WI	MULE DEER	7	N	20
WI	MULE DEER	7	N	4
WI	MULE DEER	7	O	20
WI	MULE DEER	7	Q	7
WI	MULE DEER	7	Q	25
WI	MULE DEER	7	R	6
WI	MULE DEER	7	S	11
WI	MULE DEER	8	F	18
WI	MULE DEER	8	M	4
WI	MULE DEER	8	M	2
WI	MULE DEER	8	N	1
WI	MULE DEER	8	P	13
WI	MULE DEER	8	P	1
WI	MULE DEER	8	P	9
WI	MULE DEER	8	Q	5
WI	MULE DEER	8	T	15

188

MULE DEER WINTER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	MULE DEER	9	D	14
WI	MULE DEER	9	D	16
WI	MULE DEER	9	D	18
WI	MULE DEER	9	E	13
WI	MULE DEER	9	F	1
WI	MULE DEER	9	P	3
WI	MULE DEER	9	R	5
WI	MULE DEER	9	S	2
WI	MULE DEER	9	S	11
WI	MULE DEER	9	U	14
WI	MULE DEER	10	D	26
WI	MULE DEER	10	E	9
WI	MULE DEER	10	E	7
WI	MULE DEER	10	G	10
WI	MULE DEER	10	G	14
WI	MULE DEER	10	O	6
WI	MULE DEER	10	O	2
WI	MULE DEER	10	O	2
WI	MULE DEER	10	O	20
WI	MULE DEER	10	O	14
WI	MULE DEER	10	O	9
WI	MULE DEER	10	Q	18
WI	MULE DEER	10	Q	9
WI	MULE DEER	10	R	10
WI	MULE DEER	10	T	1
WI	MULE DEER	11	E	14
WI	MULE DEER	11	F	3
WI	MULE DEER	11	F	8
WI	MULE DEER	11	F	22
WI	MULE DEER	11	I	4
WI	MULE DEER	11	K	11
WI	MULE DEER	11	K	14
WI	MULE DEER	11	L	9
WI	MULE DEER	11	M	9
WI	MULE DEER	11	M	3
WI	MULE DEER	11	N	1
WI	MULE DEER	11	N	5
WI	MULE DEER	11	N	3
WI	MULE DEER	11	P	1
WI	MULE DEER	11	P	39
WI	MULE DEER	11	P	2
WI	MULE DEER	11	P	9
WI	MULE DEER	11	P	11
WI	MULE DEER	11	R	1
WI	MULE DEER	11	R	5
WI	MULE DEER	11	R	18
WI	MULE DEER	12	E	2

MULE DEER WINTER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	MULE DEER	12	F	5
WI	MULE DEER	12	G	9
WI	MULE DEER	12	L	3
WI	MULE DEER	12	M	16
WI	MULE DEER	12	N	5
WI	MULE DEER	12	N	11
WI	MULE DEER	12	N	5
WI	MULE DEER	12	O	1
WI	MULE DEER	12	O	7
WI	MULE DEER	12	O	3
WI	MULE DEER	12	Q	5
WI	MULE DEER	12	S	3
WI	MULE DEER	12	S	17
WI	MULE DEER	12	T	1
WI	MULE DEER	13	F	4
WI	MULE DEER	13	F	5
WI	MULE DEER	13	F	17
WI	MULE DEER	13	F	14
WI	MULE DEER	13	F	9
WI	MULE DEER	13	G	3
WI	MULE DEER	13	G	6
WI	MULE DEER	13	G	6
WI	MULE DEER	13	G	9
WI	MULE DEER	13	G	8
WI	MULE DEER	13	H	8
WI	MULE DEER	13	H	6
WI	MULE DEER	13	H	4
WI	MULE DEER	13	H	8
WI	MULE DEER	13	J	13
WI	MULE DEER	13	L	1
WI	MULE DEER	13	L	19
WI	MULE DEER	13	O	1
WI	MULE DEER	13	P	1
WI	MULE DEER	13	Q	6
WI	MULE DEER	13	Q	9
WI	MULE DEER	13	Q	14
WI	MULE DEER	13	T	5
WI	MULE DEER	13	U	6
WI	MULE DEER	14	E	8
WI	MULE DEER	14	F	10
WI	MULE DEER	14	F	10
WI	MULE DEER	14	F	2
WI	MULE DEER	14	F	12
WI	MULE DEER	14	F	9
WI	MULE DEER	14	F	7
WI	MULE DEER	14	F	24
WI	MULE DEER	14	G	2

140

MULE DEER WINTER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	MULE DEER	14	G	8
WI	MULE DEER	14	G	1
WI	MULE DEER	14	G	10
WI	MULE DEER	14	H	8
WI	MULE DEER	14	H	16
WI	MULE DEER	14	H	1
WI	MULE DEER	14	H	4
WI	MULE DEER	14	I	1
WI	MULE DEER	14	J	4
WI	MULE DEER	14	J	11
WI	MULE DEER	14	J	10
WI	MULE DEER	14	J	1
WI	MULE DEER	14	J	17
WI	MULE DEER	14	K	25
WI	MULE DEER	14	L	1
WI	MULE DEER	14	L	6
WI	MULE DEER	14	L	6
WI	MULE DEER	14	L	4
WI	MULE DEER	14	M	1
WI	MULE DEER	14	N	1
WI	MULE DEER	14	O	18
WI	MULE DEER	14	O	3
WI	MULE DEER	14	O	10
WI	MULE DEER	14	P	10
WI	MULE DEER	14	S	17
WI	MULE DEER	14	S	3
WI	MULE DEER	14	S	2
WI	MULE DEER	14	S	15
WI	MULE DEER	14	T	12
WI	MULE DEER	14	T	7
WI	MULE DEER	15	G	2
WI	MULE DEER	15	G	12
WI	MULE DEER	15	G	5
WI	MULE DEER	15	G	1
WI	MULE DEER	15	G	2
WI	MULE DEER	15	G	9
WI	MULE DEER	15	G	10
WI	MULE DEER	15	G	6
WI	MULE DEER	15	H	2
WI	MULE DEER	15	H	4
WI	MULE DEER	15	H	18
WI	MULE DEER	15	I	23
WI	MULE DEER	15	J	3
WI	MULE DEER	15	J	5
WI	MULE DEER	15	J	9
WI	MULE DEER	15	L	3
WI	MULE DEER	15	M	8

MULE DEER WINTER USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	MULE DEER	15	N	1
WI	MULE DEER	15	N	1
WI	MULE DEER	15	N	13
WI	MULE DEER	15	N	8
WI	MULE DEER	15	O	5
WI	MULE DEER	15	O	1
WI	MULE DEER	15	O	5
WI	MULE DEER	15	P	8
WI	MULE DEER	15	P	11
WI	MULE DEER	15	P	9
WI	MULE DEER	15	S	6
WI	MULE DEER	15	T	22
WI	MULE DEER	15	T	26
WI	MULE DEER	16	L	9
WI	MULE DEER	16	L	2
WI	MULE DEER	16	L	1
WI	MULE DEER	16	N	10
WI	MULE DEER	16	N	9
WI	MULE DEER	16	O	1
WI	MULE DEER	16	P	1
WI	MULE DEER	16	P	8
WI	MULD DEER	16	P	11
WI	MULE DEER	16	Q	7
WI	MULE DEER	17	I	11
WI	MULE DEER	17	K	26
WI	MULE DEER	17	L	10
WI	MULE DEER	15	Q	1
WI	MULE DEER	15	R	1
WI	MULE DEER	13	R	8
WI	MULE DEER	6	I	3
WI	MULE DEER	5	R	1
WI	MULE DEER	6	G	13
WI	MULE DEER	3	O	20
WI	MULE DEER	16	P	5

ELK AND WHITE-TAILED DEER USE AREAS, BASED ON COMBINED MONITORING DATA

To determine area use year-round by elk and white-tailed deer, data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After observation locations for elk and white-tailed deer were evaluated, use areas were mapped.

ELK AND WHITE-TAILED DEER USE AREAS BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	ELK	14	F	3
WI	WHITE-TAILED DEER	3	L	5
SP	WHITE-TAILED DEER	4	J	1
FA	WHITE-TAILED DEER	4	K	1
FA	WHITE-TAILED DEER	4	L	1
FA	WHITE-TAILED DEER	4	O	1
WI	WHITE-TAILED DEER	5	P	1
FA	WHITE-TAILED DEER	5	Q	1
FA	WHITE-TAILED DEER	5	Q	1
WI	WHITE-TAILED DEER	5	Q	2
FA	WHITE-TAILED DEER	5	Q	3
WI	WHITE-TAILED DEER	5	T	4
FA	WHITE-TAILED DEER	7	L	2
WI	WHITE-TAILED DEER	9	R	1
FA	WHITE-TAILED DEER	10	R	2
SU	WHITE-TAILED DEER	16	K	1

MULE DEER/ WHITE-TAILED DEER HYBRID OBSERVATIONS ARE REPORTED HERE, BUT WERE NOT MAPPED

FA	MULE DEER/ WHITE-TAILED DEER HYBRID	10	D	1
WI	MULE DEER/ WHITE-TAILED DEER HYBRID	10	R	1
SU	MULE DEER/ WHITE-TAILED DEER HYBRID	13	F	1
FA	MULE DEER/ WHITE-TAILED DEER HYBRID	13	F	1
WI	MULE DEER/ WHITE-TAILED DEER HYBRID	14	F	1
WI	MULE DEER/ WHITE-TAILED DEER HYBRID	14	F	1
SP	MULE DEER/ WHITE-TAILED DEER HYBRID	14	I	1
WI	MULE DEER/ WHITE-TAILED DEER HYBRID	14	O	1
FA	MULE DEER/ WHITE-TAILED DEER HYBRID	15	F	1
FA	MULE DEER/ WHITE-TAILED DEER HYBRID	15	G	1
SU	MULE DEER/ WHITE-TAILED DEER HYBRID	15	H	1
FA	MULE DEER/ WHITE-TAILED DEER HYBRID	15	H	1
WI	MULE DEER/ WHITE-TAILED DEER HYBRID	17	I	1

DESERT COTTONTAIL USE AREAS, BASED ON COMBINED MONITORING DATA

To determine desert cottontail area use frequency year-round, data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned.

Use levels for desert cottontails year-round were assigned as follows:

- Average 1-9
- Elevated 10-30
- Heavy $\geq$ 30

DESERT COTTONTAIL USE AREAS BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

DESERT COTTONTAIL	1	N	1
DESERT COTTONTAIL	2	K	1
DESERT COTTONTAIL	2	N	1
DESERT COTTONTAIL	2	O	1
DESERT COTTONTAIL	2	O	1
DESERT COTTONTAIL	5	J	1
DESERT COTTONTAIL	7	J	1
DESERT COTTONTAIL	7	J	4
DESERT COTTONTAIL	7	J	1
DESERT COTTONTAIL	7	J	1
DESERT COTTONTAIL	7	K	1
DESERT COTTONTAIL	7	K	1
DESERT COTTONTAIL	7	K	1
DESERT COTTONTAIL	7	K	2
DESERT COTTONTAIL	7	K	2
DESERT COTTONTAIL	7	K	1
DESERT COTTONTAIL	7	K	1
DESERT COTTONTAIL	7	L	1
DESERT COTTONTAIL	7	L	1
DESERT COTTONTAIL	7	L	2
DESERT COTTONTAIL	7	M	1
DESERT COTTONTAIL	7	M	1
DESERT COTTONTAIL	7	N	1
DESERT COTTONTAIL	7	N	1
DESERT COTTONTAIL	7	N	2
DESERT COTTONTAIL	7	N	1
DESERT COTTONTAIL	7	N	4
DESERT COTTONTAIL	7	N	1
DESERT COTTONTAIL	7	N	2
DESERT COTTONTAIL	7	N	2
DESERT COTTONTAIL	7	N	1
DESERT COTTONTAIL	7	N	4
DESERT COTTONTAIL	7	N	1
DESERT COTTONTAIL	7	N	2
DESERT COTTONTAIL	7	N	1
DESERT COTTONTAIL	7	P	3
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	3
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	3
DESERT COTTONTAIL	7	P	4
DESERT COTTONTAIL	7	P	3
DESERT COTTONTAIL	7	P	4
DESERT COTTONTAIL	7	P	3
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	6

196

DESERT COTTONTAIL USE AREAS BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	3
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	5
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	4
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	5
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	P	1
DESERT COTTONTAIL	7	P	2
DESERT COTTONTAIL	7	Q	1
DESERT COTTONTAIL	8	K	2
DESERT COTTONTAIL	8	K	1
DESERT COTTONTAIL	8	K	1
DESERT COTTONTAIL	8	K	1
DESERT COTTONTAIL	8	L	2
DESERT COTTONTAIL	8	L	1
DESERT COTTONTAIL	8	L	3
DESERT COTTONTAIL	8	L	1
DESERT COTTONTAIL	8	L	2
DESERT COTTONTAIL	8	L	1
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	2
DESERT COTTONTAIL	8	L	3
DESERT COTTONTAIL	8	L	3
DESERT COTTONTAIL	8	L	3
DESERT COTTONTAIL	8	L	2
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	1
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	5
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	5
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	3
DESERT COTTONTAIL	8	L	4
DESERT COTTONTAIL	8	L	1
DESERT COTTONTAIL	8	L	1
DESERT COTTONTAIL	8	L	2
DESERT COTTONTAIL	8	L	2
DESERT COTTONTAIL	8	L	2

DESERT COTTONTAIL USE AREAS BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

DESERT COTTONTALI	8	L	2
DESERT COTTONTAIL	8	M	3
DESERT COTTONTAIL	8	M	4
DESERT COTTONTAIL	8	M	1
DESERT COTTONTAIL	8	M	1
DESERT COTTONTAIL	8	N	1
DESERT COTTONTAIL	8	N	1
DESERT COTTONTAIL	8	N	1
DESERT COTTONTAIL	8	N	5
DESERT COTTONTAIL	8	N	6
DESERT COTTONTAIL	8	N	1
DESERT COTTONTAIL	8	N	2
DESERT COTTONTAIL	8	N	1
DESERT COTTONTAIL	8	O	1
DESERT COTTONTAIL	8	O	11
DESERT COTTONTAIL	8	O	6
DESERT COTTONTAIL	8	O	1
DESERT COTTONTAIL	8	O	2
DESERT COTTONTAIL	9	C	1
DESERT COTTONTAIL	9	D	1
DESERT COTTONTAIL	9	E	1
DESERT COTTONTAIL	9	N	1
DESERT COTTONTAIL	9	N	1
DESERT COTTONTAIL	9	O	4
DESERT COTTONTAIL	9	O	2
DESERT COTTONTAIL	10	H	1
DESERT COTTONTAIL	10	O	1
DESERT COTTONTAIL	10	P	1
DESERT COTTONTAIL	10	P	2
DESERT COTTONTAIL	10	P	2
DESERT COTTONTAIL	10	P	1
DESERT COTTONTAIL	10	Q	1
DESERT COTTONTAIL	10	Q	1
DESERT COTTONTAIL	10	Q	1
DESERT COTTONTAIL	10	Q	1
DESERT COTTONTAIL	10	Q	2
DESERT COTTONTAIL	11	I	2
DESERT COTTONTAIL	11	I	1
DESERT COTTONTAIL	11	N	1
DESERT COTTONTAIL	11	P	1
DESERT COTTONTAIL	11	Q	1
DESERT COTTONTAIL	11	Q	3
DESERT COTTONTAIL	12	I	1
DESERT COTTONTAIL	12	J	2
DESERT COTTONTAIL	12	J	4
DESERT COTONTAIL	12	M	1
DESERT COTTONTAIL	12	O	1
DESERT COTTONTAIL	12	O	1
DESERT COTTONTAIL	12	Q	4

DESERT COTTONTAIL USE AREAS BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

DESERT COTTONTAIL	12	Q	5
DESERT COTTONTAIL	12	Q	3
DESERT COTTONTAIL	12	Q	13
DESERT COTTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	1
DESERT COTTONTAIL	12	Q	3
DESERT COTTONTAIL	12	Q	4
DESERT COTTONTAIL	12	Q	1
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	4
DESERT COTTONTAIL	12	Q	1
DESERT COTTONTAIL	12	Q	3
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	1
DESERT COTTONTAIL	12	Q	3
DESERT COTTONTAIL	12	Q	2
DESERT COTTONTAIL	12	Q	4
DESERT COTTONTAIL	12	Q	4
DESERT COTTONTAIL	12	Q	4
DESERT COTTONTAIL	13	J	1
DESERT COTTONTAIL	13	L	1
DESERT COTTONTAIL	13	P	1
DESERT COTTONTAIL	13	Q	1
DESERT COTTONTAIL	13	Q	2
DESERT COTTONTAIL	14	L	1
DESERT COTTONTAIL	14	M	3
DESERT COTTONTAIL	14	N	1
DESERT COTTONTAIL	14	N	2
DESERT COTTONTAIL	14	N	2
DESERT COTTONTAIL	14	N	1
DESERT COTTONTAIL	14	O	2
DESERT COTTONTAIL	14	O	1
DESERT COTTONTAIL	14	O	2
DESERT COTTONTAIL	15	P	1
DESERT COTTONTAIL	16	Q	1
DESERT COTTONTAIL	17	O	1
DESERT COTTONTAIL	17	P	1

MID-SIZED MAMMALS USE AREAS, BASED ON COMBINED MONITORING DATA

To determine area use year-round by selected mammal species, data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After observation locations for muskrats, porcupines, eastern fox squirrels, black-tailed prairie dogs, and beaver were evaluated, use areas were mapped. Use areas for beavers were not mapped due to sightings in a single location, and subsequent disappearance of the one individual recorded.

MID-SIZED MAMMALS USE AREAS (EXCLUDING DESERT COTTONTAILS) BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SPECIES	RF GRID N	RF GRID E	GROUP SIZE
MUSKRAT	3	R	1
MUSKRAT	4	N	1
MUSKRAT	4	R	1
MUSKRAT	4	S	1
MUSKRAT	7	J	1
MUSKRAT	7	N	1
MUSKRAT	7	N	1
MUSKRAT	7	N	1
MUSKRAT	7	P	1
MUSKRAT	10	N	1
MUSKRAT	10	O	1
MUSKRAT	10	O	1
MUSKRAT	10	O	1
MUSKRAT	10	O	1
MUSKRAT	10	P	1
MUSKRAT	10	P	1
MUSKRAT	10	P	1
MUSKRAT	10	P	2
MUSKRAT	12	O	1
MUSKRAT	12	O	1
MUSKRAT	12	O	1
MUSKRAT	12	O	1
MUSKRAT	13	H	1
MUSKRAT	13	H	1
MUSKRAT	13	H	1
PORCUPINE	13	H	1
PORCUPINE	14	I	1
PORCUPINE	14	I	1
PORCUPINE	15	J	1
PORCUPINE	16	L	1
EASTERN FOX SQUIRREL	9	J	1
EASTERN FOX SQUIRREL	13	F	1
EASTERN FOX SQUIRREL	13	F	1
EASTERN FOX SQUIRREL	13	T	1
EASTERN FOX SQUIRREL	14	F	1
BLACK-TAILED PRAIRIE DOG	2	N	1
BLACK-TAILED PRAIRIE DOG	2	O	9
BLACK-TAILED PRAIRIE DOG	9	N	1
BLACK-TAILED PRAIRIE DOG	14	G	1
BLACK-TAILED PRAIRIE DOG	14	P	1
BLACK-TAILED PRAIRIE DOG	16	I	5
BLACK-TAILED PRAIRIE DOG	16	O	46
BLACK-TAILED PRAIRIE DOG	16	Q	18
BLACK-TAILED PRAIRIE DOG	16	Q	17
BLACK-TAILED PRAIRIE DOG	16	Q	37
BLACK-TAILED PRAIRIE DOG	17	O	36
BLACK-TAILED PRAIRIE DOG	17	O	18

MID-SIZED MAMMALS USE AREAS (EXCLUDING DESERT COTTONTAILS) BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SPECIES	RF GRID N	RF GRID E	GROUP SIZE
BLACK-TAILED PRAIRIE DOG	17	P	32
BLACK-TAILED PRAIRIE DOG	17	P	30
BLACK-TAILED PRAIRIE DOG	17	P	20
BEAVER	12	O	1
BEAVER	12	O	1

COYOTE USE AREAS, BASED ON COMBINED MONITORING DATA

To determine coyote area use frequency year-round, data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned.

Use levels for coyotes year-round were assigned as follows:

- Average 1-3
- Elevated 4-6
- Heavy ≥ 7

COYOTE USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	COYOTE	2	G	1
FA	COYOTE	2	H	3
FA	COYOTE	2	N	1
FA	COYOTE	2	N	2
FA	COYOTE	2	R	1
FA	COYOTE	2	T	2
FA	COYOTE	2	T	1
FA	COYOTE	2	T	1
FA	COYOTE	3	F	1
FA	COYOTE	3	R	1
FA	COYOTE	3	S	1
FA	COYOTE	4	H	2
FA	COYOTE	4	Q	2
FA	COYOTE	5	I	1
FA	COYOTE	6	N	1
FA	COYOTE	6	N	1
FA	COYOTE	7	O	1
FA	COYOTE	8	E	1
FA	COYOTE	9	C	1
FA	COYOTE	10	E	1
FA	COYOTE	11	D	1
FA	COYOTE	12	F	1
FA	COYOTE	12	G	1
FA	COYOTE	12	I	1
FA	COYOTE	12	N	1
FA	COYOTE	13	E	2
FA	COYOTE	13	F	1
FA	COYOTE	13	H	2
FA	COYOTE	13	O	1
FA	COYOTE	14	C	1
FA	COYOTE	14	F	1
FA	COYOTE	14	F	1
FA	COYOTE	14	G	1
FA	COYOTE	14	G	1
FA	COYOTE	14	G	1
FA	COYOTE	14	I	1
FA	COYOTE	14	J	1
FA	COYOTE	14	K	1
FA	COYOTE	15	F	3
FA	COYOTE	15	G	3
FA	COYOTE	15	G	1
FA	COYOTE	15	G	1
FA	COYOTE	15	H	1
FA	COYOTE	15	J	2
FA	COYOTE	15	K	2
FA	COYOTE	15	M	2
FA	COYOTE	15	N	1

COYOTE USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	COYOTE	15	O	1
FA	COYOTE	16	G	2
FA	COYOTE	16	L	1
FA	COYOTE	16	P	1
FA	COYOTE	17	H	1
SP	COYOTE	1	Q	1
SP	COYOTE	2	L	6
SP	COYOTE	2	L	1
SP	COYOTE	2	M	1
SP	COYOTE	2	O	1
SP	COYOTE	2	O	1
SP	COYOTE	3	F	1
SP	COYOTE	3	G	2
SP	COYOTE	3	N	1
SP	COYOTE	4	G	1
SP	COYOTE	4	O	2
SP	COYOTE	4	R	1
SP	COYOTE	4	S	1
SP	COYOTE	5	G	1
SP	COYOTE	5	H	2
SP	COYOTE	5	I	1
SP	COYOTE	5	I	1
SP	COYOTE	5	O	1
SP	COYOTE	6	H	1
SP	COYOTE	6	I	2
SP	COYOTE	6	K	1
SP	COYOTE	6	L	1
SP	COYOTE	6	O	1
SP	COYOTE	7	L	1
SP	COYOTE	7	L	1
SP	COYOTE	7	O	11
SP	COYOTE	7	Q	2
SP	COYOTE	8	M	1
SP	COYOTE	10	D	1
SP	COYOTE	12	F	1
SP	COYOTE	12	F	1
SP	COYOTE	12	G	1
SP	COYOTE	13	E	1
SP	COYOYE	13	F	1
SP	COYOTE	13	G	1
SP	COYOTE	13	G	1
SP	COYOTE	13	G	1
SP	COYOTE	13	G	1
SP	COYOTE	13	L	1
SP	COYOTE	13	U	1
SP	COYOTE	14	E	1
SP	COYOTE	14	G	1

COYOTE USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	COYOTE	14	H	1
SP	COYOTE	15	I	1
SP	COYOTE	16	I	1
SP	COYOTE	16	J	1
SP	COYOTE	16	Q	1
SP	COYOTE	17	L	1
SP	COYOTE	17	O	1
SU	COYOTE	2	N	1
SU	COYOTE	2	O	1
SU	COYOTE	2	O	1
SU	COYOTE	2	P	1
SU	COYOTE	2	Q	1
SU	COYOTE	2	R	1
SU	COYOTE	2	S	1
SU	COYOTE	2	T	1
SU	COYOTE	2	T	1
SU	COYOTE	2	T	1
SU	COYOTE	2	T	2
SU	COYOTE	2	T	1
SU	COYOTE	3	F	1
SU	COYOTE	3	G	1
SU	COYOTE	3	L	1
SU	COYOTE	3	S	2
SU	COYOTE	3	T	1
SU	COYOTE	4	G	1
SU	COYOTE	4	I	1
SU	COYOTE	4	N	1
SU	COYOTE	5	I	2
SU	COYOTE	5	I	3
SU	COYOTE	5	I	1
SU	COYOTE	5	J	2
SU	COYOTE	5	J	3
SU	COYOTE	5	K	3
SU	COYOTE	6	J	1
SU	COYOTE	6	K	1
SU	COYOTE	6	K	1
SU	COYOTE	7	N	1
SU	COYOTE	7	N	3
SU	COYOTE	7	P	1
SU	COYOTE	7	P	2
SU	COYOTE	7	P	1
SU	COYOTE	7	P	1
SU	COYOTE	7	P	1
SU	COYOTE	7	P	1
SU	COYOTE	8	P	3
SU	COYOTE	9	C	1
SU	COYOTE	9	P	1

COYOTE USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	COYOTE	9	R	1
SU	COYOTE	10	D	1
SU	COYOTE	10	N	1
SU	COYOTE	10	Q	3
SU	COYOTE	10	Q	3
SU	COYOTE	11	F	1
SU	COYOTE	11	Q	2
SU	COYOTE	12	F	2
SU	COYOTE	12	O	1
SU	COYOTE	12	P	1
SU	COYOTE	12	Q	2
SU	COYOTE	13	F	1
SU	COYOTE	13	F	1
SU	COYOTE	13	G	2
SU	COYOTE	13	H	9
SU	COYOTE	13	J	1
SU	COYOTE	13	P	1
SU	COYOTE	13	Q	3
SU	COYOTE	14	F	1
SU	COYOTE	14	G	1
SU	COYOTE	14	G	1
SU	COYOTE	14	G	1
SU	COYOTE	14	G	1
SU	COYOTE	14	H	2
SU	COYOTE	14	I	1
SU	COYOTE	14	J	1
SU	COYOTE	14	L	3
SU	COYOTE	14	M	1
SU	COYOTE	14	M	2
SU	COYOTE	14	O	2
SU	COYOTE	14	P	1
SU	COYOTE	15	E	1
SU	COYOTE	15	F	1
SU	COYOTE	15	F	1
SU	COYOTE	15	G	1
SU	COYOTE	15	G	1
SU	COYOTE	15	G	1
SU	COYOTE	15	H	1
SU	COYOTE	15	I	3
SU	COYOTE	15	I	2
SU	COYOTE	15	J	1
SU	COYOTE	15	K	1
SU	COYOTE	15	M	1
SU	COYOTE	15	N	1
SU	COYOTE	16	G	1
SU	COYOTE	16	G	1
SU	COYOTE	16	K	1

COYOTE USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	COYOTE	16	L	2
SU	COYOTE	16	M	1
SU	COYOTE	17	M	1
WI	COYOTE	2	D	2
WI	COYOTE	2	G	1
WI	COYOTE	2	N	1
WI	COYOTE	2	O	1
WI	COYOTE	2	R	1
WI	COYOTE	2	T	1
WI	COYOTE	2	T	2
WI	COYOTE	3	D	1
WI	COYOTE	3	F	1
WI	COYOTE	3	H	1
WI	COYOTE	3	I	1
WI	COYOTE	3	L	1
WI	COYOTE	3	N	1
WI	COYOTE	3	O	1
WI	COYOTE	4	I	1
WI	COYOTE	4	K	1
WI	COYOTE	4	K	1
WI	COYOTE	4	L	1
WI	COYOTE	4	M	1
WI	COYOTE	4	P	3
WI	COYOTE	4	P	1
WI	COYOTE	4	T	1
WI	COYOTE	5	I	1
WI	COYOTE	5	I	1
WI	COYOTE	5	I	3
WI	COYOTE	5	I	3
WI	COYOTE	5	I	1
WI	COYOTE	5	I	1
WI	COYOTE	5	I	2
WI	COYOTE	5	I	1
WI	COYOTE	5	I	1
WI	COYOTE	5	J	1
WI	COYOTE	5	J	1
WI	COYOTE	5	P	2
WI	COYOTE	5	P	2
WI	COYOTE	5	R	1
WI	COYOTE	6	H	1
WI	COYOTE	6	J	2
WI	COYOTE	6	K	1
WI	COYOTE	7	F	1
WI	COYOTE	7	H	2
WI	COYOTE	7	J	1
WI	COYOTE	7	N	1
WI	COYOTE	7	P	1

COYOTE USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	COYOTE	7	P	1
WI	COYOTE	7	S	1
WI	COYOTE	8	D	1
WI	COYOTE	8	E	1
WI	COYOTE	8	E	1
WI	COYOTE	8	O	1
WI	COYOTE	9	C	1
WI	COYOTE	9	E	1
WI	COYOTE	9	E	1
WI	COYOTE	9	G	1
WI	COYOTE	10	D	3
WI	COYOTE	10	E	1
WI	COYOTE	10	O	1
WI	COYOTE	11	E	2
WI	COYOTE	11	N	1
WI	COYOTE	12	E	1
WI	COYOTE	12	F	1
WI	COYOTE	12	F	2
WI	COYOTE	12	G	1
WI	COYOTE	12	H	1
WI	COYOTE	12	N	1
WI	COYOTE	12	O	1
WI	COYOTE	13	E	1
WI	COYOTE	13	F	1
WI	COYOTE	13	F	1
WI	COYOTE	13	F	1
WI	COYOTE	13	G	1
WI	COYOTE	13	G	2
WI	COYOTE	13	N	1
WI	COYOTE	13	O	1
WI	COYOTE	13	O	1
WI	COYOTE	13	Q	1
WI	COYOTE	13	S	1
WI	COYOTE	14	E	2
WI	COYOTE	14	G	2
WI	COYOTE	14	G	2
WI	COYOTE	14	H	3
WI	COYOTE	14	H	1
WI	COYOTE	14	J	1
WI	COYOTE	14	M	1
WI	COYOTE	14	P	1
WI	COYOTE	14	S	1
WI	COYOTE	15	H	1
WI	COYOTE	15	J	2
WI	COYOTE	15	J	2
WI	COYOTE	15	K	1
WI	COYOTE	15	K	1

COYOTE USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	COYOTE	15	M	1
WI	COYOTE	15	O	1
WI	COYOTE	15	P	1
WI	COYOTE	15	Q	1
WI	COYOTE	15	T	2
WI	COYOTE	16	G	3
WI	COYOTE	16	L	1
WI	COYOTE	16	M	1
WI	COYOTE	16	O	1
WI	COYOTE	16	P	1
WI	COYOTE	16	P	1
WI	COYOTE	16	P	1
WI	COYOTE	16	P	2
WI	COYOTE	16	Q	4
WI	COYOTE	16	Q	1
WI	COYOTE	17	I	1
WI	COYOTE	17	L	1
WI	COYOTE	17	L	1
WI	COYOTE	17	L	1
WI	COYOTE	17	N	1
WI	COYOTE	17	P	4
WI	COYOTE	17	P	2

USE AREAS OF CARNIVORES OTHER THAN COYOTES, BASED ON COMBINED MONITORING DATA

To determine area use year-round by carnivore species other than coyotes, data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After observation locations for raccoons, badgers, long-tailed weasels, gray foxes, bobcats, and mountain lion were evaluated, use areas were mapped. It should be noted that this class of mammalian predators are secretive, and seldom seen.

CARNIVORE SPECIES USE AREAS (EXCLUDING COYOTES) BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	ADMN AREA	RF GRID N	RF GRID E	GROUP SIZE
SP	MOUNTAIN LION	BZ	8	P	1
SU	BOBCAT	BZ	14	E	1
SU	LONG-TAILED WEASEL	BZ	2	O	1
WI	LONG-TAILED WEASEL	BZ	17	K	1
FA	RACCOON	BZ	4	R	1
FA	RACCOON	BZ	5	S	1
FA	RACCOON	BZ	7	J	1
FA	RACCOON	BZ	7	K	1
FA	RACCOON	IA	10	J	1
FA	RACCOON	PA	10	P	2
FA	RACCOON	BZ	11	P	1
FA	RACCOON	BZ	14	G	1
SP	RACCOON	BZ	7	J	1
SP	RACCOON	BZ	7	L	1
SP	RACCOON	BZ	8	L	1
SP	RACCOON	BZ	12	P	1
SP	RACCOON	BZ	12	Q	1
SU	RACCOON	BZ	7	I	1
SU	RACCOON	BZ	7	M	3
SU	RACCOON	BZ	7	N	1
SU	RACCOON	IA	9	I	2
SU	RACCOON	IA	10	K	1
SU	RACCOON	IA	10	K	2
SU	RACCOON	IA	10	K	1
SU	RACCOON	IA	10	K	2
SU	RACCOON	IA	10	K	3
SU	RACCOON	IA	10	K	1
SU	RACCOON	IA	10	P	2
SU	RACCOON	PA	10	P	1
SU	RACCOON	BZ	11	E	1
SU	RACCOON	BZ	11	P	2
SU	RACCOON	BZ	11	P	1
SU	RACCOON	BZ	11	P	1
SU	RACCOON	BZ	11	P	1
SU	RACCOON	BZ	11	P	1
SU	RACCOON	BZ	12	O	1
SU	RACCOON	BZ	12	Q	5
SU	RACCOON	BZ	12	Q	3
WI	RACCOON	BZ	7	N	1
WI	RACCOON	BZ	8	N	1
WI	RACCOON	BZ	13	Q	1
SP	BADGER	BZ	10	Q	1
SP	BADGER	BZ	3	S	1
SU	GRAY FOX	BZ	7	P	1
FA	GRAY FOX	BZ	11	D	1

USE AREAS OF WATERFOWL, BASED ON COMBINED MONITORING DATA

To determine area use year-round by waterfowl species, data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After observation locations for ducks, geese, wading birds, and other shorebirds were evaluated, use areas were mapped. It should be noted that some observations are recorded as recorded individuals fly over the site within its boundaries.

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MALLARD	2	F	1
WI	COMMON GOLDENEYE	2	S	1
SP	NORTHERN PINTAIL	2	T	4
WI	NORTHERN PINTAIL	2	T	5
FA	AMERICAN WIGEON	2	T	15
FA	AMERICAN WIGEON	2	T	38
SP	AMERICAN WIGEON	2	T	2
SP	AMERICAN WIGEON	2	T	18
SP	AMERICAN WIGEON	2	T	8
SP	AMERICAN WIGEON	2	T	14
SP	AMERICAN WIGEON	2	T	9
SP	AMERICAN WIGEON	2	T	2
SP	AMERICAN WIGEON	2	T	4
SU	AMERICAN WIGEON	2	T	4
SU	AMERICAN WIGEON	2	T	1
FA	NORTHERN SHOVELER	2	T	2
SP	NORTHERN SHOVELER	2	T	6
SP	NORTHERN SHOVELER	2	T	2
SP	NORTHERN SHOVELER	2	T	3
FA	GREEN-WINGED TEAL	2	T	2
FA	GREEN-WINGED TEAL	2	T	3
FA	GREEN-WINGED TEAL	2	T	4
FA	GREEN-WINGED TEAL	2	T	1
SP	GREEN-WINGED TEAL	2	T	18
SP	GREEN-WINGED TEAL	2	T	6
SP	GREEN-WINGED TEAL	2	T	8
SP	GREEN-WINGED TEAL	2	T	6
SP	GREEN-WINGED TEAL	2	T	4
SP	GREEN-WINGED TEAL	2	T	3
SP	GREEN-WINGED TEAL	2	T	2
SP	GREEN-WINGED TEAL	2	T	2
SP	GREEN-WINGED TEAL	2	T	9
SP	GREEN-WINGED TEAL	2	T	6
SP	GREEN-WINGED TEAL	2	T	2
SP	GREENWINGED TEAL	2	T	1
SU	GREEN-WINGED TEAL	2	T	1
SU	GREEN-WINGED TEAL	2	T	1
SP	CINNAMON TEAL	2	T	2
SP	CINNAMON TEAL	2	T	8
SP	CINNAMON TEAL	2	T	2
SP	CINNAMON TEAL	2	T	2
SP	CINNAMON TEAL	2	T	2
SU	CINNAMON TEAL	2	T	1
SU	CINNAMON TEAL	2	T	2
SU	CINNAMON TEAL	2	T	1
SU	CINNAMON TEAL	2	T	1
SU	CINNAMON TEAL	2	T	4

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	BLUE-WINGED TEAL	2	T	2
FA	BLUE-WINGED TEAL	2	T	8
FA	BLUE-WINGED TEAL	2	T	4
FA	BLUE-WINGED TEAL	2	T	7
SP	BLUE-WINGED TEAL	2	T	3
SP	BLUE-WINGED TEAL	2	T	8
SP	BLUE-WINGED TEAL	2	T	2
SP	BLUE-WINGED TEAL	2	T	4
SP	BLUE-WINGED TEAL	2	T	4
SP	BLUE-WINGED TEAL	2	T	2
SP	BLUE-WINGED TEAL	2	T	6
SP	BLUE-WINGED TEAL	2	T	2
SP	BLUEWINGED TEAL	2	T	1
SU	BLUE-WINGED TEAL	2	T	4
SU	BLUE-WINGED TEAL	2	T	3
SU	BLUE-WINGED TEAL	2	T	1
SU	BLUE-WINGED TEAL	2	T	2
SU	BLUE-WINGED TEAL	2	T	2
SU	BLUE-WINGED TEAL	2	T	1
SU	BLUE-WINGED TEAL	2	T	11
SU	BLUE-WINGED TEAL	2	T	4
SU	BLUE-WINGED TEAL	2	T	2
SU	BLUE-WINGED TEAL	2	T	5
SU	BLUE-WINGED TEAL	2	T	4
SU	BLUE-WINGED TEAL	2	T	2
FA	MALLARD	2	T	1
FA	MALLARD	2	T	3
FA	MALLARD	2	T	6
FA	MALLARD	2	T	22
FA	MALLARD	2	T	8
FA	MALLARD	2	T	6
FA	MALLARD	2	T	2
FA	MALLARD	2	T	5
FA	MALLARD	2	T	1
FA	MALLARD	2	T	2
FA	MALLARD	2	T	4
SP	MALLARD	2	T	2
SP	MALLARD	2	T	2
SP	MALLARD	2	T	2
SP	MALLARD	2	T	6
SP	MALLARD	2	T	66
SP	MALLARD	2	T	44
SP	MALLARD	2	T	13
SP	MALLARD	2	T	6
SP	MALLARD	2	T	2
SP	MALLARD	2	T	10
SP	MALLARD	2	T	10

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MALLARD	2	T	3
SP	MALLARD	2	T	14
SP	MALLARD	2	T	28
SP	MALLARD	2	T	19
SP	MALLARD	2	T	2
SP	MALLARD	2	T	2
SP	MALLARD	2	T	4
SP	MALLARD	2	T	1
SP	MALLARD	2	T	2
SP	MALLARD	2	T	4
SU	MALLARD	2	T	3
SU	MALLARD	2	T	7
SU	MALLARD	2	T	4
SU	MALLARD	2	T	1
SU	MALLARD	2	T	7
SU	MALLARD	2	T	6
SU	MALLARD	2	T	6
SU	MALLARD	2	T	5
SU	MALLARD	2	T	17
SU	MALLARD	2	T	13
SU	MALLARD	2	T	12
SU	MALLARD	2	T	13
SU	MALLARD	2	T	3
SU	MALLARD	2	T	5
SU	MALLARD	2	T	8
WI	MALLARD	2	T	17
WI	MALLARD	2	T	45
FA	GADWALL	2	T	21
FA	GADWALL	2	T	76
FA	GADWALL	2	T	1
FA	GADWALL	2	T	2
FA	GADWALL	2	T	1
FA	GADWALL	2	T	21
FA	GADWALL	2	T	1
FA	GADWALL	2	T	1
SP	GADWALL	2	T	10
SP	GADWALL	2	T	6
SP	GADWALL	2	T	290
SP	GADWALL	2	T	6
SP	GADWALL	2	T	2
SP	GADWALL	2	T	68
SP	GADWALL	2	T	26
SP	GADWALL	2	T	41
SP	GADWALL	2	T	13
SP	GADWALL	2	T	8
SP	GADWALL	2	T	16
SP	GADWALL	2	T	9

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	GADWALL	2	T	3
SP	GADWALL	2	T	5
SP	GADWALL	2	T	4
SP	GADWALL	2	T	1
SP	GADWALL	2	T	1
SU	GADWALL	2	T	10
SU	GADWALL	2	T	16
SU	GADWALL	2	T	3
SU	GADWALL	2	T	10
SU	GADWALL	2	T	5
SU	GADWALL	2	T	5
SP	GREAT BLUE HERON	2	T	1
SP	GREAT BLUE HERON	2	T	4
SP	GREAT BLUE HERON	2	T	1
SP	GREAT BLUE HERON	2	T	1
SP	GREAT BLUE HERON	2	T	1
SU	GREAT BLUE HERON	2	T	1
SU	GREAT BLUE HERON	2	T	1
SU	GREAT BLUE HERON	2	T	1
SU	GREAT BLUE HERON	2	T	1
SU	GREAT BLUE HERON	2	T	1
SU	GREAT BLUE HERON	2	T	1
FA	LESSER SCAUP	2	T	6
SP	LESSER SCAUP	2	T	4
SP	LESSER SCAUP	2	T	36
SP	LESSER SCAUP	2	T	2
SP	LESSER SCAUP	2	T	55
SU	LESSER SCAUP	2	T	1
WI	LESSER SCAUP	2	T	10
FA	REDHEAD	2	T	4
SP	REDHEAD	2	T	6
SP	REDHEAD	2	T	16
SP	REDHEAD	2	T	36
SP	REDHEAD	2	T	4
SP	REDHEAD	2	T	26
SU	REDHEAD	2	T	1
WI	REDHEAD	2	T	4
FA	RING-NECKED DUCK	2	T	22
FA	RING-NECKED DUCK	2	T	7
FA	RING-NECKED DUCK	2	T	15
FA	RING-NECKED DUCK	2	T	3
SP	RING-NECKED DUCK	2	T	12
SP	RING-NECKED DUCK	2	T	2
SP	RING-NECKED DUCK	2	T	20
SP	RING-NECKED DUCK	2	T	21
SP	RING-NECKED DUCK	2	T	33
SP	RING-NECKED DUCK	2	T	22

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	RING-NECKED DUCK	2	T	12
SP	RING-NECKED DUCK	2	T	2
SP	RING-NECKED DUCK	2	T	2
WI	RING-NECKED DUCK	2	T	7
SP	GREATER SCAUP	2	T	8
SP	GREATER SCAUP	2	T	29
SP	GREATER SCAUP	2	T	1
FA	CANADA GOOSE	2	T	2
SP	CANADA GOOSE	2	T	2
SP	CANADA GOOSE	2	T	2
SP	CANADA GOOSE	2	T	4
SP	CANADA GOOSE	2	T	6
SP	CANADA GOOSE	2	T	5
SP	CANADA GOOSE	2	T	2
SP	CANADA GOOSE	2	T	2
SP	CANADA GOOSE	2	T	2
SP	CANADA GOOSE	2	T	3
SU	CANADA GOOSE	2	T	21
SU	CANADA GOOSE	2	T	30
WI	CANADA GOOSE	2	T	5
WI	CANADA GOOSE	2	T	18
FA	BUFFLEHEAD	2	T	24
FA	BUFFLEHEAD	2	T	1
FA	BUFFLEHEAD	2	T	8
FA	BUFFLEHEAD	2	T	6
FA	BUFFLEHEAD	2	T	20
FA	BUFFLEHEAD	2	T	3
FA	BUFFLEHEAD	2	T	1
SP	BUFFLEHEAD	2	T	6
SP	BUFFLEHEAD	2	T	1
SP	BUFFLEHEAD	2	T	7
SP	BUFFLEHEAD	2	T	6
SP	BUFFLEHEAD	2	T	6
SP	BUFFLEHEAD	2	T	2
SP	BUFFLEHEAD	2	T	2
SP	BUFFLEHEAD	2	T	8
SP	BUFFLEHEAD	2	T	8
SP	BUFFLEHEAD	2	T	9
SP	BUFFLEHEAD	2	T	18
SP	BUFFLEHEAD	2	T	4
SP	BUFFLEHEAD	2	T	6
SP	COMMON GOLDENEYE	2	T	1
SP	COMMON GOLDENEYE	2	T	6
SP	COMMON GOLDENEYE	2	T	14
SP	COMMON GOLDENEYE	2	T	3
SP	COMMON GOLDENEYE	2	T	20
SP	COMMON GOLDENEYE	2	T	13

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	COMMON GOLDENEYE	2	T	6
SP	COMMON GOLDENEYE	2	T	2
WI	COMMON GOLDENEYE	2	T	13
FA	AMERICAN COOT	2	T	13
FA	AMERICAN COOT	2	T	4
FA	AMERICAN COOT	2	T	2
FA	AMERICAN COOT	2	T	8
FA	AMERICAN COOT	2	T	4
FA	AMERICAN COOT	2	T	19
FA	AMERICAN COOT	2	T	27
FA	AMERICAN COOT	2	T	29
FA	AMERICAN COOT	2	T	19
FA	AMERICAN COOT	2	T	6
SP	AMERICAN COOT	2	T	2
SP	AMERICAN COOT	2	T	5
SP	AMERICAN COOT	2	T	1
SP	AMERICAN COOT	2	T	4
SP	AMERICAN COOT	2	T	4
SP	AMERICAN COOT	2	T	1
SP	AMERICAN COOT	2	T	5
SP	AMERICAN COOT	2	T	6
SP	AMERICAN COOT	2	T	11
SP	AMERICAN COOT	2	T	1
SP	AMERICAN COOT	2	T	10
SP	AMERICAN COOT	2	T	1
SU	AMERICAN COOT	2	T	4
SU	AMERICAN COOT	2	T	4
SU	AMERICAN COOT	2	T	36
SU	AMERICAN COOT	2	T	3
SU	AMERICAN COOT	2	T	1
SU	AMERICAN COOT	2	T	2
SU	AMERICAN COOT	2	T	2
SU	AMERICAN COOT	2	T	3
SU	AMERICAN COOT	2	T	7
SU	AMERICAN COOT	2	T	19
SU	AMERICAN COOT	2	T	2
SU	AMERICAN COOT	2	T	2
SU	AMERICAN COOT	2	T	4
SU	AMERICAN COOT	2	T	6
SU	AMERICAN COOT	2	T	5
SU	AMERICAN COOT	2	T	7
SU	AMERICAN COOT	2	T	1
SU	AMERICAN COOT	2	T	16
SU	AMERICAN COOT	2	T	10
SU	AMERICAN COOT	2	T	6
SU	AMERICAN COOT	2	T	4
SU	AMERICAN COOT	2	T	6

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	AMERICAN COOT	2	T	9
SP	COMMON MERGANSER	2	T	4
SP	COMMON MERGANSER	2	T	5
SP	COMMON MERGANSER	2	T	3
SU	BLACK-CROWNED NIGHT HERON	2	T	2
SU	BLACK-CROWNED NIGHT HERO	2	T	1
SP	DOUBLE-CRESTED CORMORANT	2	T	1
SP	DOUBLE-CRESTED CORMORANT	2	T	3
SP	DOUBLE-CRESTED CORMORANT	2	T	1
SU	DOUBLE-CRESTED CORMORANT	2	T	1
SU	DOUBLE-CRESTED CORMORANT	2	T	1
SU	DOUBLE-CRESTED CORMORANT	2	T	1
SU	DOUBLE-CRESTED CORMORANT	2	T	2
SU	DOUBLE-CRESTED CORMORANT	2	T	1
FA	EARED GREBE	2	T	1
FA	PIED-BILLED GREBE	2	T	4
FA	PIED-BILLED GREBE	2	T	2
FA	PIED-BILLED GREBE	2	T	1
FA	PIED-BILLED GREBE	2	T	1
FA	PIED-BILLED GREBE	2	T	1
FA	PIED-BILLED GREBE	2	T	2
FA	PIED-BILLED GREBE	2	T	5
FA	PIED-BILLED GREBE	2	T	3
FA	PIED-BILLED GREBE	2	T	1
FA	PIED-BILLED GREBE	2	T	4
SP	PIED-BILLED GREBE	2	T	1
SP	PIED-BILLED GREBE	2	T	1
SP	PIED-BILLED GREBE	2	T	1
SP	PIED-BILLED GREBE	2	T	1
SP	PIED-BILLED GREBE	2	T	1
SP	PIED-BILLED GREBE	2	T	2
SP	PIED-BILLED GREBE	2	T	1
SP	PIED-BILLED GREBE	2	T	6
SP	PIED-BILLED GREBE	2	T	1
SU	PIED-BILLED GREBE	2	T	3
SU	PIED-BILLED GREBE	2	T	1
SU	PIED-BILLED GREBE	2	T	2
SU	PIED-BILLED GREBE	2	T	2
SU	PIED-BILLED GREBE	2	T	3
SU	PIED-BILLED GREBE	2	T	1
SU	PIED-BILLED GREBE	2	T	3
SU	PIED-BILLED GREBE	2	T	3
SU	PIED-BILLED GREBE	2	T	3
SU	PIED-BILLED GREBE	2	T	2
SU	PIED-BILLED GREBE	2	T	1
SU	PIED-BILLED GREBE	2	T	5
SU	PIED-BILLED GREBE	2	T	5

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	PIED-BILLED GREBE	2	T	2
SU	PIED-BILLED GREBE	2	T	2
SU	PIED-BILLED GREBE	2	T	2
SU	PIED-BILLED GREBE	2	T	30
SU	PIED-BILLED GREBE	2	T	8
SU	BLUE-WINGED TEAL	2	U	3
SU	MALLARD	2	U	6
SU	MALLARD	2	U	1
SU	MALLARD	2	U	1
SU	GADWALL	2	U	1
SP	GREAT BLUE HERON	2	U	2
SU	GREAT BLUE HERON	2	U	1
SU	AMERICAN COOT	2	U	7
SU	PIED-BILLED GREBE	2	U	4
WI	SNOW GOOSE	3	D	14
SP	GREAT BLUE HERON	3	Q	1
SP	CANADA GOOSE	3	Q	3
SU	DOUBLE-CRESTED CORMORANT	3	Q	3
SU	NORTHERN SHOVELER	3	R	1
SP	GREEN-WINGED TEAL	3	R	1
SP	CINNAMON TEAL	3	R	3
SP	CINNAMON TEAL	3	R	3
SP	BLUE-WINGED TEAL	3	R	4
SP	BLUE-WINGED TEAL	3	R	4
SU	BLUE-WINGED TEAL	3	R	1
SU	BLUE-WINGED TEAL	3	R	5
FA	MALLARD	3	R	1
FA	MALLARD	3	R	1
SP	MALLARD	3	R	2
SP	MALLARD	3	R	2
SU	MALLARD	3	R	1
SU	MALLARD	3	R	2
SU	MALLARD	3	R	3
SU	MALLARD	3	R	1
SU	MALLARD	3	R	2
FA	GADWALL	3	R	4
SP	GREAT BLUE HERON	3	R	1
SP	GREAT BLUE HERON	3	R	1
SP	GREAT BLUE HERON	3	R	1
SP	GREAT BLUE HERON	3	R	1
SP	GREAT BLUE HERON	3	R	1
SP	GREAT BLUE HERON	3	R	1
SU	GREAT BLUE HERON	3	R	1
SP	CANADA GOOSE	3	R	4
SP	CANADA GOOSE	3	R	2
SP	CANADA GOOSE	3	R	2
SP	CANADA GOOSE	3	R	5

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	BUFFLEHEAD	3	R	10
FA	BUFFLEHEAD	3	R	1
FA	BUFFLEHEAD	3	R	7
FA	AMERICAN COOT	3	R	1
FA	AMERICAN COOT	3	R	3
SP	AMERICAN COOT	3	R	2
SP	AMERICAN COOT	3	R	2
SP	AMERICAN COOT	3	R	2
SP	AMERICAN COOT	3	R	3
SP	AMERICAN COOT	3	R	1
SP	AMERICAN COOT	3	R	2
SP	AMERICAN COOT	3	R	2
SP	AMERICAN COOT	3	R	1
SP	AMERICAN COOT	3	R	1
SU	AMERICAN COOT	3	R	1
SU	AMERICAN COOT	3	R	2
SP	LONG-BILLED DOWITCHER	3	R	6
SP	COMMON MERGANSER	3	R	2
SP	BLACK-CROWNED NIGHT HERO	3	R	1
SP	BLACK-CROWNED NIGHT HERO	3	R	2
SU	BLACK-CROWNED NIGHT HERO	3	R	2
SU	BLACK-CROWNED NIGHT HERO	3	R	1
SU	BLACK-CROWNED NIGHT HERO	3	R	3
SU	BLACK-CROWNED NIGHT HERO	3	R	2
SU	BLACK-CROWNED NIGHT HERON	3	R	1
SP	AMERICAN WHITE PELICAN	3	R	25
SP	AMERICAN WHITE PELICAN	3	R	2
SU	AMERICAN WHITE PELICAN	3	R	1
SU	DOUBLE-CRESTED CORMORANT	3	R	1
FA	PIED-BILLED GREBE	3	R	2
FA	PIED-BILLED GREBE	3	R	4
FA	PIED-BILLED GREBE	3	R	3
SP	PIED-BILLED GREBE	3	R	2
SP	PIED-BILLED GREBE	3	R	2
SP	PIED-BILLED GREBE	3	R	1
SP	PIED-BILLED GREBE	3	R	2
SP	PIED-BILLED GREBE	3	R	2
SU	PIED-BILLED GREBE	3	R	1
SU	PIED-BILLED GREBE	3	R	1
SU	PIED-BILLED GREBE	3	R	3
SU	PIED-BILLED GREBE	3	R	1
FA	MALLARD	3	S	12
SP	MALLARD	3	S	2
SP	BLACK-CROWNED NIGHT HERO	3	S	1
SU	BLACK-CROWNED NIGHT HERO	3	S	1
SP	AMERICAN WHITE PELICAN	3	S	1
SU	GREAT BLUE HERON	3	T	1

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	CANADA GOOSE	3	U	24
SP	AMERICAN COOT	3	U	1
SP	COMMON SNIPE	4	L	1
SP	MALLARD	4	M	1
SP	MALLARD	4	N	2
SP	GREAT BLUE HERON	4	P	1
SP	MALLARD	4	Q	2
SP	CANADA GOOSE	4	Q	3
WI	CANADA GOOSE	4	Q	2
SU	NORTHERN SHOVELER	4	R	1
SP	GREEN-WINGED TEAL	4	R	5
SP	GREEN-WINGED TEAL	4	R	2
SU	BLUE-WINGED TEAL	4	R	7
SP	MALLARD	4	R	1
SP	MALLARD	4	R	1
SP	MALLARD	4	R	2
SU	MALLARD	4	R	1
SP	GREAT BLUE HERON	4	R	1
SU	GREAT BLUE HERON	4	R	1
FA	CANADA GOOSE	4	R	15
SP	COMMON GOLDENEYE	4	R	3
FA	AMERICAN COOT	4	R	1
SP	AMERICAN COOT	4	R	1
SU	AMERICAN COOT	4	R	1
SU	AMERICAN COOT	4	R	2
SU	BLACK-CROWNED NIGHT HREON	4	R	1
SU	AMERICAN WHITE PELICAN	4	R	26
SP	DOUBLE-CRESTED CORMORANT	4	R	1
SU	DOUBLE-CRESTED CORMORANT	4	R	1
SP	EARED GREBE	4	R	1
FA	PIED-BILLED GREBE	4	R	1
SP	PIED-BILLED GREBE	4	R	1
SU	PIED-BILLED GREBE	4	R	3
SU	PIED-BILLED GREBE	4	R	1
SP	GREEN-WINGED TEAL	4	S	1
SP	MALLARD	4	S	10
SP	MALLARD	4	S	2
SP	GREAT BLUE HERON	4	S	1
SP	LESSER SCAUP	4	S	1
SP	LESSER SCAUP	4	S	4
SP	LESSER SCAUP	4	S	4
SP	BUFFLEHEAD	4	S	5
SP	BUFFLEHEAD	4	S	1
SP	COMMON GOLDENEYE	4	S	7
SP	AMERICAN COOT	4	S	2
SP	COMMON MERGANSER	4	S	3
SP	BLACK-CROWNED NIGHT HERON	4	S	1

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	BLACK-CROWNED NIGHT HERON	4	S	2
SP	BLACK-CROWNED NIGHT HERON	4	S	2
SP	BLACK-CROWNED NIGHT HERON	4	S	2
SP	BLACK-CROWNED NIGHT HERON	4	S	1
SP	MALLARD	4	T	1
SU	MALLARD	4	T	1
SU	MALLARD	4	T	2
SU	DOUBLE-CRESTED CORMORANT	4	T	1
SU	GREAT BLUE HERON	5	G	1
SP	GREEN-WINGED TEAL	5	I	1
SU	BLUE-WINGED TEAL	5	I	1
SP	MALLARD	5	I	2
FA	CANADA GOOSE	5	Q	15
FA	DOUBLE-CRESTED CORMORANT	5	Q	1
SU	MALLARD	5	S	9
SU	MALLARD	5	S	1
SU	GREAT BLUE HERON	5	S	2
FA	CANADA GOOSE	5	T	5
SP	CANADA GOOSE	5	T	8
SU	MALLARD	6	J	2
FA	CANADA GOOSE	6	K	26
FA	GREAT BLUE HERON	6	O	1
FA	CANADA GOOSE	7	C	27
SP	CANADA GOOSE	7	C	2
SP	CANADA GOOSE	7	F	2
SP	MALLARD	7	I	1
SP	MALLARD	7	I	1
SU	MALLARD	7	I	2
SU	MALLARD	7	I	2
SU	MALLARD	7	I	4
SP	MALLARD	7	J	2
FA	CANADA GOOSE	7	J	24
FA	CANADA GOOSE	7	J	3
SP	CANADA GOOSE	7	J	2
SP	CANADA GOOSE	7	J	2
SP	MALLARD	7	K	1
SP	MALLARD	7	K	2
SP	MALLARD	7	K	1
SP	MALLARD	7	K	2
SP	MALLARD	7	K	3
SU	MALLARD	7	K	1
SU	MALLARD	7	K	1
SP	GREAT BLUE HERON	7	K	1
FA	CANADA GOOSE	7	K	26
FA	CANADA GOOSE	7	K	7
SP	CANADA GOOSE	7	K	2
WI	CANADA GOOSE	7	K	8

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	DOUBLE-CRESTED CORMORANT	7	K	1
SP	MALLARD	7	L	2
SP	MALLARD	7	L	3
SP	MALLARD	7	L	5
SU	MALLARD	7	L	1
WI	MALLARD	7	L	1
SP	GREAT BLUE HERON	7	L	1
SP	DOUBLE-CRESTED CORMORANT	7	L	2
SU	BLUE-WINGED TEAL	7	M	2
FA	MALLARD	7	M	3
SP	MALLARD	7	M	2
SU	MALLARD	7	M	3
SU	MALLARD	7	M	2
SU	DOUBLE-CRESTED CORMORANT	7	M	2
SP	GREEN-WINGED TEAL	7	N	2
SP	CINNAMON TEAL	7	N	2
SP	CINNAMON TEAL	7	N	1
SU	CINNAMON TEAL	7	N	2
SU	CINNAMON TEAL	7	N	2
SP	BLUE-WINGED TEAL	7	N	1
SU	BLUE-WINGED TEAL	7	N	1
FA	MALLARD	7	N	4
FA	MALLARD	7	N	4
FA	MALLARD	7	N	9
FA	MALLARD	7	N	7
FA	MALLARD	7	N	5
FA	MALLARD	7	N	7
FA	MALLARD	7	N	1
FA	MALLARD	7	N	8
FA	MALLARD	7	N	6
FA	MALLARD	7	N	5
FA	MALLARD	7	N	2
SP	MALLARD	7	N	2
SP	MALLARD	7	N	3
SP	MALLARD	7	N	2
SP	MALLARD	7	N	6
SP	MALLARD	7	N	2
SP	MALLARD	7	N	2
SP	MALLARD	7	N	3
SP	MALLARD	7	N	2
SP	MALLARD	7	N	2
SP	MALLARD	7	N	2
SP	MALLARD	7	N	2
SP	MALLARD	7	N	2
SP	MALLARD	7	N	4
SP	MALLARD	7	N	2
SP	MALLARD	7	N	2

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MALLARD	7	N	2
SP	MALLARD	7	N	2
SP	MALLARD	7	N	3
SU	MALLARD	7	N	2
SU	MALLARD	7	N	1
SU	MALLARD	7	N	4
SU	MALLARD	7	N	5
SU	MALLARD	7	N	3
SU	MALLARD	7	N	3
SU	MALLARD	7	N	3
SU	MALLARD	7	N	3
SU	MALLARD	7	N	3
SU	MALLARD	7	N	1
SU	MALLARD	7	N	1
SU	MALLARD	7	N	1
SU	MALLARD	7	N	1
WI	MALLARD	7	N	6
WI	MALLARD	7	N	2
SU	GADWALL	7	N	1
FA	GREAT BLUE HERON	7	N	1
FA	GREAT BLUE HERON	7	N	1
SP	GREAT BLUE HERON	7	N	1
SP	GREAT BLUE HERON	7	N	1
SP	GREAT BLUE HERON	7	N	1
SP	GREAT BLUE HERON	7	N	1
SP	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	1
SU	GREAT BLUE HERON	7	N	2
SP	CANADA GOOSE	7	N	3
SP	CANADA GOOSE	7	N	2
SU	COMMON MERGANSER	7	N	1
SU	COMMON MERGANSER	7	N	1
SU	BLACK-CROWNED NIGHT HERO	7	N	2
WI	MALLARD	7	O	4
FA	GREAT BLUE HERON	7	O	1
SU	GREAT BLUE HERON	7	O	2
SP	CANADA GOOSE	7	O	3
SP	WESTERN GREBE	7	P	1
SP	GREEN-WINGED TEAL	7	P	9

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	GREEN-WINGED TEAL	7	P	11
SP	GREEN-WINGED TEAL	7	P	2
SP	GREEN-WINGED TEAL	7	P	5
SP	GREEN-WINGED TEAL	7	P	1
SP	GREEN-WINGED TEAL	7	P	9
SP	GREEN-WINGED TEAL	7	P	5
SP	CINNAMON TEAL	7	P	3
SP	BLUE-WINGED TEAL	7	P	2
SP	BLUE-WINGED TEAL	7	P	1
SU	BLUE-WINGED TEAL	7	P	1
SU	BLUE-WINGED TEAL	7	P	1
FA	MALLARD	7	P	1
SP	MALLARD	7	P	19
SP	MALLARD	7	P	11
SP	MALLARD	7	P	2
SP	MALLARD	7	P	6
SP	MALLARD	7	P	1
SP	MALLARD	7	P	2
SP	MALLARD	7	P	12
SP	MALLARD	7	P	2
SP	MALLARD	7	P	3
SP	MALLARD	7	P	2
SP	MALLARD	7	P	1
SP	MALLARD	7	P	8
SP	MALLARD	7	P	5
SP	MALLARD	7	P	5
SP	MALLARD	7	P	1
SP	MALLARD	7	P	2
SP	MALLARD	7	P	1
SP	MALLARD	7	P	1
SU	MALLARD	7	P	2
SU	MALLARD	7	P	8
SU	MALLARD	7	P	1
SU	MALLARD	7	P	1
SU	MALLARD	7	P	1
SU	MALLARD	7	P	1
SU	MALLARD	7	P	12
SU	MALLARD	7	P	6
SU	MALLARD	7	P	4
SU	MALLARD	7	P	4
SU	MALLARD	7	P	7
SU	MALLARD	7	P	6
WI	MALLARD	7	P	2
WI	MALLARD	7	P	3
WI	MALLARD	7	P	7
WI	MALLARD	7	P	3
SP	GREAT BLUE HERON	7	P	1

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	GREAT BLUE HERON	7	P	1
SP	GREAT BLUE HERON	7	P	2
SP	GREAT BLUE HERON	7	P	1
SP	GREAT BLUE HERON	7	P	1
SP	GREAT BLUE HERON	7	P	2
SP	GREAT BLUE HERON	7	P	1
SP	GREAT BLUE HERON	7	P	1
SP	GREAT BLUE HERON	7	P	2
SP	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	2
SU	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	1
SU	GREAT BLUE HERON	7	P	1
SP	LESSER SCAUP	7	P	1
SP	LESSER SCAUP	7	P	17
SP	LESSER SCAUP	7	P	4
SP	REDHEAD	7	P	8
SP	RING-NECKED DUCK	7	P	9
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	6
SP	CANADA GOOSE	7	P	3
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	3
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	4
SP	CANADA GOOSE	7	P	2
SP	CANADA GOOSE	7	P	6
FA	BUFFLEHEAD	7	P	2
FA	BUFFLEHEAD	7	P	2
SP	BUFFLEHEAD	7	P	3
SP	BUFFLEHEAD	7	P	3
SP	BUFFLEHEAD	7	P	2
SP	BUFFLEHEAD	7	P	1
SP	BUFFLEHEAD	7	P	2
FA	COMMON GOLDENEYE	7	P	3
SP	COMMON GOLDENEYE	7	P	6
SP	COMMON GOLDENEYE	7	P	6
SP	COMMON GOLDENEYE	7	P	10

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	AMERICAN COOT	7	P	1
SP	COMMON MERGANSER	7	P	2
SP	COMMON MERGANSER	7	P	1
SP	COMMON MERGANSER	7	P	3
SU	COMMON MERGANSER	7	P	1
SU	BLACK-CROWNED NIGHT HREON	7	P	1
SU	BLACK-CROWNED NIGHT HERO	7	P	1
SU	BLACK-CROWNED NIGHT HERO	7	P	1
SU	BLACK-CROWNED NIGHT HERON	7	P	1
SU	AMERICAN WHITE PELICAN	7	P	3
SP	DOUBLE-CRESTED CORMORANT	7	P	1
SP	DOUBLE-CRESTED CORMORANT	7	P	1
SP	DOUBLE-CRESTED CORMORANT	7	P	1
SU	DOUBLE-CRESTED CORMORANT	7	P	1
SU	DOUBLE-CRESTED CORMORANT	7	P	1
SU	DOUBLE-CRESTED CORMORANT	7	P	1
SU	DOUBLE-CRESTED CORMORANT	7	P	1
SU	DOUBLE-CRESTED CORMORANT	7	P	2
SU	DOUBLE-CRESTED CORMORANT	7	P	5
SU	DOUBLE-CRESTED CORMORANT	7	P	2
SU	DOUBLE-CRESTED CORMORANT	7	P	2
FA	PIED-BILLED GREBE	7	P	1
SP	PIED-BILLED GREBE	7	P	1
SP	PIED-BILLED GREBE	7	P	1
SP	PIED-BILLED GREBE	7	P	1
SP	PIED-BILLED GREBE	7	P	1
SP	PIED-BILLED GREBE	7	P	1
SU	PIED-BILLED GREBE	7	P	4
SU	PIED-BILLED GREBE	7	P	7
SU	PIED-BILLED GREBE	7	P	1
SU	PIED-BILLED GREBE	7	P	2
SU	PIED-BILLED GREBE	7	P	14
SU	PIED-BILLED GREBE	7	P	3
SU	PIED-BILLED GREBE	7	P	2
SU	PIED-BILLED GREBE	7	P	2
SP	MALLARD	7	Q	2
SP	MALLARD	7	Q	3
SP	GREAT BLUE HERON	7	Q	2
SP	GREAT BLUE HERON	7	Q	1
SP	CANADA GOOSE	7	Q	2
SP	MALLARD	8	C	2
SU	GREAT BLUE HERON	8	C	1
SU	GREAT BLUE HERON	8	C	1
SU	DOUBLE-CRESTED CORMORANT	8	C	1
FA	PINTAIL	8	D	8
SP	CANADA GOOSE	8	D	2
FA	SNOW GOOSE	8	D	202

229

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
WI	CANADA GOOSE	8	G	1
SP	MALLARD	8	L	2
SP	CANADA GOOSE	8	L	5
WI	CANADA GOOSE	8	L	30
SU	DOUBLE-CRESTED CORMORANT	8	L	1
FA	CANADA GOOSE	8	M	89
FA	CANADA GOOSE	8	N	27
SU	MALLARD	8	P	5
SU	GREAT BLUE HERON	8	P	1
SU	GREAT BLUE HERON	8	P	1
SP	CANADA GOOSE	9	C	2
SU	MALLARD	9	D	1
FA	CANADA GOOSE	9	J	4
SP	MALLARD	9	N	1
SP	MALLARD	10	C	2
SU	GREAT BLUE HERON	10	G	1
FA	CANADA GOOSE	10	H	63
FA	GREEN-WINGED TEAL	10	N	2
SP	GREEN-WINGED TEAL	10	N	4
FA	BLUE-WINGED TEAL	10	N	2
FA	MALLARD	10	N	8
FA	MALLARD	10	N	2
SP	MALLARD	10	N	2
SP	MALLARD	10	N	3
SP	MALLARD	10	N	2
SP	MALLARD	10	N	2
SU	MALLARD	10	N	2
SU	MALLARD	10	N	1
SP	GREAT BLUE HERON	10	N	1
SU	GREAT BLUE HERON	10	N	1
WI	AMERICAN WIGEON	10	O	2
WI	AMERICAN WIGEON	10	O	2
WI	AMERICAN WIGEON	10	O	2
WI	AMERICAN WIGEON	10	O	1
FA	GREEN-WINGED TEAL	10	O	4
FA	BLUE-WINGED TEAL	10	O	5
FA	BLUE-WINGED TEAL	10	O	2
SU	BLUE-WINGED TEAL	10	O	4
SU	BLUE-WINGED TEAL	10	O	4
SU	BLUE-WINGED TEAL	10	O	1
SU	BLUE-WINGED TEAL	10	O	2
FA	MALLARD	10	O	9
FA	MALLARD	10	O	1
FA	MALLARD	10	O	6
FA	MALLARD	10	O	3
FA	MALLARD	10	O	3
FA	MALLARD	10	O	5

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	MALLARD	10	O	3
FA	MALLARD	10	O	2
FA	MALLARD	10	O	4
FA	MALLARD	10	O	3
FA	MALLARD	10	O	15
FA	MALLARD	10	O	8
FA	MALLARD	10	O	4
FA	MALLARD	10	O	2
SP	MALLARD	10	O	1
SP	MALLARD	10	O	1
SP	MALLARD	10	O	4
SP	MALLARD	10	O	2
SP	MALLARD	10	O	2
SP	MALLARD	10	O	1
SP	MALLARD	10	O	2
SP	MALLARD	10	O	4
SP	MALLARD	10	O	1
SP	MALLARD	10	O	3
SP	MALLARD	10	O	2
SP	MALLARD	10	O	2
SP	MALLARD	10	O	2
SP	MALLARD	10	O	2
SP	MALLARD	10	O	1
SU	MALLARD	10	O	2
SU	MALLARD	10	O	2
SU	MALLARD	10	O	4
SU	MALLARD	10	O	10
SU	MALLARD	10	O	6
SU	MALLARD	10	O	8
SU	MALLARD	10	O	1
SU	MALLARD	10	O	1
SU	MALLARD	10	O	5
SU	MALLARD	10	O	2
SU	MALLARD	10	O	6
SU	MALLARD	10	O	6
SU	MALLARD	10	O	10
SU	MALLARD	10	O	6
SU	MALLARD	10	O	7
SU	MALLARD	10	O	7
SU	MALLARD	10	O	11
SU	MALLARD	10	O	8
SU	MALLARD	10	O	35
SU	MALLARD	10	O	2
SU	MALLARD	10	O	2
SU	MALLARD	10	O	8
SU	MALLARD	10	O	1
SU	MALLARD	10	O	2

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MALLARD	10	O	1
SU	MALLARD	10	O	1
SU	MALLARD	10	O	2
WI	MALLARD	10	O	5
WI	MALLARD	10	O	5
WI	MALLARD	10	O	7
WI	MALLARD	10	O	4
WI	MALLARD	10	O	8
WI	MALLARD	10	O	4
WI	MALLARD	10	O	1
SU	GADWALL	10	O	2
SP	GREAT BLUE HERON	10	O	1
SP	GREAT BLUE HERON	10	O	2
SU	GREAT BLUE HERON	10	O	1
SU	GREAT BLUE HERON	10	O	1
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	2
SP	CANADA GOOSE	10	O	1
FA	BUFFLEHEAD	10	O	1
FA	BUFFLEHEAD	10	O	1
SU	DOUBLE-CRESTED CORMORANT	10	O	1
SU	DOUBLE-CRESTED CORMORANT	10	O	8
SU	DOUBLE-CRESTED CORMORANT	10	O	5
SU	DOUBLE-CRESTED CORMORANT	10	O	2
SU	PIED-BILLED GREBE	10	O	1
SP	AMERICAN WIGEON	10	P	2
FA	GREEN-WINGED TEAL	10	P	3
FA	GREEN-WINGED TEAL	10	P	7
SP	GREENWINGED TEAL	10	P	4
WI	GREEN-WINGED TEAL	10	P	3
SP	BLUE-WINGED TEAL	10	P	2
SP	BLUE-WINGED TEAL	10	P	2
FA	MALLARD	10	P	8
FA	MALLARD	10	P	1
FA	MALLARD	10	P	5
FA	MALLARD	10	P	6
FA	MALLARD	10	P	2
SP	MALLARD	10	P	2
SP	MALLARD	10	P	2
SP	MALLARD	10	P	1
SP	MALLARD	10	P	2

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	MALLARD	10	P	1
SP	MALLARD	10	P	5
SP	MALLARD	10	P	2
SP	MALLARD	10	P	2
SP	MALLARD	10	P	10
SP	MALLARD	10	P	4
SU	MALLARD	10	P	3
SU	MALLARD	10	P	14
SU	MALLARD	10	P	1
SU	MALLARD	10	P	2
SU	MALLARD	10	P	12
SU	MALLARD	10	P	6
SU	MALLARD	10	P	4
SU	MALLARD	10	P	1
SU	MALLARD	10	P	3
SU	MALLARD	10	P	3
WI	MALLARD	10	P	12
WI	MALLARD	10	P	2
WI	MALLARD	10	P	3
WI	MALLARD	10	P	1
SP	GADWALL	10	P	2
SP	GADWALL	10	P	2
SP	GADWALL	10	P	2
SU	GADWALL	10	P	2
FA	GREAT BLUE HERON	10	P	1
SU	GREAT BLUE HERON	10	P	1
SP	LESSER SCAUP	10	P	2
SP	CANADA GOOSE	10	P	3
SP	CANADA GOOSE	10	P	4
FA	MALLARD	10	Q	1
SP	MALLARD	11	D	1
SP	GREEN-WINGED TEAL	11	E	2
SP	MALLARD	11	E	6
SP	MALLARD	11	E	2
SP	MALLARD	11	E	2
SP	MALLARD	11	E	4
SP	MALLARD	11	E	2
SP	MALLARD	11	E	1
SP	GREAT BLUE HERON	11	E	1
SP	GREAT BLUE HERON	11	E	1
SU	GREAT BLUE HERON	11	E	1
SU	GREAT BLUE HERON	11	E	1
SU	GREAT BLUE HERON	11	E	1
FA	CANADA GOOSE	11	E	5
SP	MALLARD	11	F	6
WI	CANADA GOOSE	11	F	111
SP	LONG-BILLED CURLEW	11	F	6

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	CANADA GOOSE	11	M	22
SP	NORTHERN SHOVELER	11	N	4
SU	NORTHERN SHOVELER	11	N	2
FA	GREEN-WINGED TEAL	11	N	2
SP	GREEN-WINGED TEAL	11	N	2
SU	GREEN-WINGED TEAL	11	N	1
SU	CINNAMON TEAL	11	N	1
SU	CINNAMON TEAL	11	N	1
SP	BLUE-WINGED TEAL	11	N	2
SU	BLUE-WINGED TEAL	11	N	6
FA	MALLARD	11	N	5
SP	MALLARD	11	N	2
SP	MALLARD	11	N	1
SP	MALLARD	11	N	2
SU	MALLARD	11	N	6
SU	MALLARD	11	N	7
SU	MALLARD	11	N	9
SU	MALLARD	11	N	4
SU	MALLARD	11	N	9
SU	MALLARD	11	N	3
SU	MALLARD	11	N	7
SU	MALLARD	11	N	6
SU	MALLARD	11	N	7
SU	MALLARD	11	N	20
SP	GREAT BLUE HERON	11	N	1
SP	LESSER SCAUP	11	N	5
SP	CANADA GOOSE	11	N	2
SP	PIED-BILLED GREBE	11	N	2
SP	MALLARD	11	P	4
SP	MALLARD	11	P	1
SU	MALLARD	11	P	8
SU	MALLARD	11	P	1
SU	GREAT BLUE HERON	11	P	1
SU	GREAT BLUE HERON	11	P	1
SP	BUFFLEHEAD	11	P	1
SU	BLACK-CROWNED NIGHT HERO	11	P	1
SU	DOUBLE-CRESTED CORMORANT	11	P	1
SU	GREEN-WINGED TEAL	11	Q	2
FA	MALLARD	11	Q	3
FA	MALLARD	11	Q	3
FA	MALLARD	11	Q	5
SP	MALLARD	11	Q	11
SP	MALLARD	11	Q	6
SP	MALLARD	11	Q	3
SP	MALLARD	11	Q	3
SP	MALLARD	11	Q	4
SU	MALLARD	11	Q	45

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MALLARD	11	Q	4
SU	MALLARD	11	Q	1
SU	MALLARD	11	Q	1
SU	MALLARD	11	Q	4
SU	MALLARD	11	Q	2
SU	MALLARD	11	Q	2
SU	MALLARD	11	Q	2
WI	MALLARD	11	Q	1
SP	GREAT BLUE HERON	11	Q	1
SP	GREAT BLUE HERON	11	Q	1
SP	GREAT BLUE HERON	11	Q	1
SU	GREAT BLUE HERON	11	Q	1
SU	GREAT BLUE HERON	11	Q	1
SU	GREAT BLUE HERON	11	Q	1
SU	GREAT BLUE HERON	11	Q	1
SU	GREAT BLUE HERON	11	Q	1
SU	GREAT BLUE HERON	11	Q	1
SP	LESSER SCAUP	11	Q	8
SP	LESSER SCAUP	11	Q	2
SP	CANADA GOOSE	11	Q	1
SP	CANADA GOOSE	11	Q	1
SP	CANADA GOOSE	11	Q	2
SP	CANADA GOOSE	11	Q	2
SP	BUFFLEHEAD	11	Q	1
SP	DOUBLE-CRESTED CORMORANT	11	Q	1
SU	DOUBLE-CRESTED CORMORANT	11	Q	2
SU	DOUBLE-CRESTED CORMORANT	11	Q	1
SU	DOUBLE-CRESTED CORMORANT	11	Q	8
SU	DOUBLE-CRESTED CORMORANT	11	Q	2
SU	DOUBLE-CRESTED CORMORANT	11	Q	4
SU	DOUBLE-CRESTED CORMORANT	11	Q	2
SU	DOUBLE-CRESTED CORMORANT	11	Q	4
SU	DOUBLE-CRESTED CORMORANT	11	Q	1
WI	CANADA GOOSE	11	R	6
SP	MALLARD	12	F	1
SP	MALLARD	12	F	3
SP	MALLARD	12	F	2
SU	GREAT BLUE HERON	12	F	1
FA	CANADA GOOSE	12	F	25
SU	DOUBLE-CRESTED CORMORANT	12	F	2
SP	MALLARD	12	G	2
SU	MALLARD	12	G	3
FA	CANADA GOOSE	12	G	16
SP	CANADA GOOSE	12	G	3
SU	MALLARD	12	L	3
SU	MALLARD	12	L	3
SU	MALLARD	12	L	1

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	BLUE-WINGED TEAL	12	O	3
FA	BLUE-WINGED TEAL	12	O	1
SP	BLUEWINGED TEAL	12	O	2
SU	BLUE-WINGED TEAL	12	O	2
SU	BLUE-WINGED TEAL	12	O	1
SU	BLUE-WINGED TEAL	12	O	4
SU	BLUE-WINGED TEAL	12	O	1
SP	MALLARD	12	O	6
FA	MALLARD	12	O	19
FA	MALLARD	12	O	2
FA	MALLARD	12	O	5
FA	MALLARD	12	O	1
FA	MALLARD	12	O	5
FA	MALLARD	12	O	1
FA	MALLARD	12	O	2
FA	MALLARD	12	O	9
FA	MALLARD	12	O	1
FA	MALLARD	12	O	9
FA	MALLARD	12	O	7
FA	MALLARD	12	O	4
FA	MALLARD	12	O	4
FA	MALLARD	12	O	8
FA	MALLARD	12	O	8
SP	MALLARD	12	O	2
SP	MALLARD	12	O	1
SP	MALLARD	12	O	2
SP	MALLARD	12	O	9
SP	MALLARD	12	O	2
SP	MALLARD	12	O	4
SP	MALLARD	12	O	1
SP	MALLARD	12	O	1
SP	MALLARD	12	O	10
SP	MALLARD	12	O	2
SP	MALLARD	12	O	2
SP	MALLARD	12	O	2
SP	MALLARD	12	O	4
SP	MALLARD	12	O	4
SP	MALLARD	12	O	2
SP	MALLARD	12	O	9
SU	MALLARD	12	O	1
SU	MALLARD	12	O	3
SU	MALLARD	12	O	5
SU	MALLARD	12	O	7
SU	MALLARD	12	O	14
SU	MALLARD	12	O	3
SU	MALLARD	12	O	10
SU	MALLARD	12	O	1

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	GREEN-WINGED TEAL	12	P	8
SP	GREENWINGED TEAL	12	P	12
SU	BLUE-WINGED TEAL	12	P	2
SU	BLUE-WINGED TEAL	12	P	1
SU	BLUE-WINGED TEAL	12	P	2
SU	BLUE-WINGED TEAL	12	P	2
FA	MALLARD	12	P	11
FA	MALLARD	12	P	15
FA	MALLARD	12	P	14
FA	MALLARD	12	P	16
FA	MALLARD	12	P	20
FA	MALLARD	12	P	6
FA	MALLARD	12	P	2
SP	MALLARD	12	P	11
SP	MALLARD	12	P	1
SP	MALLARD	12	P	24
SP	MALLARD	12	P	7
SP	MALLARD	12	P	2
SP	MALLARD	12	P	9
SP	MALLARD	12	P	1
SP	MALLARD	12	P	2
SP	MALLARD	12	P	4
SP	MALLARD	12	P	1
SP	MALLARD	12	P	3
SP	MALLARD	12	P	7
SP	MALLARD	12	P	3
SU	MALLARD	12	P	3
SU	MALLARD	12	P	2
SU	MALLARD	12	P	1
SU	MALLARD	12	P	1
SU	MALLARD	12	P	1
SU	MALLARD	12	P	7
SU	MALLARD	12	P	2
SU	MALLARD	12	P	1
SU	MALLARD	12	P	6
SU	MALLARD	12	P	7
SU	MALLARD	12	P	2
SU	MALLARD	12	P	7
SU	MALLARD	12	P	1
SU	MALLARD	12	P	1
SU	MALLARD	12	P	1
SP	GADWALL	12	P	1
SU	GADWALL	12	P	2
SU	GADWALL	12	P	1
SU	GADWALL	12	P	1
SU	GADWALL	12	P	2
FA	GREAT BLUE HERON	12	P	1

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SU	GREAT BLUE HERON	12	P	1
SP	LESSER SCAUP	12	P	1
SP	LESSER SCAUP	12	P	1
SP	LESSER SCAUP	12	P	3
SP	LESSER SCAUP	12	P	2
SP	REDHEAD	12	P	2
SP	RING-NECKED DUCK	12	P	2
SP	RING-NECKED DUCK	12	P	2
SP	GREATER SCAUP	12	P	3
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	4
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	3
SP	CANADA GOOSE	12	P	4
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	2
SP	CANADA GOOSE	12	P	2
FA	BUFFLEHEAD	12	P	2
FA	BUFFLEHEAD	12	P	5
FA	BUFFLEHEAD	12	P	3
FA	BUFFLEHEAD	12	P	1
FA	BUFFLEHEAD	12	P	4
FA	BUFFLEHEAD	12	P	4
SP	BUFFLEHEAD	12	P	3
SP	BUFFLEHEAD	12	P	4
SP	BUFFLEHEAD	12	P	2
SP	COMMON GOLDENEYE	12	P	1
SP	DOUBLE-CRESTED CORMORANT	12	P	1
SP	DOUBLE-CRESTED CORMORANT	12	P	6
SP	DOUBLE-CRESTED CORMORANT	12	P	4
SP	DOUBLE-CRESTED CORMORANT	12	P	1
SU	DOUBLE-CRESTED CORMORANT	12	P	4
SU	DOUBLE-CRESTED CORMORANT	12	P	5

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	DOUBLE-CRESTED CORMORANT	12	P	5
SU	DOUBLE-CRESTED CORMORANT	12	P	1
SU	DOUBLE-CRESTED CORMORANT	12	P	4
SU	DOUBLE-CRESTED CORMORANT	12	P	10
SU	DOUBLE-CRESTED CORMORANT	12	P	4
SU	DOUBLE-CRESTED CORMORANT	12	P	1
SU	DOUBLE-CRESTED CORMORANT	12	P	1
SU	DOUBLE-CRESTED CORMORANT	12	P	1
SU	DOUBLE-CRESTED CORMORANT	12	P	3
SU	DOUBLE-CRESTED CORMORANT	12	P	3
SU	DOUBLE-CRESTED CORMORANT	12	P	1
SU	DOUBLE-CRESTED CORMORANT	12	P	1
SU	DOUBLE-CRESTED CORMORANT	12	P	1
SP	PIED-BILLED GREBE	12	P	2
SU	PIED-BILLED GREBE	12	P	2
FA	GREEN-WINGED TEAL	12	Q	3
SP	GREEN-WINGED TEAL	12	Q	2
FA	BLUE-WINGED TEAL	12	Q	2
SU	BLUE-WINGED TEAL	12	Q	2
FA	MALLARD	12	Q	2
FA	MALLARD	12	Q	1
FA	MALLARD	12	Q	20
FA	MALLARD	12	Q	2
FA	MALLARD	12	Q	2
SP	MALLARD	12	Q	18
SP	MALLARD	12	Q	3
SP	MALLARD	12	Q	3
SP	MALLARD	12	Q	1
SP	MALLARD	12	Q	1
SP	MALLARD	12	Q	6
SP	MALLARD	12	Q	7
SP	MALLARD	12	Q	4
SP	MALLARD	12	Q	2
SP	MALLARD	12	Q	2
SU	MALLARD	12	Q	3
SU	MALLARD	12	Q	4
SU	MALLARD	12	Q	6
SU	MALLARD	12	Q	7
SU	MALLARD	12	Q	3
SU	MALLARD	12	Q	2
SU	MALLARD	12	Q	5
SU	MALLARD	12	Q	6
SU	MALLARD	12	Q	5
SU	MALLARD	12	Q	1
SU	MALLARD	12	Q	4
SU	MALLARD	12	Q	3
SP	GREAT BLUE HERON	12	Q	1

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	GREAT BLUE HERON	12	Q	1
SP	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SU	GREAT BLUE HERON	12	Q	1
SP	REDHEAD	12	Q	23
SP	RING-NECKED DUCK	12	Q	3
SP	GREATER SCAUP	12	Q	14
SP	CANADA GOOSE	12	Q	2
SP	CANADA GOOSE	12	Q	2
SP	CANADA GOOSE	12	Q	5
FA	BUFFLEHEAD	12	Q	13
FA	BUFFLEHEAD	12	Q	14
FA	BUFFLEHEAD	12	Q	13
FA	BUFFLEHEAD	12	Q	6
FA	BUFFLEHEAD	12	Q	6
SP	BUFFLEHEAD	12	Q	6
SP	BUFFLEHEAD	12	Q	1
SP	BUFFLEHEAD	12	Q	10
SP	BUFFLEHEAD	12	Q	2
SP	BUFFLEHEAD	12	Q	4
FA	COMMON GOLDENEYE	12	Q	2
SP	COMMON GOLDENEYE	12	Q	2
SP	COMMON GOLDENEYE	12	Q	3
SP	COMMON GOLDENEYE	12	Q	4
SP	COMMON GOLDENEYE	12	Q	2
SP	COMMON GOLDENEYE	12	Q	3
SP	BLACK-CROWNED NIGHT HERO	12	Q	1
SU	BLACK-CROWNED NIGHT HERO	12	Q	1
SU	BLACK-CROWNED NIGHT HERON	12	Q	2
FA	DOUBLE-CRESTED CORMORANT	12	Q	3
SP	DOUBLE-CRESTED CORMORANT	12	Q	2
SP	DOUBLE-CRESTED CORMORANT	12	Q	3
SU	DOUBLE-CRESTED CORMORANT	12	Q	3
SU	DOUBLE-CRESTED CORMORANT	12	Q	6
SU	DOUBLE-CRESTED CORMORANT	12	Q	1
SU	DOUBLE-CRESTED CORMORANT	12	Q	3
SU	DOUBLE-CRESTED CORMORANT	12	Q	2
SU	DOUBLE-CRESTED CORMORANT	12	Q	3
SU	DOUBLE-CRESTED CORMORANT	12	Q	1
SU	DOUBLE-CRESTED CORMORANT	12	Q	2

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	DOUBLE-CRESTED CORMORANT	12	Q	1
SU	DOUBLE-CRESTED CORMORANT	12	Q	3
SU	DOUBLE-CRESTED CORMORANT	12	Q	7
SU	PIED-BILLED GREBE	12	Q	1
SU	GREAT BLUE HERON	12	R	1
SU	DOUBLE-CRESTED CORMORANT	12	R	1
SU	GREAT BLUE HERON	12	S	1
SU	GREAT BLUE HERON	13	F	1
FA	CANADA GOOSE	13	F	15
SP	MALLARD	13	G	1
SU	MALLARD	13	G	1
SU	MALLARD	13	G	1
SU	MALLARD	13	G	4
SU	MALLARD	13	G	2
SU	GREAT BLUE HERON	13	G	1
SP	GREEN-WINGED TEAL	13	H	2
FA	MALLARD	13	H	3
FA	MALLARD	13	H	3
FA	MALLARD	13	H	1
SP	MALLARD	13	H	4
SP	MALLARD	13	H	1
SP	MALLARD	13	H	2
SP	MALLARD	13	H	2
SP	MALLARD	13	H	1
SP	MALLARD	13	H	1
SP	MALLARD	13	H	4
SP	MALLARD	13	H	1
SP	MALLARD	13	H	2
SP	MALLARD	13	H	2
SP	MALLARD	13	H	2
SU	MALLARD	13	H	1
SU	MALLARD	13	H	1
SU	MALLARD	13	H	4
SU	MALLARD	13	H	8
SU	MALLARD	13	H	1
SU	MALLARD	13	H	2
SU	MALLARD	13	H	1
SU	MALLARD	13	H	1
SU	MALLARD	13	H	1
SP	GREAT BLUE HERON	13	H	1
SP	GREAT BLUE HERON	13	H	1
SU	GREAT BLUE HERON	13	H	1
SU	GREAT BLUE HERON	13	H	1
SU	GREAT BLUE HERON	13	H	1
SU	GREAT BLUE HERON	13	H	1
SU	GREAT BLUE HERON	13	H	1
SP	RING-NECKED DUCK	13	H	3

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	RING-NECKED DUCK	13	H	3
SP	GREATER SCAUP	13	H	2
FA	CANADA GOOSE	13	H	14
FA	CANADA GOOSE	13	H	9
SP	CANADA GOOSE	13	H	2
SP	CANADA GOOSE	13	H	2
FA	BUFFLEHEAD	13	H	4
FA	SNOW GOOSE	13	H	100
SP	MALLARD	13	I	1
SP	GREEN-WINGED TEAL	13	L	12
FA	MALLARD	13	L	5
SP	MALLARD	13	L	2
SU	MALLARD	13	L	4
SP	PIED-BILLED GREBE	13	L	1
SU	PIED-BILLED GREBE	13	L	1
FA	MALLARD	13	N	8
SU	MALLARD	13	N	10
SU	GREAT BLUE HERON	13	N	1
FA	MALLARD	13	P	10
SU	MALLARD	13	P	3
SU	GREAT BLUE HERON	13	P	2
FA	MALLARD	13	Q	5
SP	MALLARD	13	Q	9
SP	MALLARD	13	Q	4
SP	MALLARD	13	Q	4
SP	MALLARD	13	Q	2
SU	MALLARD	13	Q	7
WI	MALLARD	13	Q	2
SP	GREAT BLUE HERON	13	Q	1
SU	GREAT BLUE HERON	13	Q	1
SU	GREAT BLUE HERON	13	Q	1
SU	GREAT BLUE HERON	13	Q	1
SU	GREAT BLUE HERON	13	Q	1
SU	GREAT BLUE HERON	13	Q	1
SP	LESSER SCAUP	13	Q	18
SP	LESSER SCAUP	13	Q	5
SP	RING-NECKED DUCK	13	Q	5
SP	GREATER SCAUP	13	Q	1
SP	GREATER SCAUP	13	Q	16
SP	CANADA GOOSE	13	Q	3
SP	CANADA GOOSE	13	Q	3
SP	CANADA GOOSE	13	Q	2
SP	CANADA GOOSE	13	Q	2
SU	CANADA GOOSE	13	Q	1
FA	BUFFLEHEAD	13	Q	6
FA	BUFFLEHEAD	13	Q	7
FA	BUFFLEHEAD	13	Q	9

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	BUFFLEHEAD	13	Q	13
SU	AMERICAN WHITE PELICAN	13	Q	6
SU	AMERICAN WHITE PELICAN	13	Q	3
SU	DOUBLE-CRESTED CORMORANT	13	Q	7
SU	DOUBLE-CRESTED CORMORANT	13	Q	18
SU	DOUBLE-CRESTED CORMORANT	13	Q	3
SU	DOUBLE-CRESTED CORMORANT	13	Q	1
SP	MALLARD	13	S	2
SP	MALLARD	13	S	1
SU	MALLARD	13	S	1
SP	GREAT BLUE HERON	13	S	1
SU	DOUBLE-CRESTED CORMORANT	13	S	1
SP	MALLARD	13	T	2
SP	MALLARD	13	T	1
SP	MALLARD	13	T	2
SU	MALLARD	13	T	3
SU	MALLARD	13	T	2
SU	GREAT BLUE HERON	13	T	1
SU	BLACK-CROWNED NIGHT HERON	13	T	2
SU	BLACK-CROWNED NIGHT HERON	13	T	1
SU	DOUBLE-CRESTED CORMORANT	13	T	1
FA	MALLARD	13	U	4
FA	MALLARD	13	U	4
SP	MALLARD	13	U	2
SP	MALLARD	13	U	3
SU	MALLARD	13	U	1
SP	GREAT BLUE HERON	13	U	1
SU	GREAT BLUE HERON	13	U	1
SU	GREAT BLUE HERON	13	U	1
SU	BLACK-CROWNED NIGHT HERON	13	U	1
SP	DOUBLE-CRESTED CORMORANT	13	U	1
SU	DOUBLE-CRESTED CORMORANT	13	U	1
SP	MALLARD	14	G	1
SP	MALLARD	14	G	1
SP	MALLARD	14	G	2
SP	MALLARD	14	G	2
SP	MALLARD	14	G	2
SU	MALLARD	14	G	18
SU	GREAT BLUE HERON	14	G	1
FA	SANDHILL CRANE	14	G	11
SP	MALLARD	14	H	3
SP	MALLARD	14	H	1
FA	CANADA GOOSE	14	J	25
FA	CANADA GOOSE	14	J	3
SP	MALLARD	14	P	2
SU	MALLARD	14	Q	3
SU	MALLARD	14	R	2

WATERFOWL USE AREAS
BASED ON COMBINED MONITORING DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	MALLARD	15	G	1
SP	MALLARD	15	H	2
FA	MALLARD	15	I	1
SU	DOUBLE-CRESTED CORMORANT	15	J	1
SU	GREAT BLUE HERON	15	K	1
SP	LONG-BILLED CURLEW	15	L	1
SP	MALLARD	15	O	1
SP	MALLARD	15	O	1
SU	GREAT BLUE HERON	15	O	1
SU	GREAT BLUE HERON	15	O	1
FA	CANADA GOOSE	15	O	100
SP	CANADA GOOSE	15	O	1
SP	MALLARD	15	P	2
SP	GREAT BLUE HERON	15	P	1
SU	GREAT BLUE HERON	15	P	1
SU	GREAT BLUE HERON	15	P	1
SP	CANADA GOOSE	15	P	2
SP	MALLARD	16	K	2
SP	CANADA GOOSE	16	M	5
WI	LONG-BILLED CURLEW	16	O	1
SU	AMERICAN WHITE PELICAN	16	P	18
SP	GREAT BLUE HERON	17	L	1
FA	CANADA GOOSE	17	O	142
FA	SNOW GOOSE	17	O	24

RAPTOR SPRING-SUMMER USE AREAS, BASED ON COMBINED MONITORING DATA

To determine raptor area use frequency during Spring (March through May) and Summer (June through August), data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned. Heavier Spring-Summer use by raptors required a slightly different relative use level break-downs than Fall-Winter levels.

Use levels for all raptor species during the Spring and Summer seasons were assigned as follows:

- Average 1-4
- Elevated 5-12
- Heavy $\geq$ 13

Proof Roughlegged
TURKEY Vulture

245

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	GOLDEN EAGLE	1	G	1
SU	GOLDEN EAGLE	1	G	1
SP	GOLDEN EAGLE	1	R	1
SP	GOLDEN EAGLE	1	R	1
SP	BURROWING OWL	1	S	1
SP	BURROWING OWL	1	S	1
SP	SWAINSON'S HAWK	1	S	1
SP	SWAINSON'S HAWK	1	S	1
SP	TURKEY VULTURE	1	S	4
SP	TURKEY VULTURE	1	S	4
SU	AMERICAN KESTREL	1	T	1
SU	AMERICAN KESTREL	1	T	1
SU	GOLDEN EAGLE	1	T	1
SU	GOLDEN EAGLE	1	T	1
SU	TURKEY VULTURE	1	T	1
SU	TURKEY VULTURE	1	T	1
SU	AMERICAN KESTREL	2	F	1
SU	AMERICAN KESTREL	2	F	1
SU	GOLDEN EAGLE	2	F	1
SU	GOLDEN EAGLE	2	F	1
SU	GOLDEN EAGLE	2	F	1
SU	GOLDEN EAGLE	2	F	1
SP	RED-TAILED HAWK	2	F	1
SP	RED-TAILED HAWK	2	F	1
SU	RED-TAILED HAWK	2	F	1
SU	RED-TAILED HAWK	2	F	1
SP	ROUGH-LEGGED HAWK	2	G	1
SP	ROUGH-LEGGED HAWK	2	G	1
SU	GOLDEN EAGLE	2	I	1
SU	GOLDEN EAGLE	2	I	1
SU	GOLDEN EAGLE	2	J	2
SU	GOLDEN EAGLE	2	J	2
SU	NORTHERN HARRIER	2	J	1
SU	NORTHERN HARRIER	2	J	1
SP	RED-TAILED HAWK	2	J	2
SP	RED-TAILED HAWK	2	J	2
SU	RED-TAILED HAWK	2	J	2
SU	RED-TAILED HAWK	2	J	2
SU	AMERICAN KESTREL	2	K	2
SU	AMERICAN KESTREL	2	K	2
SP	GOLDEN EAGLE	2	K	1
SP	GOLDEN EAGLE	2	K	1
SU	GOLDEN EAGLE	2	K	2
SU	GOLDEN EAGLE	2	K	1
SU	GOLDEN EAGLE	2	K	2
SU	GOLDEN EAGLE	2	K	1
SP	RED-TAILED HAWK	2	K	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	RED-TAILED HAWK	2	K	1
SP	RED-TAILED HAWK	2	K	1
SP	RED-TAILED HAWK	2	K	1
SU	RED-TAILED HAWK	2	K	1
SU	RED-TAILED HAWK	2	K	1
SP	ROUGH-LEGGED HAWK	2	K	1
SP	ROUGH-LEGGED HAWK	2	K	1
SP	AMERICAN KESTREL	2	L	1
SP	AMERICAN KESTREL	2	L	1
SP	BURROWING OWL	2	M	1
SP	BURROWING OWL	2	M	1
SP	RED-TAILED HAWK	2	M	1
SP	RED-TAILED HAWK	2	M	1
SP	ROUGH-LEGGED HAWK	2	M	1
SP	ROUGH-LEGGED HAWK	2	M	1
SP	GOLDEN EAGLE	2	N	3
SP	GOLDEN EAGLE	2	N	3
SU	GOLDEN EAGLE	2	N	1
SU	GOLDEN EAGLE	2	N	1
SP	GOLDEN EAGLE	2	O	1
SP	GOLDEN EAGLE	2	O	1
SU	GOLDEN EAGLE	2	O	1
SU	GOLDEN EAGLE	2	O	1
SU	GOLDEN EAGLE	2	Q	1
SU	GOLDEN EAGLE	2	Q	1
SU	AMERICAN KESTREL	2	R	1
SU	AMERICAN KESTREL	2	R	1
SP	FERRUGINOUS HAWK	2	S	1
SP	FERRUGINOUS HAWK	2	S	1
SP	AMERICAN KESTREL	2	T	1
SP	AMERICAN KESTREL	2	T	1
SP	GOLDEN EAGLE	2	T	1
SP	GOLDEN EAGLE	2	T	1
SU	GOLDEN EAGLE	2	T	2
SU	GOLDEN EAGLE	2	T	2
SP	NORTHERN HARRIER	2	T	1
SP	NORTHERN HARRIER	2	T	1
SP	ROUGH-LEGGED HAWK	2	T	1
SP	ROUGH-LEGGED HAWK	2	T	1
SP	AMERICAN KESTREL	2	U	1
SP	AMERICAN KESTREL	2	U	1
SU	AMERICAN KESTREL	2	U	1
SU	AMERICAN KESTREL	2	U	1
SP	NORTHERN HARRIER	2	U	1
SP	NORTHERN HARRIER	2	U	1
SU	RED-TAILED HAWK	3	F	1
SU	RED-TAILED HAWK	3	F	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	RED-TAILED HAWK	3	L	2
SP	RED-TAILED HAWK	3	L	2
SP	GREAT HORNED OWL	3	N	1
SP	GREAT HORNED OWL	3	N	1
SP	RED-TAILED HAWK	3	N	1
SP	RED-TAILED HAWK	3	N	1
SP	SWAINSON'S HAWK	3	N	1
SP	SWAINSON'S HAWK	3	N	1
SU	FERRUGINOUS HAWK	3	P	1
SU	FERRUGINOUS HAWK	3	P	1
SP	RED-TAILED HAWK	3	P	1
SP	RED-TAILED HAWK	3	P	1
SU	AMERICAN KESTREL	3	Q	1
SU	AMERICAN KESTREL	3	Q	1
SP	TURKEY VULTURE	3	Q	2
SP	TURKEY VULTURE	3	Q	2
SP	AMERICAN KESTREL	3	R	1
SP	AMERICAN KESTREL	3	R	1
SU	GOLDEN EAGLE	3	R	1
SU	GOLDEN EAGLE	3	R	1
SP	GREAT HORNED OWL	3	S	1
SP	GREAT HORNED OWL	3	S	1
SP	RED-TAILED HAWK	3	S	1
SP	RED-TAILED HAWK	3	S	1
SP	GOLDEN EAGLE	3	U	1
SP	GOLDEN EAGLE	3	U	1
SU	GOLDEN EAGLE	4	F	1
SU	GOLDEN EAGLE	4	F	1
SP	MERLIN	4	G	1
SP	MERLIN	4	G	1
SP	GREAT HORNED OWL	4	J	1
SP	GREAT HORNED OWL	4	J	1
SP	GREAT HORNED OWL	4	K	1
SP	GREAT HORNED OWL	4	K	1
SP	RED-TAILED HAWK	4	K	1
SP	RED-TAILED HAWK	4	K	1
SP	AMERICAN KESTREL	4	L	1
SP	AMERICAN KESTREL	4	L	1
SP	GREAT HORNED OWL	4	L	1
SP	GREAT HORNED OWL	4	L	1
SP	GREAT HORNED OWL	4	L	1
SP	GREAT HORNED OWL	4	L	1
SP	NORTHERN HARRIER	4	L	1
SP	NORTHERN HARRIER	4	L	1
SP	PEREGRINE FALCON	4	L	1
SP	PEREGRINE FALCON	4	L	1
SU	GOLDEN EAGLE	4	M	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	GOLDEN EAGLE	4	M	1
SU	NORTHERN HARRIER	4	M	1
SU	NORTHERN HARRIER	4	M	1
SU	GREAT HORNED OWL	4	N	1
SU	GREAT HORNED OWL	4	N	1
SP	RED-TAILED HAWK	4	N	2
SP	RED-TAILED HAWK	4	N	2
SP	FERRUGINOUS HAWK	4	O	1
SP	FERRUGINOUS HAWK	4	O	1
SP	FERRUGINOUS HAWK	4	O	1
SP	FERRUGINOUS HAWK	4	O	1
SP	GOLDEN EAGLE	4	P	1
SP	GOLDEN EAGLE	4	P	1
SP	RED-TAILED HAWK	4	P	1
SP	RED-TAILED HAWK	4	P	1
SU	RED-TAILED HAWK	4	P	1
SU	RED-TAILED HAWK	4	P	2
SU	RED-TAILED HAWK	4	P	1
SU	RED-TAILED HAWK	4	P	1
SU	RED-TAILED HAWK	4	P	2
SU	RED-TAILED HAWK	4	P	1
SP	AMERICAN KESTREL	4	Q	1
SP	AMERICAN KESTREL	4	Q	1
SU	GREAT HORNED OWL	4	Q	1
SU	GREAT HORNED OWL	4	Q	1
SP	GREAT HORNED OWL	4	R	2
SP	GREAT HORNED OWL	4	R	2
SP	PEREGRINE FALCON	4	R	1
SP	PEREGRINE FALCON	4	R	1
SP	FERRUGINOUS HAWK	4	S	1
SP	FERRUGINOUS HAWK	4	S	1
SP	GOLDEN EAGLE	4	S	1
SP	GOLDEN EAGLE	4	S	1
SP	GREAT HORNED OWL	4	S	1
SP	GREAT HORNED OWL	4	S	1
SU	SWAINSON'S HAWK	4	S	1
SU	SWAINSON'S HAWK	4	S	1
SP	GREAT HORNED OWL	4	T	1
SP	GREAT HORNED OWL	4	T	1
SP	AMERICAN KESTREL	4	U	1
SP	AMERICAN KESTREL	4	U	1
SP	GOLDEN EAGLE	4	U	1
SP	GOLDEN EAGLE	4	U	1
SP	GREAT HORNED OWL	4	U	1
SP	GREAT HORNED OWL	4	U	1
SP	SWAINSON'S HAWK	4	U	1
SP	SWAINSON'S HAWK	4	U	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	SWAINSON'S HAWK	4	U	1
SP	SWAINSON'S HAWK	4	U	1
SP	SWAINSON'S HAWK	4	U	1
SP	SWAINSON'S HAWK	4	U	1
SU	SWAINSON'S HAWK	4	U	1
SU	SWAINSON'S HAWK	4	U	1
SP	AMERICAN KESTREL	5	F	1
SP	AMERICAN KESTREL	5	F	1
SU	AMERICAN KESTREL	5	G	1
SU	AMERICAN KESTREL	5	G	1
SU	AMERICAN KESTREL	5	G	1
SU	AMERICAN KESTREL	5	G	1
SP	NORTHERN HARRIER	5	G	1
SP	NORTHERN HARRIER	5	G	1
SP	RED-TAILED HAWK	5	G	2
SP	RED-TAILED HAWK	5	G	1
SP	RED-TAILED HAWK	5	G	2
SP	RED-TAILED HAWK	5	G	1
SP	FERRUGINOUS HAWK	5	I	1
SP	FERRUGINOUS HAWK	5	I	1
SP	GOLDEN EAGLE	5	I	1
SP	GOLDEN EAGLE	5	I	1
SU	GREAT HORNED OWL	5	I	1
SU	GREAT HORNED OWL	5	I	1
SU	NORTHERN HARRIER	5	I	1
SU	NORTHERN HARRIER	5	I	1
SU	AMERICAN KESTREL	5	K	3
SU	AMERICAN KESTREL	5	K	3
SP	GREAT HORNED OWL	5	L	1
SP	GREAT HORNED OWL	5	L	1
SP	AMERICAN KESTREL	5	O	1
SP	AMERICAN KESTREL	5	O	1
SP	GREAT HORNED OWL	5	O	1
SP	GREAT HORNED OWL	5	O	1
SP	RED-TAILED HAWK	5	O	1
SP	RED-TAILED HAWK	5	O	1
SP	RED-TAILED HAWK	5	O	1
SP	RED-TAILED HAWK	5	O	1
SP	RED-TAILED HAWK	5	O	1
SP	RED-TAILED HAWK	5	O	1
SP	RED-TAILED HAWK	5	O	1
SP	RED-TAILED HAWK	5	O	1
SU	RED-TAILED HAWK	5	O	1
SU	RED-TAILED HAWK	5	O	1
SP	AMERICAN KESTREL	5	P	1
SP	AMERICAN KESTREL	5	P	1
SP	FERRUGINOUS HAWK	5	P	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	FERRUGINOUS HAWK	5	P	1
SU	FERRUGINOUS HAWK	5	P	1
SU	FERRUGINOUS HAWK	5	P	1
SP	NORTHERN HARRIER	5	P	1
SP	NORTHERN HARRIER	5	P	1
SU	NORTHERN HARRIER	5	P	1
SU	NORTHERN HARRIER	5	P	1
SP	RED-TAILED HAWK	5	P	1
SP	RED-TAILED HAWK	5	P	1
SP	RED-TAILED HAWK	5	P	2
SP	RED-TAILED HAWK	5	P	1
SP	RED-TAILED HAWK	5	P	1
SP	RED-TAILED HAWK	5	P	2
SU	RED-TAILED HAWK	5	P	2
SU	RED-TAILED HAWK	5	P	2
SP	SHARP-SHINNED HAWK	5	P	1
SP	SHARP-SHINNED HAWK	5	P	1
SP	GOLDEN EAGLE	5	Q	2
SP	GOLDEN EAGLE	5	Q	2
SP	RED-TAILED HAWK	5	Q	1
SP	RED-TAILED HAWK	5	Q	1
SU	RED-TAILED HAWK	5	Q	1
SU	RED-TAILED HAWK	5	Q	1
SP	AMERICAN KESTREL	5	R	1
SP	AMERICAN KESTREL	5	R	1
SP	GREAT HORNED OWL	5	R	1
SP	GREAT HORNED OWL	5	R	1
SU	GREAT HORNED OWL	5	R	1
SU	GREAT HORNED OWL	5	R	1
SU	GREAT HORNED OWL	5	R	1
SU	GREAT HORNED OWL	5	R	1
SU	GREAT HORNED OWL	5	R	1
SU	GREAT HORNED OWL	5	R	1
SU	RED-TAILED HAWK	5	R	1
SU	RED-TAILED HAWK	5	R	1
SU	AMERICAN KESTREL	5	S	1
SU	AMERICAN KESTREL	5	S	1
SP	GREAT HORNED OWL	5	S	2
SP	GREAT HORNED OWL	5	S	2
SU	SHORT-EARED OWL	5	S	1
SU	SHORT-EARED OWL	5	S	1
SP	GREAT HORNED OWL	5	T	1
SP	GREAT HORNED OWL	5	T	1
SP	AMERICAN KESTREL	5	U	1
SP	AMERICAN KESTREL	5	U	1
SU	AMERICAN KESTREL	5	U	1
SU	AMERICAN KESTREL	5	U	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	RED-TAILED HAWK	5	U	1
SP	RED-TAILED HAWK	5	U	1
SP	RED-TAILED HAWK	5	U	1
SP	RED-TAILED HAWK	5	U	1
SP	SWAINSON'S HAWK	5	U	1
SP	SWAINSON'S HAWK	5	U	1
SP	SWAINSON'S HAWK	5	U	1
SP	SWAINSON'S HAWK	5	U	1
SU	SWAINSON'S HAWK	5	U	1
SU	SWAINSON'S HAWK	5	U	1
SU	RED-TAILED HAWK	6	G	1
SU	RED-TAILED HAWK	6	G	1
SU	RED-TAILED HAWK	6	H	1
SU	RED-TAILED HAWK	6	H	1
SP	GREAT HORNED OWL	6	I	1
SP	GREAT HORNED OWL	6	I	1
SP	ROUGH-LEGGED HAWK	6	I	1
SP	ROUGH-LEGGED HAWK	6	I	1
SU	NORTHERN HARRIER	6	J	1
SU	NORTHERN HARRIER	6	J	1
SU	SWAINSON'S HAWK	6	J	1
SU	SWAINSON'S HAWK	6	J	1
SP	AMERICAN KESTREL	6	K	1
SP	AMERICAN KESTREL	6	K	1
SP	AMERICAN KESTREL	6	K	1
SP	AMERICAN KESTREL	6	K	1
SU	GREAT HORNED OWL	6	K	1
SU	GREAT HORNED OWL	6	K	1
SP	NORTHERN HARRIER	6	K	1
SP	NORTHERN HARRIER	6	K	1
SP	RED-TAILED HAWK	6	N	1
SP	RED-TAILED HAWK	6	N	1
SP	GOLDEN EAGLE	6	O	1
SP	GOLDEN EAGLE	6	O	1
SU	GOLDEN EAGLE	6	O	1
SU	GOLDEN EAGLE	6	O	1
SU	RED-TAILED HAWK	6	O	1
SU	RED-TAILED HAWK	6	O	1
SP	AMERICAN KESTREL	6	P	1
SP	AMERICAN KESTREL	6	P	1
SP	GOLDEN EAGLE	6	P	1
SP	GOLDEN EAGLE	6	P	1
SP	RED-TAILED HAWK	6	R	1
SP	RED-TAILED HAWK	6	R	1
SU	GREAT HORNED OWL	6	S	1
SU	GREAT HORNED OWL	6	S	1
SP	RED-TAILED HAWK	6	S	2

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	RED-TAILED HAWK	6	S	2
SU	RED-TAILED HAWK	6	U	1
SU	RED-TAILED HAWK	6	U	1
SP	RED-TAILED HAWK	7	B	1
SP	RED-TAILED HAWK	7	B	1
SP	GREAT HORNED OWL	7	C	1
SP	GREAT HORNED OWL	7	C	1
SU	AMERICAN KESTREL	7	F	1
SU	AMERICAN KESTREL	7	F	1
SP	RED-TAILED HAWK	7	G	1
SP	RED-TAILED HAWK	7	G	1
SP	RED-TAILED HAWK	7	G	1
SP	RED-TAILED HAWK	7	G	1
SP	RED-TAILED HAWK	7	G	1
SP	RED-TAILED HAWK	7	G	1
SU	RED-TAILED HAWK	7	G	1
SU	RED-TAILED HAWK	7	G	1
SP	AMERICAN KESTREL	7	H	1
SP	AMERICAN KESTREL	7	H	1
SU	RED-TAILED HAWK	7	H	1
SU	RED-TAILED HAWK	7	H	1
SU	SWAINSON'S HAWK	7	H	1
SU	SWAINSON'S HAWK	7	H	1
SP	RED-TAILED HAWK	7	I	1
SP	RED-TAILED HAWK	7	I	1
SP	RED-TAILED HAWK	7	I	1
SP	RED-TAILED HAWK	7	I	1
SP	RED-TAILED HAWK	7	I	1
SP	RED-TAILED HAWK	7	I	1
SP	SHARP-SHINNED HAWK	7	I	1
SP	SHARP-SHINNED HAWK	7	I	1
SP	SWAINSON'S HAWK	7	I	1
SP	SWAINSON'S HAWK	7	I	1
SP	AMERICAN KESTREL	7	J	1
SP	AMERICAN KESTREL	7	J	1
SP	AMERICAN KESTREL	7	J	1
SP	AMERICAN KESTREL	7	J	1
SP	RED-TAILED HAWK	7	J	1
SP	RED-TAILED HAWK	7	J	1
SP	RED-TAILED HAWK	7	J	1
SP	RED-TAILED HAWK	7	J	1
SU	RED-TAILED HAWK	7	J	1
SU	RED-TAILED HAWK	7	J	1
SP	AMERICAN KESTREL	7	K	1
SP	AMERICAN KESTREL	7	K	1
SU	GREAT HORNED OWL	7	K	1
SU	GREAT HORNED OWL	7	K	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	RED-TAILED HAWK	7	k	1
SU	RED-TAILED HAWK	7	K	1
SU	TURKET VULTURE	7	K	1
SU	TURKET VULTURE	7	K	1
SP	TURKEY VULTURE	7	K	1
SP	TURKEY VULTURE	7	K	1
SP	GREAT HORNED OWL	7	L	2
SP	GREAT HORNED OWL	7	L	1
SP	GREAT HORNED OWL	7	L	2
SP	GREAT HORNED OWL	7	L	1
SU	GREAT HORNED OWL	7	L	1
SU	GREAT HORNED OWL	7	L	1
SP	RED-TAILED HAWK	7	L	1
SP	RED-TAILED HAWK	7	L	1
SP	RED-TAILED HAWK	7	L	1
SP	RED-TAILED HAWK	7	L	1
SP	AMERICAN KESTREL	7	M	2
SP	AMERICAN KESTREL	7	M	2
SU	RED-TAILED HAWK	7	M	1
SU	RED-TAILED HAWK	7	M	1
SU	RED-TAILED HAWK (DARK)	7	M	1
SU	RED-TAILED HAWK (DARK)	7	M	1
SP	AMERICAN KESTREL	7	N	1
SP	AMERICAN KESTREL	7	N	1
SP	AMERICAN KESTREL	7	N	1
SP	AMERICAN KESTREL	7	N	1
SP	AMERICAN KESTREL	7	N	1
SP	AMERICAN KESTREL	7	N	1
SP	GREAT HORNED OWL	7	N	1
SP	GREAT HORNED OWL	7	N	1
SP	GREAT HORNED OWL	7	N	1
SP	GREAT HORNED OWL	7	N	1
SP	LONG-EARED OWL	7	N	1
SP	LONG-EARED OWL	7	N	1
SP	RED-TAILED HAWK	7	N	3
SP	RED-TAILED HAWK	7	N	3
SP	RED-TAILED HAWK	7	O	1
SP	RED-TAILED HAWK	7	O	1
SP	RED-TAILED HAWK	7	O	1
SP	RED-TAILED HAWK	7	O	2
SP	RED-TAILED HAWK	7	O	1
SP	RED-TAILED HAWK	7	O	1
SP	RED-TAILED HAWK	7	O	1
SP	RED-TAILED HAWK	7	O	1
SP	RED-TAILED HAWK	7	O	2
SP	RED-TAILED HAWK	7	O	1
SU	RED-TAILED HAWK	7	O	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	RED-TAILED HAWK	7	O	1
SU	NORTHERN HARRIER	7	P	1
SU	NORTHERN HARRIER	7	P	1
SP	PEREGRINE FALCON	7	P	1
SP	PEREGRINE FALCON	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SU	RED-TAILED HAWK	7	P	1
SP	RED-TAILED HAWK	7	Q	2
SP	RED-TAILED HAWK	7	Q	1
SP	RED-TAILED HAWK	7	Q	2
SP	RED-TAILED HAWK	7	Q	1
SP	GOLDEN EAGLE	7	R	1
SP	GOLDEN EAGLE	7	R	1
SP	AMERICAN KESTREL	7	U	1
SP	AMERICAN KESTREL	7	U	1
SU	RED-TAILED HAWK	8	C	1
SU	RED-TAILED HAWK	8	C	1
SP	SHARP-SHINNED HAWK	8	C	1
SP	SHARP-SHINNED HAWK	8	C	1
SP	RED-TAILED HAWK	8	E	1
SP	RED-TAILED HAWK	8	E	1
SP	RED-TAILED HAWK	8	F	1
SP	RED-TAILED HAWK	8	F	1
SP	ROUGH-LEGGED HAWK	8	F	1
SP	ROUGH-LEGGED HAWK	8	F	1
SP	AMERICAN KESTREL	8	G	1
SP	AMERICAN KESTREL	8	G	1
SU	GREAT HORNED OWL	8	G	1
SU	GREAT HORNED OWL	8	G	1
SU	NORTHERN HARRIER	8	G	1
SU	NORTHERN HARRIER	8	G	1
SU	RED-TAILED HAWK	8	L	1
SU	RED-TAILED HAWK	8	L	1
SU	SWAINSON'S HAWK	8	L	1
SU	SWAINSON'S HAWK	8	L	1
SU	SWAINSON'S HAWK	8	L	1
SU	SWAINSON'S HAWK	8	L	1
SU	SWAINSON'S HAWK	8	L	1
SU	SWAINSON'S HAWK	8	L	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	GOLDEN EAGLE	8	M	1
SP	GOLDEN EAGLE	8	M	1
SP	RED-TAILED HAWK	8	M	1
SP	RED-TAILED HAWK	8	M	1
SU	RED-TAILED HAWK	8	M	1
SU	RED-TAILED HAWK	8	M	1
SU	RED-TAILED HAWK	8	M	1
SU	RED-TAILED HAWK	8	M	1
SP	TURKEY VULTURE	8	M	2
SP	TURKEY VULTURE	8	M	2
SP	GOLDEN EAGEL	8	N	1
SP	GOLDEN EAGEL	8	N	1
SU	GREAT HORNED OWL	8	N	1
SU	GREAT HORNED OWL	8	N	1
SU	RED-TAILED HAWK	8	N	1
SU	RED-TAILED HAWK	8	N	1
SU	ROUGH-LEGGED HAWK	8	N	1
SU	ROUGH-LEGGED HAWK	8	N	1
SP	SHARP-SHINNED HAWK	8	N	1
SP	SHARP-SHINNED HAWK	8	N	1
SU	SWAINSON'S HAWK	8	N	1
SU	SWAINSON'S HAWK	8	N	1
SU	GREAT HORNED OWL	8	O	1
SU	GREAT HORNED OWL	8	O	1
SP	RED-TAILED HAWK	8	Q	1
SP	RED-TAILED HAWK	8	Q	1
SU	RED-TAILED HAWK	8	Q	1
SU	RED-TAILED HAWK	8	Q	1
SU	SWAINSON'S HAWK	8	T	1
SU	SWAINSON'S HAWK	8	T	1
SP	AMERICAN KESTREL	8	U	1
SP	AMERICAN KESTREL	8	U	1
SP	GOLDEN EAGLE	9	C	1
SP	GOLDEN EAGLE	9	C	1
SU	RED-TAILED HAWK	9	D	1
SU	RED-TAILED HAWK	9	D	1
SU	SWAINSON'S HAWK	9	D	1
SU	SWAINSON'S HAWK	9	D	1
SP	PRAIRIE FALCON	9	E	1
SP	PRAIRIE FALCON	9	E	1
SP	GREAT HORNED OWL	9	F	1
SP	GREAT HORNED OWL	9	F	1
SP	RED-TAILED HAWK	9	F	1
SP	RED-TAILED HAWK	9	F	1
SP	GOLDEN EAGLE	9	K	1
SP	GOLDEN EAGLE	9	K	1
SU	TURKEY VULTURE	9	K	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	TURKEY VULTURE	9	K	1
SP	AMERICAN KESTREL	9	N	1
SP	AMERICAN KESTREL	9	N	1
SU	GREAT HORNED OWL	9	N	1
SU	GREAT HORNED OWL	9	N	1
SU	SWAINSON'S HAWK	9	N	1
SU	SWAINSON'S HAWK	9	N	1
SU	SWAINSON'S HAWK	9	N	1
SU	SWAINSON'S HAWK	9	N	1
SU	GOLDEN EAGLE	9	T	1
SU	GOLDEN EAGLE	9	T	1
SP	AMERICAN KESTREL	9	U	1
SP	AMERICAN KESTREL	9	U	1
SP	RED-TAILED HAWK	9	U	1
SP	RED-TAILED HAWK	9	U	1
SP	RED-TAILED HAWK	10	E	1
SP	RED-TAILED HAWK	10	E	1
SP	SWAINSON'S HAWK	10	M	1
SP	SWAINSON'S HAWK	10	M	1
SP	GREAT HORNED OWL	10	N	1
SP	GREAT HORNED OWL	10	N	1
SP	AMERICAN KESTREL	10	O	1
SP	AMERICAN KESTREL	10	O	1
SP	SWAINSON'S HAWK	10	O	1
SP	SWAINSON'S HAWK	10	O	1
SP	SWAINSON'S HAWK	10	O	1
SP	SWAINSON'S HAWK	10	O	1
SU	SWAINSON'S HAWK	10	O	2
SU	SWAINSON'S HAWK	10	O	1
SU	SWAINSON'S HAWK	10	O	1
SU	SWAINSON'S HAWK	10	O	2
SU	SWAINSON'S HAWK	10	O	1
SU	SWAINSON'S HAWK	10	O	2
SU	SWAINSON'S HAWK	10	O	1
SU	SWAINSON'S HAWK	10	O	1
SU	SWAINSON'S HAWK	10	O	2
SU	SWAINSON'S HAWK	10	O	1
SP	SWAINSON'S HAWK	10	P	1
SP	SWAINSON'S HAWK	10	P	1
SP	BURROWING OWL	10	Q	1
SP	BURROWING OWL	10	Q	1
SP	SWAINSON'S HAWK	10	Q	1
SP	SWAINSON'S HAWK	10	Q	1
SU	TURKEY VULTURE	10	Q	1
SU	TURKEY VULTURE	10	Q	1
SU	AMERICAN KESTREL	10	R	1
SU	AMERICAN KESTREL	10	R	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	AMERICAN KESTREL	10	U	1
SP	AMERICAN KESTREL	10	U	1
SP	AMERICAN KESTREL	10	U	1
SP	AMERICAN KESTREL	10	U	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SP	GREAT HORNED OWL	11	E	1
SU	GREAT HORNED OWL	11	E	1
SU	GREAT HORNED OWL	11	E	1
SU	GREAT HORNED OWL	11	E	1
SU	GREAT HORNED OWL	11	E	1
SU	GREAT HORNED OWL	11	E	1
SU	GREAT HORNED OWL	11	E	1
SP	RED-TAILED HAWK	11	E	1
SP	RED-TAILED HAWK	11	E	1
SU	RED-TAILED HAWK	11	E	1
SU	RED-TAILED HAWK	11	E	1
SU	RED-TAILED HAWK	11	E	1
SU	RED-TAILED HAWK	11	E	1
SU	RED-TAILED HAWK	11	E	1
SU	RED-TAILED HAWK	11	E	1
SP	SWAINSON'S HAWK	11	E	2
SP	SWAINSON'S HAWK	11	E	2
SU	SWAINSON'S HAWK	11	E	1
SU	SWAINSON'S HAWK	11	E	1
SU	AMERICAN KESTREL	11	F	1
SU	AMERICAN KESTREL	11	F	1
SU	RED-TAILED HAWK	11	F	1
SU	RED-TAILED HAWK	11	F	1
SP	SWAINSON'S HAWK	11	F	1
SP	SWAINSON'S HAWK	11	F	1
SP	SWAINSON'S HAWK	11	F	1
SP	SWAINSON'S HAWK	11	F	1
SP	AMERICAN KESTREL	11	G	1
SP	AMERICAN KESTREL	11	G	1
SP	PRAIRIE FALCON	11	G	1
SP	PRAIRIE FALCON	11	G	1
SU	SWAINSON'S HAWK	11	J	2
SU	SWAINSON'S HAWK	11	J	2
SP	AMERICAN KESTREL	11	M	2

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	AMERICAN KESTREL	11	M	1
SP	AMERICAN KESTREL	11	M	2
SP	AMERICAN KESTREL	11	M	1
SU	GOLDEN EAGLE	11	M	1
SU	GOLDEN EAGLE	11	M	1
SP	GREAT HORNED OWL	11	M	1
SP	GREAT HORNED OWL	11	M	1
SP	GREAT HORNED OWL	11	M	3
SP	GREAT HORNED OWL	11	M	1
SP	GREAT HORNED OWL	11	M	1
SP	GREAT HORNED OWL	11	M	3
SP	SWAINSON'S HAWK	11	M	1
SP	SWAINSON'S HAWK	11	M	1
SP	SWAINSON'S HAWK	11	M	2
SP	SWAINSON'S HAWK	11	M	1
SP	SWAINSON'S HAWK	11	M	1
SP	SWAINSON'S HAWK	11	M	1
SP	SWAINSON'S HAWK	11	M	2
SP	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	4
SU	SWAINSON'S HAWK	11	M	3
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	1
SU	SWAINSON'S HAWK	11	M	2
SU	SWAINSON'S HAWK	11	M	4

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	SWAINSON'S HAWK	11	M	3
SU	SWAINSON'S HAWK	11	M	2
SU	GOLDEN EAGLE	11	N	1
SU	GOLDEN EAGLE	11	N	1
SP	GREAT HORNED OWL	11	N	2
SP	GREAT HORNED OWL	11	N	2
SU	GREAT HORNED OWL	11	N	1
SU	GREAT HORNED OWL	11	N	1
SU	NORTHERN HARRIER	11	N	1
SU	NORTHERN HARRIER	11	N	1
SU	SWAINSON'S HAWK	11	N	1
SU	SWAINSON'S HAWK	11	N	1
SP	AMERICAN KESTREL	11	P	1
SP	AMERICAN KESTREL	11	P	1
SP	RED-TAILED HAWK	11	Q	1
SP	RED-TAILED HAWK	11	Q	1
SU	RED-TAILED HAWK	11	Q	1
SU	RED-TAILED HAWK	11	Q	1
SU	GOLDEN EAGLE	11	S	1
SU	GOLDEN EAGLE	11	S	1
SU	GOLDEN EAGLE	11	S	1
SU	GOLDEN EAGLE	11	S	1
SU	SWAINSON'S HAWK	11	S	1
SU	SWAINSON'S HAWK	11	S	1
SP	AMERICAN KESTREL	11	U	1
SP	AMERICAN KESTREL	11	U	1
SP	AMERICAN KESTREL	11	U	1
SP	AMERICAN KESTREL	11	U	1
SU	NORTHERN HARRIER	12	G	1
SU	NORTHERN HARRIER	12	G	1
SP	SWAINSON'S HAWK	12	G	1
SP	SWAINSON'S HAWK	12	G	1
SP	GREAT HORNED OWL	12	H	1
SP	GREAT HORNED OWL	12	H	1
SU	AMERICAN KESTREL	12	K	1
SU	AMERICAN KESTREL	12	K	1
SP	RED-TAILED HAWK	12	K	1
SP	RED-TAILED HAWK	12	K	1
SU	TURKEY VULTURE	12	K	1
SU	TURKEY VULTURE	12	K	1
SU	SWAINSON'S HAWK	12	L	1
SU	SWAINSON'S HAWK	12	L	1
SP	SWAINSON'S HAWK	12	M	1
SP	SWAINSON'S HAWK	12	M	1
SU	SWAINSON'S HAWK	12	M	2
SU	SWAINSON'S HAWK	12	M	2
SP	SWAINSON'S HAWK	12	N	1

2160

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	SWAINSON'S HAWK	12	N	2
SP	SWAINSON'S HAWK	12	N	1
SP	SWAINSON'S HAWK	12	N	2
SU	SWAINSON'S HAWK	12	N	1
SU	SWAINSON'S HAWK	12	N	1
SU	SWAINSON'S HAWK	12	N	1
SU	SWAINSON'S HAWK	12	N	1
SU	AMERICAN KESTREL	12	O	1
SU	AMERICAN KESTREL	12	O	1
SP	GOLDEN EAGLE	12	O	1
SP	GOLDEN EAGLE	12	O	1
SU	SWAINSON'S HAWK	12	O	1
SU	SWAINSON'S HAWK	12	O	1
SP	AMERICAN KESTREL	12	P	1
SP	AMERICAN KESTREL	12	P	1
SP	GREAT HORNED OWL	12	P	1
SP	GREAT HORNED OWL	12	P	1
SP	RED-TAILED HAWK	12	P	1
SP	RED-TAILED HAWK	12	P	1
SU	RED-TAILED HAWK	12	P	1
SU	RED-TAILED HAWK	12	P	1
SP	RED-TAILED HAWK	12	Q	1
SP	RED-TAILED HAWK	12	Q	1
SP	RED-TAILED HAWK	12	Q	1
SP	RED-TAILED HAWK	12	Q	1
SU	AMERICAN KESTREL	12	S	1
SU	AMERICAN KESTREL	12	S	1
SU	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	1
SU	NORTHERN HARRIER	12	S	1
SP	SWAINSON'S HAWK	12	S	1
SP	SWAINSON'S HAWK	12	S	1
SP	AMERICAN KESTREL	12	U	1
SP	AMERICAN KESTREL	12	U	1
SP	ROUGHLEGGED HAWK	13	E	1
SP	ROUGHLEGGED HAWK	13	E	1
SP	AMERICAN KESTREL	13	F	1
SP	AMERICAN KESTREL	13	F	1
SP	GREAT HORNED OWL	13	F	1
SP	GREAT HORNED OWL	13	F	1
SP	GREAT HORNED OWL	13	F	1
SP	GREAT HORNED OWL	13	F	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	RED-TAILED HAWK	13	F	1
SU	RED-TAILED HAWK	13	F	1
SU	RED-TAILED HAWK	13	F	1
SU	RED-TAILED HAWK	13	F	1
SP	SWAINSON'S HAWK	13	F	1
SP	SWAINSON'S HAWK	13	F	1
SU	TURKEY VULTURE	13	F	1
SU	TURKEY VULTURE	13	F	1
SP	AMERICAN KESTREL	13	G	1
SP	AMERICAN KESTREL	13	G	1
SP	AMERICAN KESTREL	13	G	1
SP	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	2
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	2
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	2
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	2
SU	AMERICAN KESTREL	13	G	1
SU	AMERICAN KESTREL	13	G	1
SP	FERRUGINOUS HAWK	13	G	1
SP	FERRUGINOUS HAWK	13	G	1
SP	GREAT HORNED OWL	13	G	1
SP	GREAT HORNED OWL	13	G	1
SU	GREAT HORNED OWL	13	G	1
SU	GREAT HORNED OWL	13	G	1
SU	GREAT HORNED OWL	13	G	1
SU	GREAT HORNED OWL	13	G	1
SU	GREAT HORNED OWL	13	G	1
SU	GREAT HORNED OWL	13	G	1
SU	NORTHERN HARRIER	13	G	1
SU	NORTHERN HARRIER	13	G	1
SU	RED-TAILED HAWK	13	G	1
SU	RED-TAILED HAWK	13	G	1
SU	TURKEY VULTURE	13	G	1
SU	TURKEY VULTURE	13	G	1
SP	AMERICAN KESTREL	13	H	1
SP	AMERICAN KESTREL	13	H	1
SP	AMERICAN KESTREL	13	H	1
SP	AMERICAN KESTREL	13	H	1
SP	AMERICAN KESTREL	13	H	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	AMERICAN KESTREL	13	H	1
SU	AMERICAN KESTREL	13	H	3
SU	AMERICAN KESTREL	13	H	1
SU	AMERICAN KESTREL	13	H	3
SU	AMERICAN KESTREL	13	H	1
SU	GREAT HORNED OWL	13	H	1
SU	GREAT HORNED OWL	13	H	1
SU	SWAINSON'S HAWK	13	H	1
SU	SWAINSON'S HAWK	13	H	1
SU	AMERICAN KESTREL	13	K	1
SU	AMERICAN KESTREL	13	K	1
SU	AMERICAN KESTREL	13	L	1
SU	AMERICAN KESTREL	13	L	1
SP	GOLDEN EAGLE	13	O	1
SP	GOLDEN EAGLE	13	O	1
SP	AMERICAN KESTREL	13	P	1
SP	AMERICAN KESTREL	13	P	1
SU	GREAT HORNED OWL	13	P	1
SU	GREAT HORNED OWL	13	P	1
SP	RED-TAILED HAWK (DARK)	13	P	1
SP	RED-TAILED HAWK (DARK)	13	P	1
SU	AMERICAN KESTREL	13	Q	2
SU	AMERICAN KESTREL	13	Q	2
SP	GOLDEN EAGLE	13	R	1
SP	GOLDEN EAGLE	13	R	1
SP	GREAT HORNED OWL	13	R	1
SP	GREAT HORNED OWL	13	R	1
SP	GREAT HORNED OWL	13	R	1
SP	GREAT HORNED OWL	13	R	1
SU	RED-TAILED HAWK	13	R	1
SU	RED-TAILED HAWK	13	R	1
SU	RED-TAILED HAWK	13	R	1
SU	RED-TAILED HAWK	13	R	1
SP	AMERICAN KESTREL	13	S	1
SP	AMERICAN KESTREL	13	S	1
SU	AMERICAN KESTREL	13	S	1
SU	AMERICAN KESTREL	13	S	1
SP	GOLDEN EAGLE	13	S	1
SP	GOLDEN EAGLE	13	S	1
SU	GOLDEN EAGLE	13	S	1
SU	GOLDEN EAGLE	13	S	1
SP	GREAT HORNED OWL	13	S	1
SP	GREAT HORNED OWL	13	S	2
SP	GREAT HORNED OWL	13	S	1
SP	GREAT HORNED OWL	13	S	1
SP	GREAT HORNED OWL	13	S	2
SP	GREAT HORNED OWL	13	S	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	GREAT HORNED OWL	13	S	1
SU	GREAT HORNED OWL	13	S	1
SU	GREAT HORNED OWL	13	S	1
SU	GREAT HORNED OWL	13	S	1
SU	GREAT HORNED OWL	13	S	1
SU	GREAT HORNED OWL	13	S	1
SU	GREAT HORNED OWL	13	S	1
SU	GREAT HORNED OWL	13	S	1
SP	NORTHERN HARRIER	13	S	1
SP	NORTHERN HARRIER	13	S	1
SU	RED-TAILED HAWK	13	S	1
SU	RED-TAILED HAWK	13	S	1
SU	AMERICAN KESTREL	13	T	1
SU	AMERICAN KESTREL	13	T	2
SU	AMERICAN KESTREL	13	T	1
SU	AMERICAN KESTREL	13	T	1
SU	AMERICAN KESTREL	13	T	2
SU	AMERICAN KESTREL	13	T	1
SP	GREAT HORNED OWL	13	T	1
SP	GREAT HORNED OWL	13	T	1
SP	GREAT HORNED OWL	13	T	1
SP	GREAT HORNED OWL	13	T	2
SP	GREAT HORNED OWL	13	T	1
SP	GREAT HORNED OWL	13	T	1
SP	GREAT HORNED OWL	13	T	1
SP	GREAT HORNED OWL	13	T	2
SU	GREAT HORNED OWL	13	T	1
SU	GREAT HORNED OWL	13	T	1
SU	GREAT HORNED OWL	13	T	1
SU	GREAT HORNED OWL	13	T	1
SU	GREAT HORNED OWL	13	T	1
SU	GREAT HORNED OWL	13	T	1
SU	GREAT HORNED OWL	13	T	1
SU	GREAT HORNED OWL	13	T	1
SU	RED-TAILED HAWK	13	T	1
SU	RED-TAILED HAWK	13	T	1
SU	TURKEY VULTURE	13	T	1
SU	TURKEY VULTURE	13	T	1
SP	AMERICAN KESTREL	13	U	1
SP	AMERICAN KESTREL	13	U	1
SP	AMERICAN KESTREL	13	U	1
SP	AMERICAN KESTREL	13	U	1
SP	AMERICAN KESTREL	13	U	1
SP	AMERICAN KESTREL	13	U	1
SU	AMERICAN KESTREL	13	U	1
SU	AMERICAN KESTREL	13	U	1
SU	GREAT HORNED OWL	13	U	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	GREAT HORNED OWL	13	U	1
SU	GREAT HORNED OWL	13	U	1
SU	GREAT HORNED OWL	13	U	1
SU	SWAINSON'S HAWK	13	U	1
SU	SWAINSON'S HAWK	13	U	1
SU	SWAINSON'S HAWK	13	U	1
SU	SWAINSON'S HAWK	13	U	1
SU	GREAT HORNED OWL	14	E	2
SU	GREAT HORNED OWL	14	E	2
SU	RED-TAILED HAWK	14	E	1
SU	RED-TAILED HAWK	14	E	1
SU	AMERICAN KESTREL	14	F	1
SU	AMERICAN KESTREL	14	F	1
SP	GREAT HORNED OWL	14	F	1
SP	GREAT HORNED OWL	14	F	1
SU	GREAT HORNED OWL	14	F	1
SU	GREAT HORNED OWL	14	F	1
SP	RED-TAILED HAWK	14	F	2
SP	RED-TAILED HAWK	14	F	2
SU	RED-TAILED HAWK	14	F	2
SU	RED-TAILED HAWK	14	F	2
SU	SHARP-SHINNED HAWK	14	F	1
SU	SHARP-SHINNED HAWK	14	F	1
SP	TURKEY VULTURE	14	F	1
SP	TURKEY VULTURE	14	F	1
SU	TURKEY VULTURE	14	F	3
SU	TURKEY VULTURE	14	F	3
SU	LONG-EARED OWL	14	G	1
SU	LONG-EARED OWL	14	G	1
SU	NORTHERN HARRIER	14	G	1
SU	NORTHERN HARRIER	14	G	1
SU	RED-TAILED HAWK	14	G	1
SU	RED-TAILED HAWK	14	G	1
SU	SHORT-EARED OWL	14	G	1
SU	SHORT-EARED OWL	14	G	1
SU	GREAT HORNED OWL	14	H	1
SU	GREAT HORNED OWL	14	H	1
SU	RED-TAILED HAWK	14	H	1
SU	RED-TAILED HAWK	14	H	1
SU	AMERICAN KESTREL	14	I	2
SU	AMERICAN KESTREL	14	I	2
SU	AMERICAN KESTREL	14	I	2
SU	AMERICAN KESTREL	14	I	2
SU	GOLDEN EAGLE	14	I	1
SU	GOLDEN EAGLE	14	I	1
SU	GREAT HORNED OWL	14	I	1
SU	GREAT HORNED OWL	14	I	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	NORTHERN HARRIER	14	I	2
SU	NORTHERN HARRIER	14	I	2
SU	RED-TAILED HAWK	14	J	1
SU	RED-TAILED HAWK	14	J	2
SU	RED-TAILED HAWK	14	J	1
SU	RED-TAILED HAWK	14	J	2
SP	RED-TAILED HAWK	14	N	1
SP	RED-TAILED HAWK	14	N	1
SU	AMERICAN KESTREL	14	P	1
SU	AMERICAN KESTREL	14	P	1
SU	GREAT HORNED OWL	14	P	1
SU	GREAT HORNED OWL	14	P	1
SU	GREAT HORNED OWL	14	R	1
SU	GREAT HORNED OWL	14	R	1
SP	NORTHERN HARRIER	14	R	1
SP	NORTHERN HARRIER	14	R	1
SP	RED-TAILED HAWK	14	R	1
SP	RED-TAILED HAWK	14	R	1
SP	RED-TAILED HAWK	14	R	1
SP	RED-TAILED HAWK	14	R	1
SU	AMERICAN KESTREL	14	S	1
SU	AMERICAN KESTREL	14	S	1
SU	NORTHERN HARRIER	14	T	1
SU	NORTHERN HARRIER	14	T	1
SP	AMERICAN KESTREL	14	U	1
SP	AMERICAN KESTREL	14	U	1
SU	NORTHERN HARRIER	15	F	1
SU	NORTHERN HARRIER	15	F	1
SU	GREAT HORNED OWL	15	G	1
SU	GREAT HORNED OWL	15	G	1
SP	RED-TAILED HAWK	15	G	1
SP	RED-TAILED HAWK	15	G	1
SU	RED-TAILED HAWK	15	G	1
SU	RED-TAILED HAWK	15	G	1
SU	RED-TAILED HAWK	15	G	1
SU	RED-TAILED HAWK	15	G	1
SU	RED-TAILED HAWK	15	H	2
SU	RED-TAILED HAWK	15	H	2
SU	RED-TAILED HAWK	15	H	2
SU	RED-TAILED HAWK	15	H	2
SU	RED-TAILED HAWK	15	H	2
SU	RED-TAILED HAWK	15	H	2
SP	GREAT HORNED OWL	15	I	1
SP	GREAT HORNED OWL	15	I	1
SP	RED-TAILED HAWK	15	I	2
SP	RED-TAILED HAWK	15	I	2
SU	RED-TAILED HAWK	15	I	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	2
SU	RED-TAILED HAWK	15	I	2
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	2
SU	RED-TAILED HAWK	15	I	2
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SU	RED-TAILED HAWK	15	I	1
SP	GREAT HORNED OWL	15	J	1
SP	GREAT HORNED OWL	15	J	1
SU	GREAT HORNED OWL	15	J	1
SU	GREAT HORNED OWL	15	J	1
SP	AMERICAN KESTREL	15	K	1
SP	AMERICAN KESTREL	15	K	1
SP	NORTHERN GOSHAWK	15	K	1
SP	NORTHERN GOSHAWK	15	K	1
SU	NORTHERN HARRIER	15	K	1
SU	NORTHERN HARRIER	15	K	1
SP	RED-TAILED HAWK	15	K	1
SP	RED-TAILED HAWK	15	K	1
SU	RED-TAILED HAWK	15	K	1
SU	RED-TAILED HAWK	15	K	1
SP	AMERICAN KESTREL	15	P	1
SP	AMERICAN KESTREL	15	P	1
SP	GOLDEN EAGLE	15	P	1
SP	GOLDEN EAGLE	15	P	1
SU	RED-TAILED HAWK	15	P	1
SU	RED-TAILED HAWK	15	P	1
SU	RED-TAILED HAWK	15	P	1
SU	RED-TAILED HAWK	15	P	1
SP	ROUGH-LEGGED HAWK	15	P	1
SP	ROUGH-LEGGED HAWK	15	P	1
SP	AMERICAN KESTREL	15	Q	1
SP	AMERICAN KESTREL	15	Q	1
SU	RED-TAILED HAWK	15	Q	1
SU	RED-TAILED HAWK	15	Q	1
SP	ROUGH-LEGGED HAWK	15	Q	1
SP	ROUGH-LEGGED HAWK	15	Q	1
SU	GOLDEN EAGLE	15	S	1
SU	GOLDEN EAGLE	15	S	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	RED-TAILED HAWK	16	D	1
SP	RED-TAILED HAWK	16	D	1
SP	AMERICAN KSETREL	16	J	2
SP	AMERICAN KSETREL	16	J	2
SU	GOLDEN EAGLE	16	J	1
SU	GOLDEN EAGLE	16	J	1
SU	GREAT HORNED OWL	16	J	1
SU	GREAT HORNED OWL	16	J	1
SP	RED-TAILED HAWK	16	J	2
SP	RED-TAILED HAWK	16	J	1
SP	RED-TAILED HAWK	16	J	1
SP	RED-TAILED HAWK	16	J	2
SP	RED-TAILED HAWK	16	J	1
SP	RED-TAILED HAWK	16	J	1
SU	RED-TAILED HAWK	16	J	1
SU	RED-TAILED HAWK	16	J	1
SU	GREAT HORNED OWL	16	K	1
SU	GREAT HORNED OWL	16	K	1
SP	RED-TAILED HAWK	16	K	2
SP	RED-TAILED HAWK	16	K	1
SP	RED-TAILED HAWK	16	K	2
SP	RED-TAILED HAWK	16	K	1
SU	RED-TAILED HAWK	16	K	2
SU	RED-TAILED HAWK	16	K	1
SU	RED-TAILED HAWK	16	K	1
SU	RED-TAILED HAWK	16	K	2
SU	RED-TAILED HAWK	16	K	1
SU	RED-TAILED HAWK	16	K	1
SU	RED-TAILED HAWK	16	L	1
SU	RED-TAILED HAWK	16	L	1
SU	SWAINSON'S HAWK	16	L	1
SU	SWAINSON'S HAWK	16	L	1
SP	AMERICAN KESTREL	16	M	1
SP	AMERICAN KESTREL	16	M	1
SP	AMERICAN KESTREL	16	O	1
SP	AMERICAN KESTREL	16	O	1
SP	GOLDEN EAGLE	16	O	1
SP	GOLDEN EAGLE	16	O	1
SP	GOLDEN EAGLE	16	P	3
SP	GOLDEN EAGLE	16	P	3
SP	RED-TAILED HAWK	16	P	1
SP	RED-TAILED HAWK	16	P	1
SP	GOLDEN EAGLE	16	Q	1
SP	GOLDEN EAGLE	16	Q	1
SP	AMERICAN KESTREL	16	U	1
SP	AMERICAN KESTREL	16	U	1
SP	SWAINSON'S HAWK	16	U	1

SPRING AND SUMMER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
SP	SWAINSON'S HAWK	16	U	1
SP	RED-TAILED HAWK	17	1	1
SP	RED-TAILED HAWK	17	I	1
SU	LONG-EARED OWL	17	J	1
SU	LONG-EARED OWL	17	J	1
SP	GOLDEN EAGLE	17	K	1
SP	GOLDEN EAGLE	17	K	1
SP	RED-TAILED HAWK	17	K	1
SP	RED-TAILED HAWK	17	K	1
SU	RED-TAILED HAWK	17	K	1
SU	RED-TAILED HAWK	17	K	2
SU	RED-TAILED HAWK	17	K	1
SU	RED-TAILED HAWK	17	K	2
SP	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK	17	L	2
SP	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK	17	L	2
SP	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK	17	L	1
SU	RED-TAILED HAWK	17	L	1
SU	RED-TAILED HAWK	17	L	1
SP	RED-TAILED HAWK (DARK)	17	L	1
SP	RED-TAILED HAWK (DARK)	17	L	1
SP	FERRUGINOUS HAWK	17	M	1
SP	FERRUGINOUS HAWK	17	M	1
SP	GOLDEN EAGLE	17	M	1
SP	GOLDEN EAGLE	17	M	1
SU	TURKEY VULTURE	17	N	1
SU	TURKEY VULTURE	17	N	1
SP	AMERICAN KESTREL	17	O	1
SP	AMERICAN KESTREL	17	O	1
SP	BURROWING OWL	17	O	1
SP	BURROWING OWL	17	O	1
SU	TURKEY VULTURE	17	O	2
SU	TURKEY VULTURE	17	O	2
SU	RED-TAILED HAWK	17	P	2
SU	RED-TAILED HAWK	17	P	2

RAPTOR FALL- WINTER USE AREAS, BASED ON COMBINED MONITORING DATA

To determine raptor area use frequency during Fall (September through November) and Winter (December through February), data records from the Significant Species Database for the years 1993, 1994, and 1995 were combined. Heavier Spring-Summer use by raptors required a slightly different relative use level break-downs than Fall-Winter levels. After total numbers of individuals using each grid block were evaluated, relative use levels were assigned.

Use levels for all raptor species during the Fall and Winter seasons were assigned as follows:

- Average 1-2
- Elevated 3-7
- Heavy ≥ 8

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

SEASON	SPECIES	RF GRID N	RF GRID E	GROUP SIZE
FA	AMERICAN KESTREL	1	G	1
WI	BALD EAGLE	1	R	1
WI	GOLDEN EAGLE	1	T	1
WI	NORTHERN GOSHAWK	2	F	1
FA	ROUGHLEGGED HAWK	2	F	1
WI	NORTHERN GOSHAWK	2	G	1
WI	AMERICAN KESTREL	2	I	1
WI	AMERICAN KESTREL	2	J	1
WI	ROUGHLEGGED HAWK	2	J	2
WI	GOLDEN EAGLE	2	L	1
WI	ROUGHLEGGED HAWK	2	L	1
FA	AMERICAN KESTREL	2	M	1
WI	GOLDEN EAGLE	2	O	1
FA	SHORT-EARED OWL	2	O	1
FA	GOLDEN EAGLE	2	Q	1
FA	NORTHERN HARRIER	2	S	1
FA	AMERICAN KESTREL	2	T	1
WI	BALD EAGLE	2	T	1
FA	GOLDEN EAGLE	2	T	1
FA	GOLDEN EAGLE	2	T	1
WI	GOLDEN EAGLE	2	T	1
FA	NORTHERN HARRIER	2	T	1
FA	NORTHERN HARRIER	2	T	1
FA	RED-TAILED HAWK	2	T	1
FA	SHARP-SHINNED HAWK	2	T	1
WI	AMERICAN KESTREL	2	U	1
FA	NORTHERN HARRIER	2	U	1
FA	AMERICAN KESTREL	3	F	1
FA	GOLDEN EAGLE	3	O	1
FA	GOLDEN EAGLE	3	P	1
FA	GOLDEN EAGLE	3	R	1
FA	NORTHERN HARRIER	3	R	1
WI	NORTHERN HARRIER	3	R	1
FA	GREAT HORNED OWL	3	S	2
FA	GREAT HORNED OWL	3	S	1
FA	RED-TAILED HAWK	3	T	1
WI	AMERICAN KESTREL	3	U	1
FA	ROUGHLEGGED HAWK	4	D	1
WI	ROUGHLEGGED HAWK	4	H	1
WI	GREAT HORNED OWL	4	K	1
WI	NORTHERN HARRIER	4	K	1
WI	GOLDEN EAGLE	4	L	1
FA	ROUGHLEGGED HAWK	4	M	1
FA	AMERICAN KESTREL	4	N	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

FA	ROUGHLEGGED HAWK (DARK)	4	N	1
FA	AMERICAN KESTREL	4	O	1
FA	RED-TAILED HAWK	4	O	1
WI	RED-TAILED HAWK	4	O	1
FA	GOLDEN EAGLE	4	P	1
FA	GOLDEN EAGLE	4	P	1
WI	GOLDEN EAGLE	4	P	1
WI	GOLDEN EAGLE	4	P	1
WI	GOLDEN EAGLE	4	P	1
FA	RED-TAILED HAWK	4	P	1
FA	RED-TAILED HAWK	4	P	1
WI	RED-TAILED HAWK	4	P	1
WI	FERRUGINOUS HAWK	4	Q	1
WI	GREAT HORNED OWL	4	Q	1
WI	GREAT HORNED OWL	4	R	1
WI	ROUGHLEGGED HAWK	4	R	1
WI	GOLDEN EAGLE	4	T	2
FA	NORTHERN HARRIER	4	T	1
FA	RED-TAILED HAWK	4	T	1
WI	RED-TAILED HAWK	4	T	1
FA	REOUGH-LEGGED HAWK	4	T	1
WI	AMERICAN KESTREL	4	U	1
WI	AMERICAN KESTREL	4	U	1
FA	GREAT HORNED OWL	4	U	1
FA	RED-TAILED HAWK	4	U	1
FA	RED-TAILED HAWK	4	U	1
FA	RED-TAILED HAWK	4	U	1
FA	NORTHERN HARRIER	5	F	1
FA	ROUGHLEGGED HAWK	5	G	1
FA	NORTHERN HARRIER	5	H	1
FA	FERRUGINOUS HAWK	5	I	1
FA	NORTHERN HARRIER	5	I	1
WI	NORTHERN HARRIER	5	I	1
WI	NORTHERN HARRIER	5	I	1
FA	PRAIRIE FALCON	5	I	1
FA	ROUGHLEGGED HAWK	5	I	1
FA	ROUGHLEGGED HAWK	5	I	1
FA	NORTHERN HARRIER	5	J	1
WI	NORTHERN HARRIER	5	J	1
WI	GREAT HORNED OWL	5	O	1
WI	GREAT HORNED OWL	5	O	2
FA	NORTHERN HARRIER	5	O	1
WI	RED-TAILED HAWK	5	O	1
WI	RED-TAILED HAWK	5	O	1
WI	ROUGHLEGGED HAWK	5	O	1
WI	ROUGHLEGGED HAWK	5	O	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

WI	AMERICAN KESTREL	5	P	1
WI	GOLDEN EAGLE	5	P	1
FA	RED-TAILED HAWK	5	P	1
FA	RED-TAILED HAWK	5	P	1
WI	RED-TAILED HAWK	5	P	1
WI	GOLDEN EAGLE	5	Q	1
FA	RED-TAILED HAWK	5	Q	1
FA	SWAINSON'S HAWK	5	Q	1
FA	GOLDEN EAGLE	5	R	1
FA	GOLDEN EAGLE	5	R	1
WI	GOLDEN EAGLE	5	R	1
FA	GREAT HORNED OWL	5	R	1
FA	GREAT HORNED OWL	5	R	1
WI	GREAT HORNED OWL	5	R	1
WI	GREAT HORNED OWL	5	R	1
WI	GREAT HORNED OWL	5	R	1
FA	RED-TIALED HAWK	5	R	1
FA	ROUGHLEGGED HAWK	5	R	1
FA	GREAT HORNED OWL	5	S	1
WI	GREAT HORNED OWL	5	S	1
WI	GREAT HORNED OWL	5	S	1
WI	GREAT HORNED OWL	5	S	1
FA	ROUGHLEGGED HAWK	5	S	1
FA	AMERICAN KESTREL	5	T	1
FA	AMERICAN KESTREL	5	T	1
FA	BALD EAGLE	5	T	1
WI	GOLDEN EAGLE	5	T	1
WI	RED-TAILED HAWK	6	C	1
FA	RED-TAILED HAWK	6	E	1
FA	BALD EAGLE	6	G	2
FA	GREAT HORNED OWL	6	H	1
FA	NORTHERN HARRIER	6	H	1
FA	RED-TAILED HAWK	6	H	1
FA	GREAT HORNED OWL	6	I	1
FA	NORTHERN HARRIER	6	I	1
FA	NORTHERN HARRIER	6	I	1
WI	NORTHERN HARRIER	6	I	1
WI	ROUGHLEGGED HAWK	6	I	1
WI	ROUGHLEGGED HAWK	6	I	1
WI	BALD EAGLE	6	J	1
FA	NORTHERN HARRIER	6	J	1
FA	NORTHERN HARRIER	6	J	1
WI	NORTHERN HARRIER	6	J	1
FA	NORTHERN HARRIER	6	K	1
WI	NORTHERN HARRIER	6	K	2
WI	RED-TAILED HAWK	6	K	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

WI	RED-TAILED HAWK	6	K	1
FA	RED-TAILED HAWK	6	L	2
FA	RED-TAILED HAWK	6	O	1
FA	RED-TAILED HAWK	6	O	1
FA	RED-TAILED HAWK	6	O	1
FA	NORTHERN HARRIER	6	P	1
FA	SWAINSON'S HAWK	6	P	1
FA	RED-TAILED HAWK	6	Q	1
FA	SWAINSON'S HAWK (DARK)	6	R	1
WI	GREAT HORNED OWL	6	S	1
WI	RED-TAILED HAWK	6	S	1
FA	AMERICAN KESTREL	6	U	1
WI	AMERICAN KESTREL	6	U	1
FA	RED-TAILED HAWK	6	U	1
FA	RED-TAILED HAWK	6	U	1
WI	BALD EAGLE	7	F	1
FA	GOLDEN EAGLE	7	F	1
FA	GREAT HORNED OWL	7	F	1
WI	NORTHERN HARRIER	7	F	1
WI	NORTHERN HARRIER	7	F	1
WI	ROUGHLEGGED HAWK	7	F	1
WI	ROUGHLEGGED HAWK	7	F	1
WI	TURKEY VULTURE	7	F	2
FA	GREAT HORNED OWL	7	G	1
FA	GREAT HORNED OWL	7	G	2
WI	GREAT HORNED OWL	7	G	1
FA	RED-TAILED HAWK	7	G	1
FA	RED-TAILED HAWK	7	G	1
FA	ROUGHLEGGED HAWK	7	G	1
FA	ROUGHLEGGED HAWK	7	G	1
WI	AMERICAN KESTREL	7	H	1
WI	AMERICAN KESTREL	7	H	1
FA	GOLDEN EAGLE	7	H	1
FA	GREAT HORNED OWL	7	H	1
FA	ROUGHLEGGED HAWK	7	H	1
FA	ROUGHLEGGED HAWK	7	H	1
FA	AMERICAN KESTREL	7	I	1
FA	AMERICAN KESTREL	7	I	1
WI	AMERICAN KESTREL	7	I	1
FA	PRAIRIE FALCON	7	I	2
FA	RED-TAILED HAWK	7	I	1
WI	RED-TAILED HAWK	7	I	1
FA	AMERICAN KESTREL	7	J	1
WI	AMERICAN KESTREL	7	J	1
WI	GREAT HORNED OWL	7	J	2
WI	GREAT HORNED OWL	7	J	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

FA	RED-TAILED HAWK	7	J	1
FA	RED-TAILED HAWK	7	J	2
WI	AMERICAN KESTREL	7	K	1
WI	GREAT HORNED OWL	7	K	1
FA	NORTHERN HARRIER	7	K	1
WI	NORTHERN HARRIER	7	K	1
WI	RED-TAILED HAWK	7	K	1
WI	RED-TAILED HAWK	7	K	1
WI	RED-TAILED HAWK	7	K	1
FA	AMERICAN KESTREL	7	L	1
FA	BALD EAGLE	7	L	1
FA	GREAT HORNED OWL	7	L	1
FA	GREAT HORNED OWL	7	L	2
WI	GREAT HORNED OWL	7	L	2
WI	GREAT HORNED OWL	7	L	2
FA	RED-TAILED HAWK	7	L	1
FA	GREAT HORNED OWL	7	M	2
FA	GREAT HORNED OWL	7	M	1
WI	GREAT HORNED OWL	7	M	1
FA	NORTHERN HARRIER	7	M	1
WI	NORTHERN HARRIER	7	M	1
WI	RED-TAILED HAWK	7	M	1
FA	AMERICAN KESTREL	7	N	1
WI	AMERICAN KESTREL	7	N	1
FA	GREAT HORNED OWL	7	N	1
FA	GREAT HORNED OWL	7	N	1
FA	GREAT HORNED OWL	7	N	1
WI	GREAT HORNED OWL	7	N	2
FA	NORTHERN HARRIER	7	N	1
FA	RED-TAILED HAWK	7	N	1
WI	RED-TAILED HAWK	7	N	1
FA	RED-TAILED HAWK (DARK)	7	N	1
FA	ROUGHLEGGED HAWK	7	N	1
WI	ROUGHLEGGED HAWK	7	N	1
WI	GREAT HORNED OWL	7	O	1
WI	GREAT HORNED OWL	7	O	1
FA	NORTHERN HARRIER	7	O	1
FA	RED-TAILED HAWK	7	O	1
WI	RED-TAILED HAWK	7	O	1
WI	RED-TAILED HAWK	7	O	1
FA	NORTHERN HARRIER	7	P	1
WI	ROUGHLEGGED HAWK	7	Q	1
FA	ROUGHLEGGED HAWK	7	T	1
FA	AMERICAN KESTREL	8	C	1
FA	AMERICAN KESTREL	8	C	1
FA	ROUGHLEGGED HAWK	8	D	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

FA	NORTHERN HARRIER	8	L	1
FA	ROUGHLEGGED HAWK	8	L	1
FA	AMERICAN KESTREL	8	N	1
FA	AMERICAN KESTREL	8	N	1
WI	AMERICAN KESTREL	8	N	1
FA	GOLDEN EAGLE	8	N	1
WI	ROUGHLEGGED HAWK	8	N	1
WI	AMERICAN KESTREL	8	O	1
WI	NORTHERN HARRIER	8	P	1
FA	RED-TAILED HAWK	8	Q	1
FA	RED-TAILED HAWK	8	Q	1
WI	RED-TAILED HAWK	8	Q	1
WI	ROUGHLEGGED HAWK	9	D	1
FA	GREAT HORNED OWL	9	E	1
FA	RED-TAILED HAWK	9	E	1
WI	BALD EAGLE	9	K	2
FA	GOLDEN EAGLE	9	L	1
FA	AMERICAN KESTREL	9	M	1
WI	GOLDEN EAGLE	9	M	1
WI	AMERICAN KESTREL	9	N	1
WI	AMERICAN KESTREL	9	P	1
FA	RED-TAILED HAWK	9	Q	1
WI	BALD EAGLE	9	R	1
FA	RED-TAILED HAWK	9	S	1
FA	TURKEY VULTURE	9	T	1
WI	AMERICAN KESTREL	9	U	1
FA	RED-TAILED HAWK	10	C	1
FA	NORTHERN HARRIER	10	D	1
FA	RED-TAILED HAWK	10	F	1
WI	RED-TAILED HAWK	10	F	1
FA	NORTHERN HARRIER	10	H	1
WI	RED-TAILED HAWK	10	K	1
WI	AMERICAN KESTREL	10	L	1
WI	GREAT HORNED OWL	10	N	1
WI	GREAT HORNED OWL	10	N	1
WI	GOLDEN EAGLE	10	O	1
FA	NORTHERN HARRIER	10	O	1
WI	RED-TAILED HAWK	10	O	2
FA	SWAINSON'S HAWK	10	O	1
WI	RED-TAILED HAWK	10	P	1
FA	BALD EAGLE	10	Q	1
FA	GOLDEN EAGLE	10	Q	1
WI	GOLDEN EAGLE	10	Q	1
FA	NORTHERN HARRIER	10	Q	1
FA	NORTHERN HARRIER	10	Q	1
FA	RED-TAILED HAWK (DARK)	10	Q	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

WI	ROUGHLEGGED HAWK	10	Q	1
FA	AMERICAN KESTREL	10	R	1
FA	RED-TAILED HAWK	10	R	1
WI	FERRUGINOUS HAWK	10	U	1
WI	RED-TAILED HAWK	10	U	1
FA	SWAINSON'S HAWK	11	D	1
FA	GREAT HORNED OWL	11	E	1
FA	GREAT HORNED OWL	11	E	1
FA	GREAT HORNED OWL	11	E	1
WI	MERLIN	11	E	1
FA	NORTHERN HARRIER	11	E	1
FA	RED-TAILED HAWK	11	E	1
FA	RED-TAILED HAWK	11	E	1
WI	ROUGHLEGGED HAWK	11	E	1
WI	ROUGHLEGGED HAWK	11	E	1
WI	ROUGHLEGGED HAWK	11	E	1
WI	NORTHERN HARRIER	11	F	1
FA	RED-TAILED HAWK	11	F	1
FA	AMERICAN KESTREL	11	H	1
WI	AMERICAN KESTREL	11	K	1
WI	RED-TAILED HAWK	11	K	1
FA	AMERICAN KESTREL	11	M	1
FA	GREAT HORNED OWL	11	M	2
WI	GREAT HORNED OWL	11	M	1
WI	GREAT HORNED OWL	11	M	1
FA	ROUGHLEGGED HAWK	11	M	1
FA	SWAINSON'S HAWK	11	M	1
FA	BALD EAGLE	11	N	1
WI	BALD EAGLE	11	N	1
WI	NORTHERN HARRIER	11	N	1
WI	RED-TAILED HAWK	11	O	1
FA	SWAINSON'S HAWK	11	O	1
WI	AMERICAN KESTREL	11	P	1
WI	GOLDEN EAGLE	11	P	1
WI	GREAT HORNED OWL	11	P	1
WI	GREAT HORNED OWL	11	P	2
WI	NORTHERN HARRIER	11	P	1
FA	RED-TAILED HAWK	11	P	1
FA	RED-TAILED HAWK	11	P	1
WI	RED-TAILED HAWK	11	P	1
WI	ROUGHLEGGED HAWK	11	P	1
WI	ROUGHLEGGED HAWK	11	P	1
WI	GOLDEN EAGLE	11	Q	1
WI	GOLDEN EAGLE	11	R	1
FA	NORTHERN HARRIER	11	R	1
FA	RED-TAILED HAWK	11	R	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

FA	AMERICAN KESTREL	11	S	1
WI	AMERICAN KESTREL	11	U	1
WI	AMERICAN KESTREL	11	U	1
FA	AMERICAN KESTREL	12	F	1
FA	NORTHERN HARRIER	12	F	1
WI	NORTHERN HARRIER	12	F	1
WI	NORTHERN HARRIER	12	F	1
FA	REREGRINE FALCON	12	F	1
FA	ROUGHLEGGED HAWK	12	G	1
WI	ROUGHLEGGED HAWK	12	G	1
WI	AMERICAN KESTREL	12	M	1
WI	AMERICAN KESTREL	12	M	1
FA	GREAT HORNED OWL	12	M	2
WI	GREAT HORNED OWL	12	M	1
WI	GREAT HORNED OWL	12	M	1
FA	SWAINSON'S HAWK	12	M	1
FA	NORTHERN HARRIER	12	N	1
WI	ROUGHLEGGED HAWK	12	N	1
WI	GOLDEN EAGLE	12	O	1
FA	NORTHERN HARRIER	12	O	1
WI	NORTHERN HARRIER	12	O	1
FA	AMERICAN KESTREL	12	P	1
WI	AMERICAN KESTREL	12	P	1
FA	NORTHERN HARRIER	12	P	1
FA	RED-TAILED HAWK	12	P	1
FA	ROUGHLEGGED HAWK	12	P	2
FA	AMERICAN KESTREL	12	Q	1
FA	AMERICAN KESTREL	12	Q	2
WI	AMERICAN KESTREL	12	Q	1
FA	RED-TAILED HAWK	12	Q	1
WI	RED-TAILED HAWK	12	Q	1
WI	ROUGHLEGGED HAWK	12	Q	1
FA	GOLDEN EAGLE	12	R	2
FA	SWAINSON'S HAWK	12	R	1
WI	BALD EAGLE	12	S	1
WI	GOLDEN EAGLE	12	S	2
WI	GOLDEN EAGLE	12	S	2
FA	NORTHERN HARRIER	12	S	1
WI	GOLDEN EAGLE	12	T	1
WI	GOLDEN EAGLE	12	T	1
WI	RED-TAILED HAWK	12	T	1
WI	AMERICAN KESTREL	13	F	1
FA	GREAT HORNED OWL	13	F	1
FA	GREAT HORNED OWL	13	F	1
WI	GREAT HORNED OWL	13	F	1
WI	GREAT HORNED OWL	13	F	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

WI	GREAT HORNED OWL	13	F	1
WI	NORTHERN HARRIER	13	F	1
WI	PRAIRIE FALCON	13	F	1
FA	RED-TAILED HAWK	13	F	1
WI	ROUGHLEGGED HAWK	13	F	1
WI	ROUGHLEGGED HAWK	13	F	1
FA	AMERICAN KESTREL	13	G	1
FA	AMERICAN KESTREL	13	G	2
WI	AMERICAN KESTREL	13	G	1
WI	FERRUGINOUS HAWK	13	G	1
WI	GOLDEN EAGLE	13	G	1
FA	GREAT HORNED OWL	13	G	2
FA	GREAT HORNED OWL	13	G	1
FA	GREAT HORNED OWL	13	G	1
FA	GREAT HORNED OWL	13	G	1
WI	GREAT HORNED OWL	13	G	2
WI	GREAT HORNED OWL	13	G	1
FA	NORTHERN HARRIER	13	G	1
FA	NORTHERN HARRIER	13	G	1
FA	NORTHERN HARRIER	13	G	1
FA	NORTHERN HARRIER	13	G	1
WI	NORTHERN HARRIER	13	G	1
WI	RED-TAILED HAWK	13	G	1
WI	ROUGHLEGGED HAWK	13	G	1
FA	AMERICAN KESTREL	13	H	1
FA	GOLDEN EAGLE	13	H	1
WI	GREAT HORNED OWL	13	H	2
FA	NORTHERN HARRIER	13	H	1
WI	NORTHERN HARRIER	13	H	1
FA	RED-TAILED HAWK	13	H	1
WI	RED-TAILED HAWK	13	H	1
FA	ROUGHLEGGED HAWK	13	H	1
WI	ROUGHLEGGED HAWK	13	H	2
WI	ROUGHLEGGED HAWK	13	H	1
WI	ROUGHLEGGED HAWK	13	H	1
FA	AMERICAN KESTREL	13	I	1
FA	GOLDEN EAGLE	13	K	1
FA	NORTHERN HARRIER	13	K	1
FA	AMERICAN KESTREL	13	L	1
FA	NORTHERN HARRIER	13	L	2
FA	RED-TAILED HAWK	13	L	1
FA	AMERICAN KESTREL	13	P	1
FA	NORTHERN HARRIER	13	P	1
FA	NORTHERN HARRIER	13	P	1
WI	AMERICAN PEREGRINE FALCON	13	P	1
WI	AMERICAN KESTREL	13	Q	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

WI	BALD EAGLE	13	Q	1
WI	NORTHERN HARRIER	13	Q	1
FA	RED-TAILED HAWK	13	Q	2
WI	BALD EAGLE	13	R	1
WI	GREAT HORNED OWL	13	R	1
WI	GREAT HORNED OWL	13	R	1
WI	NORTHERN HARRIER	13	R	1
FA	RED-TAILED HAWK	13	R	1
FA	GREAT HORNED OWL	13	S	2
WI	GREAT HORNED OWL	13	S	1
WI	GREAT HORNED OWL	13	S	2
WI	GREAT HORNED OWL	13	S	1
WI	GREAT HORNED OWL	13	S	1
FA	NORTHERN HARRIER	13	S	1
FA	RED-TAILED HAWK	13	S	1
WI	ROUGHLEGGED HAWK	13	S	1
FA	GREAT HORNED OWL	13	T	1
FA	GREAT HORNED OWL	13	T	1
FA	GREAT HORNED OWL	13	T	1
WI	GREAT HORNED OWL	13	T	1
WI	GREAT HORNED OWL	13	T	3
FA	RED-TAILED HAWK	13	T	2
FA	ROUGHLEGGED HAWK	13	T	2
WI	AMERICAN KESTREL	13	U	1
WI	AMERICAN KESTREL	13	U	1
FA	GREAT HORNED OWL	13	U	1
WI	GREAT HORNED OWL	13	U	1
WI	ROUGHLEGGED HAWK	13	U	1
FA	RED-TAILED HAWK	14	D	2
WI	GREAT HORNED OWL	14	F	1
WI	RED-TAILED HAWK	14	F	1
FA	SHORT-EARED OWL	14	F	1
FA	AMERICAN KESTREL	14	G	1
WI	BALD EAGLE	14	G	2
FA	FERRUGINOUS HAWK	14	G	1
FA	FERRUGINOUS HAWK	14	G	1
FA	GREAT HORNED OWL	14	G	1
FA	GREAT HORNED OWL	14	G	1
WI	GREAT HORNED OWL	14	G	1
WI	GREAT HORNED OWL	14	G	1
FA	NORTHERN HARRIER	14	G	1
FA	NORTHERN HARRIER	14	G	1
WI	NORTHERN HARRIER	14	G	1
WI	BALD EAGLE	14	H	1
FA	FERRUGINOUS HAWK	14	H	1
WI	GOLDEN EAGLE	14	H	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

FA	NORTHERN HARRIER	14	H	1
FA	NORTHERN HARRIER	14	H	1
FA	RED-TAILED HAWK	14	H	1
WI	ROUGHLEGGED HAWK	14	H	1
FA	GREAT HORNED OWL	14	I	1
FA	NORTHERN HARRIER	14	I	1
FA	NORTHERN HARRIER	14	I	1
WI	RED-TAILED HAWK	14	I	1
WI	GOLDEN EAGLE	14	J	1
WI	GREAT HORNED OWL	14	J	1
FA	NORTHERN HARRIER	14	J	1
FA	NORTHERN HARRIER	14	J	1
FA	NORTHERN HARRIER	14	J	1
FA	NORTHERN HARRIER	14	J	1
FA	NORTHERN HARRIER	14	J	1
WI	RED-TAILED HAWK	14	J	1
WI	ROUGHLEGGED HAWK	14	J	1
WI	GOLDEN EAGLE	14	M	1
FA	NORTHERN HARRIER	14	N	1
FA	AMERICAN KESTREL	14	P	1
WI	ROUGHLEGGED HAWK	14	P	1
FA	ROUGHLEGGED HAWK	14	Q	1
WI	ROUGHLEGGED HAWK	14	Q	1
WI	AMERICAN KESTREL	14	R	1
FA	PRAIRIE FALCON	14	R	1
WI	ROUGHLEGGED HAWK	14	R	1
FA	AMERICAN KESTREL	14	S	1
WI	GREAT HORNED OWL	14	S	2
WI	GREAT HORNED OWL	14	S	1
FA	NORTHERN HARRIER	14	S	1
WI	FERRUGINOUS HAWK	14	T	1
WI	RED-TAILED HAWK	14	T	1
FA	NORTHERN HARRIER	14	U	1
WI	GREAT HORNED OWL	15	E	1
FA	ROUGHLEGGED HAWK	15	F	1
FA	GOLDEN EAGLE	15	G	1
FA	NORTHERN HARRIER	15	G	1
FA	RED-TAILED HAWK	15	G	1
WI	RED-TAILED HAWK	15	G	1
FA	TURKEY VULTURE	15	G	2
WI	GOLDEN EAGLE	15	H	1
FA	NORTHERN HARRIER	15	H	1
FA	GOLDEN EAGLE	15	I	1
FA	GREAT HORNED OWL	15	I	1
FA	GREAT HORNED OWL	15	I	1
WI	GREAT HORNED OWL	15	I	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

WI	GREAT HORNED OWL	15	I	1
FA	NORTHERN HARRIER	15	I	1
FA	RED-TAILED HAWK	15	I	1
FA	RED-TAILED HAWK	15	I	1
FA	RED-TAILED HAWK	15	I	1
WI	RED-TAILED HAWK	15	I	1
WI	ROUGHLEGGED HAWK	15	I	1
WI	ROUGHLEGGED HAWK	15	I	1
FA	AMERICAN KESTREL	15	J	1
WI	BALD EAGLE	15	J	1
FA	GREAT HORNED OWL	15	J	1
FA	LONG-EARED OWL	15	J	3
FA	NORTHERN HARRIER	15	J	1
FA	RED-TAILED HAWK	15	J	4
FA	BURROWING OWL	15	M	1
WI	BALD EAGLE	15	O	1
FA	COOPER'S HAWK	15	O	1
FA	NORTHERN HARRIER	15	O	1
WI	AMERICAN KESTREL	15	P	1
FA	GOLDEN EAGLE	15	P	1
FA	NORTHERN HARRIER	15	P	1
FA	NORTHERN HARRIER	15	P	1
FA	PRAIRIE FALCON	15	P	1
FA	RED-TAILED HAWK	15	P	1
WI	ROUGHLEGGED HAWK	15	P	1
WI	ROUGHLEGGED HAWK	15	P	1
FA	AMERICAN KESTREL	15	Q	1
WI	PRAIRIE FALCON	15	Q	1
FA	ROUGHLEGGED HAWK	15	Q	1
FA	AMERICAN KESTREL	15	R	1
FA	COOPER'S HAWK	15	R	1
FA	RED-TAILED HAWK	15	R	1
FA	RED-TAILED HAWK	15	R	1
WI	BALD EAGLE	15	T	1
WI	GREAT HORNED OWL	16	C	1
WI	ROUGHLEGGED HAWK	16	G	1
FA	RED-TAILED HAWK	16	H	1
WI	BALD EAGLE	16	I	1
FA	GOLDEN EAGLE	16	I	2
FA	AMERICAN KESTREL	16	J	1
WI	BALD EAGLE	16	J	2
FA	FERRUGINOUS HAWK	16	J	1
FA	GREAT HORNED OWL	16	J	1
FA	GREAT HORNED OWL	16	J	2
WI	GREAT HORNED OWL	16	J	1
WI	ROUGHLEGGED HAWK	16	K	2

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

WI	ROUGHLEGGED HAWK	16	L	1
WI	ROUGHLEGGED HAWK	16	L	1
WI	ROUGHLEGGED HAWK	16	M	1
WI	GOLDEN EAGLE	16	O	1
FA	RED-TAILED HAWK	16	O	1
WI	ROUGHLEGGED HAWK	16	Q	1
WI	ROUGHLEGGED HAWK	16	Q	1
FA	GREAT HORNED OWL	16	T	1
FA	RED-TAILED HAWK	16	T	1
FA	RED-TAILED HAWK	16	T	1
WI	AMERICAN KESTREL	16	U	2
WI	AMERICAN KESTREL	16	U	1
FA	RED-TAILED HAWK	16	U	1
FA	SWAINSON'S HAWK	16	U	1
FA	AMERICAN KESTREL	17	F	1
FA	ROUGHLEGGED HAWK	17	F	1
FA	AMERICAN KESTREL	17	K	1
WI	GOLDEN EAGLE	17	K	1
FA	RED-TAILED HAWK	17	K	1
FA	RED-TAILED HAWK	17	K	1
WI	RED-TAILED HAWK	17	K	1
FA	AMERICAN KESTREL	17	L	1
WI	AMERICAN KESTREL	17	I	1
WI	AMERICAN KESTREL	17	L	1
WI	BALD EAGLE	17	L	1
WI	BALD EAGLE	17	L	1
WI	BALD EAGLE	17	L	1
WI	GREAT HORNED OWL	17	L	1
WI	GREAT HORNED OWL	17	L	1
FA	RED-TAILED HAWK	17	L	1
FA	RED-TAILED HAWK	17	L	1
WI	RED-TAILED HAWK	17	L	1
FA	ROUGHLEGGED HAWK	17	L	1
WI	ROUGHLEGGED HAWK	17	L	1
WI	GREAT HORNED OWL	17	N	1
WI	NORTHERN HARRIER	17	N	1
FA	AMERICAN KESTREL	17	O	1
FA	AMERICAN KESTREL	17	O	1
WI	GOLDEN EAGLE	17	O	1
FA	PRAIRIE FALCON	17	O	1
FA	RED-TAILED HAWK	17	O	1
WI	ROUGHLEGGED HAWK	17	O	1
FA	AMERICAN KESTREL	17	P	1
WI	BALD EAGLE	17	P	1
FA	GOLDEN EAGLE	17	P	1
FA	GOLDEN EAGLE	17	P	1

FALL AND WINTER RAPTOR USE AREAS BASED ON COMBINED DATA FROM 1993, 1994, AND 1995

FA	RED-TAILED HAWK	17	P	1
WI	RED-TAILED HAWK	17	P	1

RING-NECKED PHEASANT (GAMEBIRD) USE AREAS, BASED ON COMBINED MONITORING DATA

To determine area use year-round by upland gamebirds, data records of all upland gamebirds from the Significant Species Database for the years 1993, 1994, and 1995 were combined. After data records on observation locations for upland gamebirds were evaluated, only records of ring-necked pheasants were found. Area use locations for this species were mapped.

RING-NECKED PHEASANT (GAMEBIRDS) USE AREAS USE AREAS BASED ON COMBINED MONITORING DATA FROM 1993, 11994, AND 1995

SEASON	SPECIES	RF GRID N	RF GIRD E	GROUP SIZE
SU	RING-NECKED PHEASANT	4	K	1
SP	RING-NECKED PHEASANT	4	L	1
SP	RING-NECKED PHEASANT	4	M	1
SP	RING-NECKED PHEASANT	4	M	1
WI	RING-NECKED PHEASANT	4	M	1
FA	RING-NECKED PHEASANT	5	I	1
SP	RING-NECKED PHEASANT	5	L	1
SP	RING-NECKED PHEASANT	7	J	1
FA	RING-NECKED PHEASANT	7	K	1
SP	RING-NECKED PHEASANT	7	K	1
SP	RING-NECKED PHEASANT	7	K	1
SU	RING-NECKED PHEASANT	7	K	1
WI	RING-NECKED PHEASANT	7	K	1
SP	RING-NECKED PHEASANT	7	L	1
WI	RING-NECKED PHEASANT	7	N	1

APPENDIX C

Bird Density Calculations During the Winter Season
(1991, 1993, 1994, and 1995)

Key to table symbols:

n = number of individuals observed
sum d = the sum of all the distances which individuals were observed
mean d = (sum d divided by n)
D = the density of the species observed in hectares using the Leopold formula

Winter Season 1991/92

Habitat = Riparian Woodlands

Species Richness = 8

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
American Tree Sparrow					13	65	5.0	4.333					13	65	5.0	1.444	2.50	1.44
Great Horned Owl	2	10	5.0	0.667	1	5	5.0	0.333	2	10	5.0	0.667	5	25	5.0	0.556	0.19	0.11
Black-billed Magpie	3	274	91.3	0.055	1	15	15.0	0.111	4	80	20.0	0.333	8	369	46.1	0.096	0.15	0.08
House Finch					5	363	72.6	0.115					5	363	72.6	0.038	0.07	0.04
Rough-legged Hawk	1	25	25.0	0.067									1	25	25.0	0.022	0.04	0.02
Prairie Falcon					2	162	81.0	0.041					2	162	81.0	0.014	0.02	0.01
Red-tailed Hawk					1	87	87.0	0.019					1	87	87.0	0.006	0.01	0.01
Western Meadowlark					1	87	87.0	0.019					1	87	87.0	0.006	0.01	0.01
Totals	6	309	51.5	0.194	24	784	32.7	1.224	6	90	15.0	0.667	36	1183	32.9	0.609	0.52	0.30

Winter Season 1993/94

Habitat = Riparian Woodlands

Species Richness = 11

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Northern Flicker					4	20	5.0	1.333	2	10	5.0	0.667	6	30	5.0	0.667	0.67	0.38
Black-capped Chickadee	1	5	5.0	0.333	2	10	5.0	0.667					3	15	5.0	0.333	0.33	0.19
Great Horned Owl									2	10	5.0	0.667	2	10	5.0	0.222	0.39	0.22
Red-winged Blackbird									1	5	5.0	0.333	1	5	5.0	0.111	0.19	0.11
Rough-legged Hawk									1	5	5.0	0.333	1	5	5.0	0.111	0.19	0.11
Black-billed Magpie					1	5	5.0	0.333					1	5	5.0	0.111	0.19	0.11
European Starling									9	425	47.2	0.318	9	425	47.2	0.106	0.18	0.11
American Tree Sparrow					2	30	15.0	0.222					2	30	15.0	0.074	0.13	0.07
Common Raven					5	500	100.0	0.083					5	500	100.0	0.028	0.05	0.03
American Kestrel	1	62	62.0	0.027									1	62	62.0	0.009	0.02	0.01
Red-tailed Hawk					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
Totals	2	67	33.5	0.100	15	665	44.3	0.564	15	455	30.3	0.824	32	1187	37.1	0.479	0.37	0.21

Winter Season 1994/95

Habitat = Riparian Woodlands

Species Richness = 14

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
American Tree Sparrow									8	40	5.0	2.667	8	40	5.0	0.889	1.54	0.89
European Starling	13	225	17.3	1.252	6	125	20.8	0.480	25	886	35.4	1.176	44	1236	28.1	0.870	0.43	0.25
Song Sparrow	2	10	5.0	0.667	2	10	5.0	0.667	2	10	5.0	0.667	6	30	5.0	0.667	0.00	0.00
Great Horned Owl	5	35	7.0	1.190	2	10	5.0	0.667	4	100	25.0	0.267	11	145	13.2	0.464	0.46	0.27
Black-billed Magpie	2	10	5.0	0.667	1	15	15.0	0.111	2	10	5.0	0.667	5	35	7.0	0.397	0.32	0.19
Northern Flicker	1	25	25.0	0.067	3	15	5.0	1.000	1	5	5.0	0.333	5	45	9.0	0.309	0.48	0.28
Mallard									2	10	5.0	0.667	2	10	5.0	0.222	0.39	0.22
House Finch					5	120	24.0	0.347					5	120	24.0	0.116	0.20	0.12
Common Snipe	1	5	5.0	0.333									1	5	5.0	0.111	0.19	0.11
Black-capped Chickadee									1	5	5.0	0.333	1	5	5.0	0.111	0.19	0.11
Bald Eagle					3	300	100.0	0.050	3	300	100.0	0.050	6	600	100.0	0.033	0.03	0.02
Western Meadowlark									2	149	74.5	0.045	2	149	74.5	0.015	0.03	0.02
Red-winged Blackbird									2	200	100.0	0.033	2	200	100.0	0.011	0.02	0.01
Red-tailed Hawk									1	100	100.0	0.017	1	100	100.0	0.006	0.01	0.01
Totals	24	310	12.9	3.097	22	595	27.0	1.356	53	1815	34.2	2.579	99	2720	27.5	2.002	0.89	0.52

Winter Season 1995/96

Habitat = Riparian Woodlands

Species Richness = 15

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
American Tree Sparrow	24	120	5.0	8.000	15	225	15.0	1.667	5	25	5.0	1.667	44	370	8.4	2.907	3.66	2.11
European Starling	12	120	10.0	2.000					10	170	17.0	0.980	22	290	13.2	0.927	1.00	0.58
American Goldfinch	16	280	17.5	1.524									16	280	17.5	0.508	0.88	0.51
Western Meadowlark									3	15	5.0	1.000	3	15	5.0	0.333	0.58	0.33
Northern Flicker	3	25	8.3	0.600	4	60	15.0	0.444					7	85	12.1	0.320	0.31	0.18
Song Sparrow	1	5	5.0	0.333	3	25	8.3	0.600					4	30	7.5	0.296	0.30	0.17
Loggerhead Shrike	1	5	5.0	0.333					1	5	5.0	0.333	2	10	5.0	0.222	0.19	0.11
Black-billed Magpie	5	95	19.0	0.439					4	115	28.8	0.232	9	210	23.3	0.214	0.22	0.13
Mallard									10	275	27.5	0.606	10	275	27.5	0.202	0.35	0.20
Great Horned Owl					1	5	5.0	0.333					1	5	5.0	0.111	0.19	0.11
Downy Woodpecker	2	20	10.0	0.333									2	20	10.0	0.111	0.19	0.11
Common Raven	1	100	100.0	0.017					2	200	100.0	0.033	3	300	100.0	0.017	0.02	0.01
Black-capped Chickadee									1	35	35.0	0.048	1	35	35.0	0.016	0.03	0.02
Golden Eagle					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
Red-tailed Hawk					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
Totals	65	770	11.8	9.145	25	515	20.6	2.023	36	840	23.3	2.571	126	2125	16.9	4.151	3.96	2.29

290

Winter Season 1991/92

Habitat = Wetlands

Species Richness = 10

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Common Snipe									1	5	5	0.3	1	5	5.0	0.111	0.19	0.11
Song Sparrow									1	5	5	0.3	1	5	5.0	0.111	0.19	0.11
Rock Dove	8	800	100.0	0.133									8	800	100.0	0.044	0.08	0.04
Black-billed Magpie	1	100	100.0	0.017					2	30	15	0.2	3	130	43.3	0.038	0.12	0.07
Red-tailed Hawk					1	35	35.0	0.048					1	35	35.0	0.016	0.03	0.02
American Kestrel	1	35	35.0	0.048									1	35	35.0	0.016	0.03	0.02
Loggerhead Shrike	1	45	45.0	0.037									1	45	45.0	0.012	0.02	0.01
American Tree Sparrow	1	45	45.0	0.037									1	45	45.0	0.012	0.02	0.01
Golden Eagle									1	100	100	0.0	1	100	100.0	0.006	0.01	0.01
Common Raven	1	100	100.0	0.017									1	100	100.0	0.006	0.01	0.01
Totals	13	1125	86.5	0.250	1	35	35.0	0.048	5	140	28	0.3	19	1300	68.4	0.154	0.13	0.08

Winter Season 1993/94

Habitat = Wetlands

Species Richness = 5

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
American Tree Sparrow					1	5	5.0	0.333					1	5	5.0	0.111	0.19	0.11
European Starling	3	105	35.0	0.143									3	105	35.0	0.048	0.08	0.05
Black-billed Magpie	1	15	15.0	0.111									1	15	15.0	0.037	0.06	0.04
Red-tailed Hawk	1	45	45.0	0.037									1	45	45.0	0.012	0.02	0.01
Merlin					1	55	55.0	0.030					1	55	55.0	0.010	0.02	0.01
Totals	5	165	33.0	0.253	2	60	30.0	0.111	0	0	0.0	0.000	7	225	32.1	0.121	0.13	0.07

Winter Season 1994/95

Habitat = Wetlands

Species Richness = 7

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Red-winged Blackbird					6	215	35.8	0.279	15	192	12.8	1.953	21	407	19.4	0.602	1.06	0.61
Song Sparrow					1	5	5.0	0.333	2	20	10.0	0.333	3	25	8.3	0.200	0.19	0.11
Northern Harrier									2	30	15.0	0.222	2	30	15.0	0.074	0.13	0.07
Western Meadowlark									1	15	15.0	0.111	1	15	15.0	0.037	0.06	0.04
Black-billed Magpie	1	5	5.0	0.333					1	87	87.0	0.019	2	92	46.0	0.024	0.19	0.11
European Starling									3	261	87.0	0.057	3	261	87.0	0.019	0.03	0.02
Rough-legged Hawk	2	187	93.5	0.036									2	187	93.5	0.012	0.02	0.01
Totals	3	192	64.0	0.078	7	220	31.4	0.371	24	605	25.2	1.587	34	1017	29.9	0.631	0.80	0.46

Winter Season 1995/96

Habitat = Wetlands

Species Richness = 11

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Song Sparrow	4	20	5.0	1.333	3	15	5.0	1.000					7	35	5.0	0.778	0.69	0.40
House Finch	28	660	23.6	1.980	1	100	100.0	0.017	1	100	100.0	0.017	30	860	28.7	0.581	1.13	0.65
Northern Harrier									1	5	5.0	0.333	1	5	5.0	0.111	0.19	0.11
American Tree Sparrow									1	5	5.0	0.333	1	5	5.0	0.111	0.19	0.11
Black-billed Magpie	1	5	5.0	0.333					3	235	78.3	0.064	4	240	60.0	0.037	0.18	0.10
Horned Lark	2	70	35.0	0.095					1	100	100.0	0.017	3	170	56.7	0.029	0.05	0.03
Common Raven									1	25	25.0	0.067	1	25	25.0	0.022	0.04	0.02
Great Horned Owl									1	35	35.0	0.048	1	35	35.0	0.016	0.03	0.02
Red-tailed Hawk	1	100	100.0	0.017									1	100	100.0	0.006	0.01	0.01
Northern Flicker					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
American Kestrel									1	100	100.0	0.017	1	100	100.0	0.006	0.01	0.01
Totals	36	855	23.8	2.526	5	215	43.0	0.194	10	605	60.5	0.275	51	1675	32.8	0.863	1.32	0.76

Winter Season 1991/92

Habitat = Reclaimed Grasslands

Species Richness = 2

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Rock Dove									9	783	87.0	0.207	9	783	87.0	0.069	0.12	0.07
Red-tailed Hawk					1	100	100.0	0.020					1	100	100.0	0.007	0.01	0.01
Totals	0	0	0.0	0.000	1	100	100.0	0.020	9	783	87.0	0.207	10	883	88.3	0.076	0.11	0.07

Winter Season 1993/94

Habitat = Reclaimed Grasslands

Species Richness = 2

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Red-winged Blackbird									1	25	25.0	0.100	1	25	25.0	0.033	0.06	0.03
Common Goldeneye									1	100	100.0	0.025	1	100	100.0	0.008	0.01	0.01
Totals	0	0	0.0	0.000	0	0	0.0	0.000	2	125	62.5	0.080	2	125	62.5	0.027	0.05	0.03

Winter Season 1994/95

Habitat = Reclaimed Grasslands

Species Richness = 9

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Canada Goose	24	2400	100.0	0.480									24	2400	100.0	0.160	0.28	0.16
Horned Lark	3	45	15.0	0.400									3	45	15.0	0.133	0.23	0.13
European Starling	2	200	100.0	0.040	11	957	87.0	0.253					13	1157	89.0	0.097	0.14	0.08
Red-winged Blackbird									1	15	15.0	0.133	1	15	15.0	0.044	0.08	0.04
Western Meadowlark									2	80	40.0	0.100	2	80	40.0	0.033	0.06	0.03
Rock Dove	4	400	100.0	0.080									4	400	100.0	0.027	0.05	0.03
American Kestrel					1	87	87.0	0.023	1	25	25.0	0.080	2	112	56.0	0.024	0.04	0.02
Common Raven					3	300	100.0	0.060					3	300	100.0	0.020	0.03	0.02
Black-billed Magpie					1	100	100.0	0.020					1	100	100.0	0.007	0.01	0.01
Totals	33	3045	92.3	0.715	16	1444	90.3	0.355	4	120	30.0	0.267	53	4609	87.0	0.406	0.24	0.14

Winter Season 1995/96

Habitat = Reclaimed Grasslands

Species Richness = 5

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Great Horned Owl	1	5	5.0	0.400									1	5	5.0	0.133	0.23	0.13
Canada Goose	2	200	100.0	0.040	7	700	100.0	0.140					9	900	100.0	0.060	0.07	0.04
Black-billed Magpie	1	62	62.0	0.032	1	100	100.0	0.020					2	162	81.0	0.016	0.02	0.01
Ferruginous Hawk	1	100	100.0	0.020									1	100	100.0	0.007	0.01	0.01
Common Raven					1	100	100.0	0.020					1	100	100.0	0.007	0.01	0.01
Totals	5	367	73.4	0.136	9	900	100.0	0.180	0	0	0.0	0.000	14	1267	90.5	0.103	0.09	0.05

Winter Season 1991/92

Habitat = Mesic Mixed Grasslands

Species Richness = 4

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Common Raven	2	115	57.5	0.087	3	287	95.7	0.078	1	100	100.0	0.025	6	502	83.7	0.060	0.03	0.02
Black-billed Magpie									1	15	15.0	0.167	1	15	15.0	0.056	0.10	0.06
House Finch	1	25	25.0	0.100									1	25	25.0	0.033	0.06	0.03
Ferruginous Hawk	1	100	100.0	0.025									1	100	100.0	0.008	0.01	0.01
Totals	4	240	60.0	0.167	3	287	95.7	0.078	2	115	57.5	0.087	9	642	71.3	0.105	0.05	0.03

Winter Season 1993/94

Habitat = Mesic Mixed Grasslands

Species Richness = 2

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Horned Lark									4	100	25.0	0.400	4	100	25.0	0.133	0.23	0.13
American Tree Sparrow	7	550	78.6	0.223									7	550	78.6	0.074	0.13	0.07
Totals	7	550	78.6	0.223	0	0	0.0	0.000	4	100	25.0	0.400	11	650	59.1	0.155	0.20	0.12

Winter Season 1994/95

Habitat = Mesic Mixed Grasslands

Species Richness = 11

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
European Starling									13	571	43.9	0.740	13	571	43.9	0.247	0.43	0.25
House Finch					4	290	72.5	0.138	9	580	64.4	0.349	13	870	66.9	0.162	0.18	0.10
Horned Lark	1	15	15.0	0.167									1	15	15.0	0.056	0.10	0.06
Common Raven									4	400	100.0	0.100	4	400	100.0	0.033	0.06	0.03
Song Sparrow									1	25	25.0	0.100	1	25	25.0	0.033	0.06	0.03
Black-capped Chickadee					1	25	25.0	0.100					1	25	25.0	0.033	0.06	0.03
Rough-legged Hawk					1	100	100.0	0.025	1	15	15.0	0.167	2	115	57.5	0.029	0.09	0.05
American Crow									3	300	100.0	0.075	3	300	100.0	0.025	0.04	0.03
Northern Flicker	1	87	87.0	0.029									1	87	87.0	0.010	0.02	0.01
Red-winged Blackbird									1	100	100.0	0.025	1	100	100.0	0.008	0.01	0.01
Bald Eagle	1	100	100.0	0.025									1	100	100.0	0.008	0.01	0.01
Totals	3	202	67.3	0.111	6	415	69.2	0.217	32	1991	62.2	1.286	41	2608	63.6	0.537	0.65	0.38

Winter Season 1995/96

Habitat = Mesic Mixed Grasslands

Species Richness = 5

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Horned Lark									1	15	15.0	0.167	1	15	15.0	0.056	0.10	0.06
House Finch					1	25	25.0	0.100					1	25	25.0	0.033	0.06	0.03
Common Raven	1	100	100.0	0.025	1	100	100.0	0.025	1	100	100.0	0.025	3	300	100.0	0.025	0.00	0.00
Western Meadowlark									1	35	35.0	0.071	1	35	35.0	0.024	0.04	0.02
Northern Harrier					1	100	100.0	0.025	1	100	100.0	0.025	2	200	100.0	0.017	0.01	0.01
Totals	1	100	100.0	0.025	3	225	75.0	0.100	4	250	62.5	0.160	8	575	71.9	0.093	0.07	0.04

Winter Season 1991/92

Habitat = Xeric Mixed Grasslands

Species Richness = 4

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
American Tree Sparrow					1	5	5.0	0.323					1	5	5.0	0.108	0.19	0.11
Common Raven	3	300	100.0	0.048	5	500	100.0	0.081	1	100	100.0	0.016	9	900	100.0	0.048	0.03	0.02
Horned Lark	4	248	62.0	0.104									4	248	62.0	0.035	0.06	0.03
Black-billed Magpie	2	200	100.0	0.032					1	87	87.0	0.019	3	287	95.7	0.017	0.02	0.01
Totals	9	748	83.1	0.175	6	505	84.2	0.115	2	187	93.5	0.035	17	1440	84.7	0.108	0.07	0.04

Winter Season 1993/94

Habitat = Xeric Mixed Grasslands

Species Richness = 6

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Horned Lark	3	75	25.0	0.146					2	105	52.5	0.046	5	180	36.0	0.056	0.07	0.04
Western Meadowlark									4	380	95.0	0.051	4	380	95.0	0.017	0.03	0.02
Golden Eagle	2	145	72.5	0.034	1	100	100.0	0.012					3	245	81.7	0.015	0.02	0.01
Common Raven	1	100	100.0	0.012	1	100	100.0	0.012					2	200	100.0	0.008	0.01	0.00
Northern Goshawk	1	100	100.0	0.012									1	100	100.0	0.004	0.01	0.00
Bald Eagle	1	100	100.0	0.012									1	100	100.0	0.004	0.01	0.00
Totals	8	520	65.0	0.150	2	200	100.0	0.024	6	485	80.8	0.091	16	1205	75.3	0.086	0.06	0.04

Winter Season 1994/95

Habitat = Xeric Mixed Grasslands

Species Richness = 8

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Horned Lark					30	450	15.0	2.439	15	593	39.5	0.463	45	1043	23.2	0.789	1.30	0.75
Black-billed Magpie					10	870	87.0	0.140	4	172	43.0	0.113	14	1042	74.4	0.076	0.07	0.04
House Finch									2	50	25.0	0.098	2	50	25.0	0.033	0.06	0.03
Western Meadowlark					1	15	15.0	0.081	1	35	35.0	0.035	2	50	25.0	0.033	0.04	0.02
Canada Goose									6	600	100.0	0.073	6	600	100.0	0.024	0.04	0.02
Rough-legged Hawk	1	25	25.0	0.049									1	25	25.0	0.016	0.03	0.02
American Crow					1	100	100.0	0.012					1	100	100.0	0.004	0.01	0.00
Common Raven	1	100	100.0	0.012									1	100	100.0	0.004	0.01	0.00
Totals	2	125	62.5	0.039	42	1435	34.2	1.499	28	1450	51.8	0.659	72	3010	41.8	0.700	0.73	0.42

Winter Season 1995/96

Habitat = Xeric Mixed Grasslands

Species Richness = 9

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Horned Lark	5	150	30.0	0.203	23	215	9.4	3.000	6	242	40.3	0.181	34	607	17.9	0.774	1.62	0.94
European Starling	23	2001	87.0	0.322									23	2001	87.0	0.107	0.19	0.11
House Finch	10	1000	100.0	0.122					1	100	100.0	0.012	11	1100	100.0	0.045	0.07	0.04
American Tree Sparrow	2	30	15.0	0.163	1	87	87.0	0.014					3	117	39.0	0.031	0.09	0.05
Black-billed Magpie	4	345	86.3	0.057	2	200	100.0	0.024					6	545	90.8	0.027	0.03	0.02
Common Raven	1	100	100.0	0.012					3	300	100.0	0.037	4	400	100.0	0.016	0.02	0.01
Vesper Sparrow					1	25	25.0	0.049					1	25	25.0	0.016	0.03	0.02
Northern Harrier					1	35	35.0	0.035	1	100	100.0	0.012	2	135	67.5	0.012	0.02	0.01
Rough-legged Hawk									1	100	100.0	0.012	1	100	100.0	0.004	0.01	0.00
Totals	45	3626	80.6	0.681	28	562	20.1	1.701	12	842	70.2	0.209	85	5030	59.2	0.584	0.76	0.44

Winter Season 1991/92

Habitat = Upland Shrublands

Species Richness = 6

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
European Starling									5	25	5.0	2.500	5	25	5.0	0.833	1.44	0.83
Great Horned Owl					2	10	5.0	1.000	1	15	15.0	0.167	3	25	8.3	0.300	0.54	0.31
Black-billed Magpie	7	535	76.4	0.229	1	100	100.0	0.025	3	205	68.3	0.110	11	840	76.4	0.120	0.10	0.06
Loggerhead Shrike	1	45	45.0	0.056									1	45	45.0	0.019	0.03	0.02
Red-tailed Hawk					1	100	100.0	0.025					1	100	100.0	0.008	0.01	0.01
Northern Harrier	1	100	100.0	0.025									1	100	100.0	0.008	0.01	0.01
Totals	9	680	75.6	0.298	4	210	52.5	0.190	9	245	27.2	0.827	22	1135	51.6	0.355	0.34	0.20

Winter Season 1993/94

Habitat = Upland Shrublands

Species Richness = 7

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Black-capped Chickadee	2	10	5.0	1.000	12	540	45.0	0.667					14	550	39.3	0.297	0.51	0.29
Black-billed Magpie	3	72	24.0	0.313	2	50	25.0	0.200	4	120	30.0	0.333	9	242	26.9	0.279	0.07	0.04
House Finch	6	450	75.0	0.200	3	75	25.0	0.300	2	30	15.0	0.333	11	555	50.5	0.182	0.07	0.04
Dark-eyed Junco					2	30	15.0	0.333					2	30	15.0	0.111	0.19	0.11
Horned Lark									8	800	100.0	0.200	8	800	100.0	0.067	0.12	0.07
Red-winged Blackbird									2	60	30.0	0.167	2	60	30.0	0.056	0.10	0.06
Bald Eagle									1	100	100.0	0.025	1	100	100.0	0.008	0.01	0.01
Totals	11	532	48.4	0.569	19	695	36.6	1.299	17	1110	65.3	0.651	47	2337	49.7	0.788	0.40	0.23

Winter Season 1994/95

Habitat = Upland Shrublands

Species Richness = 13

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Black-billed Magpie	10	337	33.7	0.742	5	159	31.8	0.393	6	182	30.3	0.495	21	678	32.3	0.542	0.18	0.10
Black-capped Chickadee	2	20	10.0	0.500	2	10	5.0	1.000					4	30	7.5	0.444	0.50	0.29
American Goldfinch	6	130	21.7	0.692									6	130	21.7	0.231	0.40	0.23
Northern Flicker					2	30	15.0	0.333	1	5	5.0	0.500	3	35	11.7	0.214	0.25	0.15
Great Horned Owl					1	5	5.0	0.500					1	5	5.0	0.167	0.29	0.17
Song Sparrow					1	5	5.0	0.500					1	5	5.0	0.167	0.29	0.17
House Finch					3	35	11.7	0.643	1	100	100.0	0.025	4	135	33.8	0.099	0.36	0.21
American Robin									2	40	20.0	0.250	2	40	20.0	0.083	0.14	0.08
Rough-legged Hawk									2	60	30.0	0.167	2	60	30.0	0.056	0.10	0.06
Bald Eagle					2	200	100.0	0.050					2	200	100.0	0.017	0.03	0.02
Red-winged Blackbird	1	100	100.0	0.025					1	100	100.0	0.025	1	100	100.0	0.008	0.01	0.01
Red-tailed Hawk													1	100	100.0	0.008	0.00	0.00
Northern Harrier	1	100	100.0	0.025									1	100	100.0	0.008	0.01	0.01
Totals	20	687	34.4	1.456	16	444	27.8	1.441	13	487	37.5	0.868	49	1618	33.0	1.237	0.34	0.19

Winter Season 1995/96

Habitat = Upland Shrublands

Species Richness = 10

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
European Starling					11	55	5.0	5.500					11	55	5.0	1.833	3.18	1.83
Black-billed Magpie	19	652	34.3	1.384	11	200	100.0	0.050	14	775	55.4	0.632	35	1627	46.5	0.627	0.67	0.39
Black-capped Chickadee	2	30	15.0	0.333	9	145	16.1	1.397					11	175	15.9	0.576	0.73	0.42
American Goldfinch					8	200	25.0	0.800					8	200	25.0	0.267	0.46	0.27
Song Sparrow	1	15	15.0	0.167	1	5	5.0	0.500	3	65	21.7	0.346	5	85	17.0	0.245	0.17	0.10
Northern Flicker	1	5	5.0	0.500									1	5	5.0	0.167	0.29	0.17
American Tree Sparrow	1	5	5.0	0.500									1	5	5.0	0.167	0.29	0.17
Great Horned Owl	1	25	25.0	0.100									1	25	25.0	0.033	0.06	0.03
Prairie Falcon	1	35	35.0	0.071									1	35	35.0	0.024	0.04	0.02
Red-winged Blackbird									1	87	87.0	0.029	1	87	87.0	0.010	0.02	0.01
Totals	26	767	29.5	2.203	40	605	15.1	6.612	18	927	51.5	0.874	84	2299	27.4	2.558	3.00	1.73

300

Winter Season 1991/92

Habitat = Riparian Shrublands

Species Richness = 3

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Northern Flicker	1	5	5.0	1.000	1	15	15.0	0.333					2	5	2.5	1.333	0.51	0.29
American Kestrel					1	15	15.0	0.333					1	15	15.0	0.111	0.19	0.11
Common Raven									4	400	100.0	0.200	4	400	100.0	0.067	0.12	0.07
Totals	1	5	5.0	1.000	2	30	15.0	0.667	4	400	100.0	0.667	7	435	62.1	0.188	0.19	0.11

Winter Season 1993/94

Habitat = Riparian Shrublands

Species Richness = 2

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Western Meadowlark									1	15	15.0	0.333	1	15	15.0	0.111	0.19	0.11
Common Raven									1	100	100.0	0.050	1	100	100.0	0.017	0.03	0.02
Totals	0	0	0.0	0.000	0	0	0.0	0.000	2	115	57.5	0.174	2	115	57.5	0.058	0.10	0.06

Winter Season 1994/95

Habitat = Riparian Shrublands

Species Richness = 6

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Great Horned Owl	1	5	5.0	1.000	2	10	5.0	2.000					3	15	5.0	1.000	1.00	0.58
American Tree Sparrow									2	10	5.0	2.000	2	10	5.0	0.667	1.15	0.67
European Starling									2	10	5.0	2.000	2	10	5.0	0.667	1.15	0.67
Western Meadowlark									2	40	20.0	0.500	2	40	20.0	0.167	0.29	0.17
Golden Eagle					1	87	87.0	0.057					1	87	87.0	0.019	0.03	0.02
Northern Flicker					1	87	87.0	0.057					1	87	87.0	0.019	0.03	0.02
Totals	1	5	5.0	1.000	4	184	46.0	0.435	6	60	10.0	3.000	11	249	22.6	0.810	1.35	0.78

Winter Season 1995/96

Habitat = Riparian Shrublands

Species Richness = 4

	December				January				February				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Great Horned Owl					1	5	5.0	1.000					1	5	5.0	0.333	0.58	0.33
Northern Flicker	1	5	5.0	1.000									1	5	5.0	0.333	0.58	0.33
Loggerhead Shrike					1	5	5.0	1.000					1	5	5.0	0.333	0.58	0.33
European Starling	1	15	15.0	0.333									1	15	15.0	0.111	0.19	0.11
Totals	2	20	10.0	1.000	2	10	5.0	2.000	0	0	0.0	0.000	4	30	7.5	0.889	1.00	0.58

APPENDIX D

Bird Density Calculations During the Breeding Season
(1991, 1993, 1994, and 1995)

Key to table symbols:

n = number of individuals observed
sum d = the sum of all the distances which individuals were observed
mean d = (sum d divided by n)
D = the density of the species observed in hectares using the Leopold formula

Breeding Season 1991

Habitat = Riparian Shrublands

Species Richness = 17

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Swainson's Hawk	2	10	5.0	2.000	2	10	5.0	2.000	1	5	5.0	1.000	5	25	5.0	1.667	0.58	0.33
American Goldfinch	3	15	5.0	3.000	1	5	5.0	1.000					4	20	5.0	1.333	1.53	0.88
Western Meadowlark	10	634	63.4	0.789	20	1181	59.1	1.693	10	225	22.5	2.222	40	2040	51.0	1.307	0.72	0.42
Vesper Sparrow	2	30	15.0	0.667	7	205	29.3	1.195	7	135	19.3	1.814	16	370	23.1	1.153	0.57	0.33
Brown-headed Cowbird					1	5	5.0	1.000	2	10	5.0	2.000	3	15	5.0	1.000	1.00	0.58
European Starling	5	25	5.0	5.000	4	102	25.5	0.784	2	200	100.0	0.100	11	327	29.7	0.617	2.65	1.53
Northern Oriole	1	25	25.0	0.200	2	10	5.0	2.000	1	15	15.0	0.333	4	50	12.5	0.533	1.00	0.58
Mourning Dove	2	20	10.0	1.000	8	440	55.0	0.727	2	20	10.0	1.000	12	480	40.0	0.500	0.16	0.09
Song Sparrow	1	5	5.0	1.000	2	30	15.0	0.667					3	35	11.7	0.428	0.51	0.29
Savannah Sparrow					1	5	5.0	1.000					1	5	5.0	0.333	0.58	0.33
American Robin	1	5	5.0	1.000									1	5	5.0	0.333	0.58	0.33
House Finch					11	625	56.8	0.968					11	625	56.8	0.323	0.56	0.32
Brewer's Blackbird	2	10	5.0	2.000	3	261	87.0	0.172					5	271	54.2	0.154	1.11	0.64
Mallard	3	110	36.7	0.409									3	110	36.7	0.136	0.24	0.14
Blue Grosbeak					2	60	30.0	0.333					2	60	30.0	0.111	0.19	0.11
Red-winged Blackbird					1	100	100.0	0.050	1	100	100.0	0.050	2	200	100.0	0.033	0.03	0.02
American Kestrel	1	100	100.0	0.050	1	100	100.0	0.050					2	200	100.0	0.033	0.03	0.02
Totals	33	989	30.0	5.506	66	3139	47.6	6.939	26	710	27.3	4.761	125	4838	38.7	5.383	1.11	0.64

Breeding Season 1993

Habitat = Riparian Shrublands

Species Richness = 21

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	10	145	14.5	3.448	1	5	5.0	1.000	5	85	17.0	1.471	16	235	14.7	1.361	1.30	0.75
Northern Oriole	7	35	5.0	7.000	3	15	5.0	3.000	2	105	52.5	0.190	12	155	12.9	1.161	3.42	1.98
Red-winged Blackbird	8	325	40.6	0.984	8	40	5.0	8.000	4	77	19.3	1.039	20	442	22.1	1.131	4.03	2.33
American Goldfinch					2	10	5.0	2.000	2	10	5.0	2.000	4	20	5.0	1.000	1.15	0.67
Western Meadowlark	11	757	68.8	0.799	9	279	31.0	1.452	12	616	51.3	1.169	32	1652	51.6	0.775	0.33	0.19
Brewer's Blackbird	7	225	32.1	1.089	19	950	50.0	1.900	1	5	5.0	1.000	27	1180	43.7	0.772	0.50	0.29
Blue-winged Teal					2	10	5.0	2.000					2	10	5.0	0.500	1.15	0.67
Great Horned Owl	1	5	5.0	1.000					1	5	5.0	1.000	2	10	5.0	0.500	0.58	0.33
Blue Grosbeak					2	10	5.0	2.000					2	10	5.0	0.500	1.15	0.67
Mourning Dove	4	210	52.5	0.381	3	15	5.0	3.000	2	10	5.0	2.000	9	235	26.1	0.431	1.32	0.76
Grasshopper Sparrow	1	15	15.0	0.333	5	125	25.0	1.000					6	140	23.3	0.321	0.51	0.29
House Finch					1	5	5.0	1.000					1	5	5.0	0.250	0.58	0.33
American Kestrel					1	5	5.0	1.000					1	5	5.0	0.250	0.58	0.33
Song Sparrow									1	5	5.0	1.000	1	5	5.0	0.250	0.58	0.33
Common Grackle									1	5	5.0	1.000	1	5	5.0	0.250	0.58	0.33
Eastern Kingbird									1	5	5.0	1.000	1	5	5.0	0.250	0.58	0.33
Warbling Vireo	1	5	5.0	1.000									1	5	5.0	0.250	0.58	0.33
European Starling	4	400	100.0	0.200	1	100	100.0	0.050					5	500	100.0	0.063	0.10	0.06
Great Blue Heron	2	200	100.0	0.100									2	200	100.0	0.025	0.06	0.03
Horned Lark					1	62	62.0	0.081					1	62	62.0	0.020	0.05	0.03
Common Nighthawk	1	100	100.0	0.050									1	100	100.0	0.013	0.03	0.02
Totals	57	2422	42.5	6.707	58	1631	28.1	10.313	32	928	29.0	5.517	147	4981	33.9	7.230	2.50	1.44

Breeding Season 1994

Habitat = Riparian Shrublands

Species Richness = 19

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Northern Oriole	2	10	5.0	2.000	3	25	8.3	1.801	4	20	5.0	4.000	9	170	18.9	2.382	18	225	12.5	1.800	1.00	0.50
Red-winged Blackbird	4	20	5.0	4.000	10	100	10.0	5.000	2	10	5.0	2.000	8	290	36.3	1.103	24	420	17.5	1.714	1.79	0.89
Vesper Sparrow	3	25	8.3	1.801	2	160	80.0	0.125	3	25	8.3	1.801	15	185	12.3	6.083	23	395	17.2	1.674	2.55	1.27
Mourning Dove	4	20	5.0	4.000	5	85	17.0	1.471	4	115	28.8	0.696	5	45	9.0	2.778	18	265	14.7	1.529	1.46	0.73
Western Meadowlark	5	105	21.0	1.190	6	110	18.3	1.637	8	190	23.8	1.684	2	60	30.0	0.333	21	465	22.1	1.186	0.63	0.31
Eastern Kingbird	3	35	11.7	1.285	1	15	15.0	0.333	1	5	5.0	1.000	1	5	5.0	1.000	6	60	10.0	0.750	0.40	0.20
Brewer's Blackbird	2	10	5.0	2.000													2	10	5.0	0.500	1.00	0.50
American Robin					1	5	5.0	1.000	1	5	5.0	1.000					2	10	5.0	0.500	0.58	0.29
European Starling	2	10	5.0	2.000	7	275	39.3	0.891	2	10	5.0	2.000	2	200	100.0	0.100	13	495	38.1	0.427	0.93	0.46
American Goldfinch	4	210	52.5	0.381	1	5	5.0	1.000	2	105	52.5	0.190	4	135	33.8	0.593	11	455	41.4	0.332	0.35	0.17
House Finch	1	5	5.0	1.000					1	5	5.0	1.000	10	565	56.5	0.885	12	575	47.9	0.313	0.48	0.24
Grasshopper Sparrow	1	25	25.0	0.200	3	155	51.7	0.290	3	75	25.0	0.600	1	25	25.0	0.200	8	280	35.0	0.286	0.19	0.09
Song Sparrow	1	5	5.0	1.000					3	65	21.7	0.692					4	70	17.5	0.286	0.50	0.25
Great Horned Owl	1	5	5.0	1.000													1	5	5.0	0.250	0.50	0.25
Brown-headed Cowbird					5	245	49.0	0.510									5	245	49.0	0.128	0.26	0.13
Blue Grosbeak	1	25	25.0	0.200	2	100	50.0	0.200									3	125	41.7	0.090	0.12	0.06
Common Grackle					1	100	100.0	0.050					1	100	100.0	0.050	2	200	100.0	0.025	0.03	0.01
Killdeer									1	100	100.0	0.050					1	100	100.0	0.013	0.03	0.01
Double-crested Cormorant									1	100	100.0	0.050					1	100	100.0	0.013	0.03	0.01
Totals	34	510	15.0	11.333	47	1380	29.4	8.004	36	830	23.1	7.807	58	1780	30.7	9.449	175	4500	25.7	8.507	1.63	0.82

Breeding Season 1995

Habitat = Riparian Shrublands

Species Richness = 21

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Brewer's Blackbird	2	10	5.0	2.000	3	25	8.3	1.801	12	60	5.0	12.000	5	75	15.0	1.667	22	170	7.7	3.558	5.09	2.55
Northern Oriole	3	15	5.0	3.000	2	10	5.0	2.000	3	15	5.0	3.000	5	75	15.0	1.667	13	115	8.9	1.836	0.69	0.34
Western Meadowlark	3	55	18.3	0.818	8	140	17.5	2.286	9	195	21.7	2.077	7	165	23.6	1.485	27	555	20.6	1.642	0.66	0.33
Mourning Dove	3	15	5.0	3.000	7	75	10.7	3.268	1	5	5.0	1.000	2	70	35.0	0.286	13	165	12.7	1.281	1.47	0.74
Vesper Sparrow	1	15	15.0	0.333	6	80	13.3	2.251	2	30	15.0	0.667	1	5	5.0	1.000	10	130	13.0	0.962	0.84	0.42
Red-winged Blackbird	7	75	10.7	3.268	1	100	100.0	0.050	3	15	5.0	3.000					11	190	17.3	0.796	1.80	0.90
European Starling	4	115	28.8	0.696					4	20	5.0	4.000					8	135	16.9	0.592	1.91	0.96
Great Horned Owl					1	5	5.0	1.000					1	5	5.0	1.000	2	10	5.0	0.500	0.58	0.29
Yellow Warbler	1	5	5.0	1.000					1	5	5.0	1.000					2	10	5.0	0.500	0.58	0.29
Blue Grosbeak	2	10	5.0	2.000													2	10	5.0	0.500	1.00	0.50
American Goldfinch	5	25	5.0	5.000	1	5	5.0	1.000	6	600	100.0	0.300					12	630	52.5	0.286	2.32	1.16
Song Sparrow	1	5	5.0	1.000													1	5	5.0	0.250	0.50	0.25
Eastern Phoebe	1	5	5.0	1.000													1	5	5.0	0.250	0.50	0.25
American Robin									1	5	5.0	1.000					1	5	5.0	0.250	0.50	0.25
Grasshopper Sparrow	1	25	25.0	0.200					1	15	15.0	0.333	1	35	35.0	0.143	3	75	25.0	0.150	0.14	0.07
House Finch					3	300	100.0	0.150	1	5	5.0	1.000					4	305	76.3	0.066	0.48	0.24
Brown-headed Cowbird	1	100	100.0	0.050	4	400	100.0	0.200									5	500	100.0	0.063	0.09	0.05
Mallard	3	205	68.3	0.220													3	205	68.3	0.055	0.11	0.06
Cliff Swallow	1	100	100.0	0.050													1	100	100.0	0.013	0.03	0.01
Common Grackle	1	100	100.0	0.050													1	100	100.0	0.013	0.03	0.01
Western Kingbird	1	100	100.0	0.050													1	100	100.0	0.013	0.03	0.01
Totals	41	980	23.9	8.577	36	1140	31.7	5.684	44	970	22.0	9.979	22	430	19.5	5.628	143	3520	24.6	7.262	2.17	1.08

Breeding Season 1991

Habitat = Upland Shrublands

Species Richness = 22

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Song Sparrow	1	15	15.0	0.167	3	35	11.7	0.643	10	60	6.0	4.167	14	110	7.9	1.484	2.18	1.26
Rufous-sided Towhee	4	50	12.5	0.800	6	40	6.7	2.249	7	75	10.7	1.634	17	165	9.7	1.459	0.73	0.42
Red-winged Blackbird	16	848	53.0	0.755	11	327	29.7	0.925	21	805	38.3	1.370	48	1980	41.3	0.970	0.32	0.18
Western Meadowlark	7	509	72.7	0.241	8	490	61.3	0.327	11	682	62.0	0.444	26	1681	64.7	0.335	0.10	0.06
Yellow-breasted Chat	2	10	5.0	1.000	2	50	25.0	0.200	1	5	5.0	0.500	5	65	13.0	0.321	0.40	0.23
Northern Oriole	1	15	15.0	0.167					2	10	5.0	1.000	3	25	8.3	0.300	0.54	0.31
Brown-headed Cowbird	1	5	5.0	0.500	1	35	35.0	0.071	2	10	5.0	1.000	4	50	12.5	0.267	0.46	0.27
Black-billed Magpie	4	244	61.0	0.164	7	344	49.1	0.356	6	502	83.7	0.179	17	1090	64.1	0.221	0.11	0.06
American Goldfinch					1	5	5.0	0.500	2	30	15.0	0.333	3	35	11.7	0.214	0.25	0.15
Great Horned Owl	1	15	15.0	0.167					2	30	15.0	0.333	3	45	15.0	0.167	0.17	0.10
Swainson's Thrush	1	15	15.0	0.167	1	5	5.0	0.500					2	20	10.0	0.167	0.25	0.15
Gray Catbird									1	5	5.0	0.500	1	5	5.0	0.167	0.29	0.17
Vesper Sparrow	1	62	62.0	0.040	2	50	25.0	0.200	3	129	43.0	0.174	6	241	40.2	0.124	0.09	0.05
Mourning Dove	1	100	100.0	0.025	4	400	100.0	0.100	3	199	66.3	0.113	8	699	87.4	0.076	0.05	0.03
Barn Swallow	3	300	100.0	0.075					1	100	100.0	0.025	4	400	100.0	0.033	0.04	0.02
Lazuli Bunting									1	25	25.0	0.100	1	25	25.0	0.033	0.06	0.03
European Starling	2	200	100.0	0.050	2	200	100.0	0.050					4	400	100.0	0.033	0.03	0.02
Green-tailed Towhee	2	174	87.0	0.057									2	174	87.0	0.019	0.03	0.02
Say's Phoebe									1	45	45.0	0.056	1	45	45.0	0.019	0.03	0.02
Brewer's Blackbird	1	87	87.0	0.029									1	87	87.0	0.010	0.02	0.01
Mallard	1	100	100.0	0.025									1	100	100.0	0.008	0.01	0.01
Killdeer									1	100	100.0	0.025	1	100	100.0	0.008	0.01	0.01
Totals	49	2749	56.1	2.184	48	1981	41.3	2.908	75	2812	37.5	5.001	172	7542	43.8	3.269	1.46	0.84

Breeding Season 1993

Habitat = Upland Shrublands

Species Richness = 31

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Red-winged Blackbird	60	1372	22.9	6.559	26	869	33.4	1.945	17	540	31.8	1.338	103	2781	27.0	2.384	2.86	1.65
Rufous-sided Towhee	13	215	16.5	1.965	5	25	5.0	2.500	7	85	12.1	1.442	25	325	13.0	1.202	0.53	0.31
Western Meadowlark	18	512	28.4	1.582	9	314	34.9	0.645	11	489	44.5	0.619	38	1315	34.6	0.686	0.55	0.32
American Goldfinch	12	769	64.1	0.468	7	225	32.1	0.544	33	2532	76.7	1.075	52	3526	67.8	0.479	0.33	0.19
Song Sparrow	6	157	26.2	0.573	2	40	20.0	0.250	10	285	28.5	0.877	18	482	26.8	0.420	0.31	0.18
Great Horned Owl	1	5	5.0	0.500	2	10	5.0	1.000					3	15	5.0	0.375	0.50	0.29
Green-tailed Towhee	1	5	5.0	0.500					17	600	35.3	1.204	18	605	33.6	0.335	0.60	0.35
Common Yellowthroat	6	157	26.2	0.573					6	200	33.3	0.450	12	357	29.8	0.252	0.30	0.17
Northern Oriole	4	60	15.0	0.667	1	5	5.0	0.500	1	25	25.0	0.100	6	90	15.0	0.250	0.29	0.17
Loggerhead Shrike	2	10	5.0	1.000									2	10	5.0	0.250	0.58	0.33
Brewer's Blackbird	1	5	5.0	0.500					9	275	30.6	0.736	10	280	28.0	0.223	0.38	0.22
Black-billed Magpie	7	190	27.1	0.645	4	184	46.0	0.217	4	270	67.5	0.148	15	644	42.9	0.218	0.27	0.16
Lesser Goldfinch									3	35	11.7	0.643	3	35	11.7	0.161	0.37	0.21
Yellow-breasted Chat					1	5	5.0	0.500					1	5	5.0	0.125	0.29	0.17
Solitary Vireo					1	5	5.0	0.500					1	5	5.0	0.125	0.29	0.17
House Finch									16	1355	84.7	0.472	16	1355	84.7	0.118	0.27	0.16
Vesper Sparrow	1	45	45.0	0.056	4	100	25.0	0.400	1	45	45.0	0.056	6	190	31.7	0.118	0.20	0.11
Barn Swallow	6	464	77.3	0.194	3	300	100.0	0.075	4	400	100.0	0.100	13	1164	89.5	0.091	0.06	0.04
Grasshopper Sparrow	1	25	25.0	0.100					1	15	15.0	0.167	2	40	20.0	0.063	0.08	0.05
Brown-headed Cowbird					1	5	5.0	0.500	3	212	70.7	0.106	4	217	54.3	0.046	0.26	0.15
European Starling	1	15	15.0	0.167									1	15	15.0	0.042	0.10	0.06
American Robin	1	5	5.0	0.500					1	62	62.0	0.040	2	67	33.5	0.037	0.28	0.16
Common Nighthawk	3	287	95.7	0.078	1	100	100.0	0.025					4	387	96.8	0.026	0.04	0.02
Common Snipe									2	97	48.5	0.103	2	97	48.5	0.026	0.06	0.03
Yellow Warbler	1	25	25.0	0.100									1	25	25.0	0.025	0.06	0.03
Eastern Phoebe									1	25	25.0	0.100	1	25	25.0	0.025	0.06	0.03
Mourning Dove					3	300	100.0	0.075					3	300	100.0	0.019	0.04	0.03
Common Grackle					2	200	100.0	0.050					2	200	100.0	0.013	0.03	0.02
Mallard	1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Yellow-rumped Warbler									1	100	100.0	0.025	1	100	100.0	0.006	0.01	0.01
Horned Lark	1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Totals	147	4523	30.8	11.944	72	2687	37.3	4.823	148	7647	51.7	7.161	367	14857	40.5	7.555	3.63	2.10

Breeding Season 1994

Habitat = Upland Shrublands

Species Richness = 37

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Song Sparrow	16	430	26.9	1.488	24	400	16.7	3.599	19	355	18.7	2.543	28	650	23.2	3.016	87	1835	21.1	2.578	0.89	0.45
Rufous-sided Towhee	17	275	16.2	2.627	18	350	19.4	2.315	15	325	21.7	1.731	19	325	17.1	2.776	69	1275	18.5	2.334	0.46	0.23
Red-winged Blackbird	26	315	12.1	5.363	24	1260	52.5	1.143	17	345	20.3	2.095	19	785	41.3	1.150	86	2705	31.5	1.709	2.00	1.00
American Goldfinch	11	410	37.3	0.738	15	1095	73.0	0.514	11	300	27.3	1.008	30	1070	35.7	2.103	67	2875	42.9	0.976	0.70	0.35
Black-billed Magpie	10	385	38.5	0.649	6	165	27.5	0.545	11	240	21.8	1.260	13	245	18.9	1.724	40	1035	25.9	0.966	0.55	0.28
Brown-headed Cowbird	6	220	36.7	0.409	9	400	44.4	0.506	4	70	17.5	0.571	8	245	30.6	0.653	27	935	34.6	0.487	0.10	0.05
Western Meadowlark	9	470	52.2	0.431	10	500	50.0	0.500	10	475	47.5	0.526	7	225	32.1	0.544	36	1670	46.4	0.485	0.05	0.02
Green-tailed Towhee					6	130	21.7	0.692	1	5	5.0	0.500	3	15	5.0	1.500	10	150	15.0	0.417	0.62	0.31
Common Yellowthroat	3	55	18.3	0.409	5	285	57.0	0.219	4	100	25.0	0.400	5	165	33.0	0.379	17	605	35.6	0.299	0.09	0.04
Vesper Sparrow	1	5	5.0	0.500	1	25	25.0	0.100	1	5	5.0	0.500	5	115	23.0	0.543	8	150	18.8	0.267	0.21	0.10
Lesser Goldfinch													2	10	5.0	1.000	2	10	5.0	0.250	0.50	0.25
Blue-gray Gnatcatcher					2	10	5.0	1.000									2	10	5.0	0.250	0.50	0.25
Northern Oriole	5	105	21.0	0.595	2	70	35.0	0.143					1	5	5.0	0.500	8	180	22.5	0.222	0.28	0.14
House Finch	2	200	100.0	0.050	6	205	34.2	0.439					4	140	35.0	0.286	12	545	45.4	0.165	0.21	0.10
Yellow-breasted Chat													1	5	5.0	0.500	1	5	5.0	0.125	0.25	0.13
Grasshopper Sparrow					1	5	5.0	0.500									1	5	5.0	0.125	0.25	0.13
Black-capped Chickadee	3	45	15.0	0.500													3	45	15.0	0.125	0.25	0.13
Chipping Sparrow					1	5	5.0	0.500									1	5	5.0	0.125	0.25	0.13
Common Snipe					1	35	35.0	0.071	1	55	55.0	0.045	3	55	18.3	0.409	5	145	29.0	0.108	0.19	0.09
Mourning Dove	3	160	53.3	0.141	1	85	85.0	0.029	1	75	75.0	0.033	5	390	78.0	0.160	10	710	71.0	0.088	0.07	0.03
Ring-billed Gull					14	1400	100.0	0.350									14	1400	100.0	0.088	0.18	0.09
Western Kingbird	2	10	5.0	1.000					1	55	55.0	0.045					3	65	21.7	0.087	0.49	0.25
Dark-eyed Junco					1	15	15.0	0.167					1	15	15.0	0.167	2	30	15.0	0.083	0.10	0.05
Northern Flicker	2	120	60.0	0.083	1	75	75.0	0.033	2	105	52.5	0.095	1	5	5.0	0.500	6	305	50.8	0.074	0.22	0.11
Blue Grosbeak	2	40	20.0	0.250													2	40	20.0	0.063	0.13	0.06
Barn Swallow					2	200	100.0	0.050	4	400	100.0	0.100	3	300	100.0	0.075	9	900	100.0	0.056	0.04	0.02
Cliff Swallow					2	200	100.0	0.050	1	100	100.0	0.025	4	400	100.0	0.100	7	700	100.0	0.044	0.04	0.02
Brewer's Blackbird					1	15	15.0	0.167									1	15	15.0	0.042	0.08	0.04
American Robin					1	45	45.0	0.056					1	25	25.0	0.100	2	70	35.0	0.036	0.05	0.02
American Kestrel													4	380	95.0	0.105	4	380	95.0	0.026	0.05	0.03
European Starling	2	200	100.0	0.050	2	200	100.0	0.050									4	400	100.0	0.025	0.03	0.01
Common Raven					1	100	100.0	0.025					1	100	100.0	0.025	2	200	100.0	0.013	0.01	0.01
Yellow Warbler					1	65	65.0	0.038									1	65	65.0	0.010	0.02	0.01
Golden Eagle	1	100	100.0	0.025													1	100	100.0	0.006	0.01	0.01
Great Blue Heron	1	100	100.0	0.025													1	100	100.0	0.006	0.01	0.01
Red-tailed Hawk					1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Tree Swallow					1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Totals	122	3645	29.9	10.209	160	7540	47.1	8.488	103	3010	29.2	8.811	168	5670	33.8	12.444	553	19865	35.9	9.621	1.80	0.90

Breeding Season 1995

Habitat = Upland Shrublands

Species Richness = 39

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Rufous-sided Towhee	4	30	7.5	1.333	23	272	11.8	4.861	7	145	20.7	0.845	32	545	17.0	4.698	66	992	15.0	2.745	2.14	1.07
Song Sparrow	11	195	17.7	1.551	19	225	11.8	4.012	9	210	23.3	0.964	18	250	13.9	3.240	57	880	15.4	2.307	1.42	0.71
Red-winged Blackbird	11	457	41.6	0.662	15	427	28.5	1.317	10	130	13.0	1.923	22	1000	45.5	1.210	58	2014	34.7	1.044	0.52	0.26
Common Yellowthroat	6	50	8.3	1.801	5	95	19.0	0.658	5	55	11.0	1.136	4	40	10.0	1.000	20	240	12.0	1.042	0.48	0.24
Black-billed Magpie	4	100	25.0	0.400	8	155	19.4	1.032	11	329	29.9	0.919	7	65	9.3	1.884	30	649	21.6	0.867	0.62	0.31
American Goldfinch	2	10	5.0	1.000	26	885	34.0	1.910	1	15	15.0	0.167	19	1125	59.2	0.802	48	2035	42.4	0.708	0.72	0.36
Black-capped Chickadee	2	30	15.0	0.333	7	115	16.4	1.065	1	25	25.0	0.100	6	80	13.3	1.125	16	250	15.6	0.640	0.52	0.26
Brown-headed Cowbird					3	65	21.7	0.346	5	105	21.0	0.595	8	205	25.6	0.780	16	375	23.4	0.427	0.34	0.17
Wilson's Warbler	2	10	5.0	1.000					1	5	5.0	0.500					3	15	5.0	0.375	0.48	0.24
Western Meadowlark	4	199	49.8	0.201	6	180	30.0	0.500	2	67	33.5	0.149	9	402	44.7	0.504	21	848	40.4	0.325	0.19	0.09
Mourning Dove	1	5	5.0	0.500	7	245	35.0	0.500	2	10	5.0	1.000	1	15	15.0	0.167	11	275	25.0	0.275	0.34	0.17
Yellow-breasted Chat									2	40	20.0	0.250	2	20	10.0	0.500	4	60	15.0	0.167	0.24	0.12
Brewer's Blackbird	5	500	100.0	0.125	6	70	11.7	1.285	1	5	5.0	0.500	1	100	100.0	0.025	13	675	51.9	0.156	0.57	0.29
Vesper Sparrow					1	5	5.0	0.500					2	40	20.0	0.250	3	45	15.0	0.125	0.24	0.12
White-crowned Sparrow					2	30	15.0	0.333					2	50	25.0	0.200	4	80	20.0	0.125	0.16	0.08
Northern Flicker					2	20	10.0	0.500	1	25	25.0	0.100					3	45	15.0	0.125	0.24	0.12
Sage Thrasher					1	5	5.0	0.500									1	5	5.0	0.125	0.25	0.13
Green-tailed Towhee					1	5	5.0	0.500									1	5	5.0	0.125	0.25	0.13
Northern Oriole	1	15	15.0	0.167									1	15	15.0	0.167	2	30	15.0	0.083	0.10	0.05
American Robin					2	30	15.0	0.333									2	30	15.0	0.083	0.17	0.08
Barn Swallow					6	600	100.0	0.150	3	300	100.0	0.075	4	400	100.0	0.100	13	1300	100.0	0.081	0.06	0.03
Common Snipe					3	160	53.3	0.141	1	62	62.0	0.040					4	222	55.5	0.045	0.07	0.03
House Finch					1	100	100.0	0.025	1	5	5.0	0.500	1	25	25.0	0.100	3	130	43.3	0.043	0.23	0.12
Dark-eyed Junco													1	15	15.0	0.167	1	15	15.0	0.042	0.08	0.04
Grasshopper Sparrow													1	25	25.0	0.100	1	25	25.0	0.025	0.05	0.03
Chestnut-sided Warbler													1	25	25.0	0.100	1	25	25.0	0.025	0.05	0.03
Downy Woodpecker													1	25	25.0	0.100	1	25	25.0	0.025	0.05	0.03
Cliff Swallow					3	300	100.0	0.075					1	100	100.0	0.025	4	400	100.0	0.025	0.04	0.02
Yellow Warbler					1	25	25.0	0.100									1	25	25.0	0.025	0.05	0.03
Western Kingbird									1	25	25.0	0.100					1	25	25.0	0.025	0.05	0.03
Blue Grosbeak					1	35	35.0	0.071									1	35	35.0	0.018	0.04	0.02
Red-tailed Hawk					2	200	100.0	0.050									2	200	100.0	0.013	0.03	0.01
Common Nighthawk													1	100	100.0	0.025	1	100	100.0	0.006	0.01	0.01
Common Raven													1	100	100.0	0.025	1	100	100.0	0.006	0.01	0.01
Double-crested Cormorant													1	100	100.0	0.025	1	100	100.0	0.006	0.01	0.01
European Starling													1	100	100.0	0.025	1	100	100.0	0.006	0.01	0.01
Tree Swallow													1	100	100.0	0.025	1	100	100.0	0.006	0.01	0.01
Mallard					1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Broad-tailed Hummingbird					1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Totals	53	1601	30.2	4.386	153	4449	29.1	13.154	64	1558	24.3	6.573	149	5067	34.0	10.954	419	12675	30.3	8.657	4.00	2.00

Breeding Season 1991

Habitat = Xeric Mixed Grasslands

Species Richness = 21

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	16	220	13.8	1.877	24	783	32.6	1.186	12	342	28.5	0.679	52	1345	25.9	1.081	0.60	0.35
Western Meadowlark	18	782	43.4	0.668	26	1562	60.1	0.698	19	1033	54.4	0.564	63	3377	53.6	0.632	0.07	0.04
Grasshopper Sparrow					11	275	25.0	0.710	12	526	43.8	0.442	23	801	34.8	0.355	0.36	0.21
Common Nighthawk	5	180	36.0	0.224	2	10	5.0	0.645	1	87	87.0	0.019	8	277	34.6	0.124	0.32	0.18
Red-winged Blackbird	5	445	89.0	0.091	14	1273	90.9	0.248					19	1718	90.4	0.113	0.13	0.07
Ring-billed Gull					19	1900	100.0	0.306					19	1900	100.0	0.102	0.18	0.10
Horned Lark					5	262	52.4	0.154	3	117	39.0	0.124	8	379	47.4	0.091	0.08	0.05
Song Sparrow					5	195	39.0	0.207					5	195	39.0	0.069	0.12	0.07
Barn Swallow					7	700	100.0	0.113	1	100	100.0	0.016	8	800	100.0	0.043	0.06	0.04
Savannah Sparrow	2	70	35.0	0.092									2	70	35.0	0.031	0.05	0.03
Mourning Dove					1	45	45.0	0.036	1	62	62.0	0.026	2	107	53.5	0.020	0.02	0.01
Black-billed Magpie					2	174	87.0	0.037	1	87	87.0	0.019	3	261	87.0	0.019	0.02	0.01
Mallard					2	174	87.0	0.037					2	174	87.0	0.012	0.02	0.01
Say's Phoebe	1	87	87.0	0.019	1	100	100.0	0.016					2	187	93.5	0.012	0.01	0.01
Killdeer	2	200	100.0	0.032									2	200	100.0	0.011	0.02	0.01
Red-tailed Hawk									1	87	87.0	0.019	1	87	87.0	0.006	0.01	0.01
Rufous-sided Towhee					1	87	87.0	0.019					1	87	87.0	0.006	0.01	0.01
Great Blue Heron					1	100	100.0	0.016					1	100	100.0	0.005	0.01	0.01
Common Raven	1	100	100.0	0.016									1	100	100.0	0.005	0.01	0.01
Cliff Swallow									1	100	100.0	0.016	1	100	100.0	0.005	0.01	0.01
European Starling					1	100	100.0	0.016					1	100	100.0	0.005	0.01	0.01
Totals	50	2084	41.7	1.935	122	7740	63.4	3.102	52	2541	48.9	1.716	224	12365	55.2	2.182	0.74	0.43

Breeding Season 1993

Habitat = Xeric Mixed Grasslands

Species Richness = 19

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	15	423	28.2	0.649	12	352	29.3	0.499	30	496	16.5	2.213	57	1271	22.3	0.779	0.95	0.55
Western Meadowlark	27	1055	39.1	0.843	23	1355	58.9	0.476	33	1510	45.8	0.879	83	3920	47.2	0.536	0.22	0.13
Grasshopper Sparrow	21	572	27.2	0.940	16	544	34.0	0.574	14	402	28.7	0.595	51	1518	29.8	0.522	0.21	0.12
Say's Phoebe	1	5	5.0	0.244	1	5	5.0	0.244					2	10	5.0	0.122	0.14	0.08
Song Sparrow	2	20	10.0	0.244	2	124	62.0	0.039	3	75	25.0	0.146	7	219	31.3	0.068	0.10	0.06
Common Nighthawk	4	315	78.8	0.062	4	345	86.3	0.057	4	125	31.3	0.156	12	785	65.4	0.056	0.06	0.03
Horned Lark					6	307	51.2	0.143	1	15	15.0	0.081	7	322	46.0	0.046	0.07	0.04
Mourning Dove					3	160	53.3	0.069	4	230	57.5	0.085	7	390	55.7	0.038	0.05	0.03
Barn Swallow					3	287	95.7	0.038	5	500	100.0	0.061	8	787	98.4	0.025	0.03	0.02
Red-winged Blackbird	1	25	25.0	0.049	1	100	100.0	0.012	1	100	100.0	0.012	3	225	75.0	0.012	0.02	0.01
House Finch									2	115	57.5	0.042	2	115	57.5	0.011	0.02	0.01
Rufous-sided Towhee	1	62	62.0	0.020					1	62	62.0	0.020	2	124	62.0	0.010	0.01	0.01
Killdeer									1	45	45.0	0.027	1	45	45.0	0.007	0.02	0.01
Loggerhead Shrike	1	45	45.0	0.027									1	45	45.0	0.007	0.02	0.01
American Goldfinch									2	200	100.0	0.024	2	200	100.0	0.006	0.01	0.01
Common Raven									1	100	100.0	0.012	1	100	100.0	0.003	0.01	0.00
Cliff Swallow									1	100	100.0	0.012	1	100	100.0	0.003	0.01	0.00
American Robin	1	100	100.0	0.012									1	100	100.0	0.003	0.01	0.00
Western Kingbird					1	100	100.0	0.012					1	100	100.0	0.003	0.01	0.00
Totals	74	2622	35.4	2.547	72	3679	51.1	1.718	103	4075	39.6	3.175	249	10376	41.7	2.429	0.73	0.42

3/4

Breeding Season 1994

Habitat = Xeric Mixed Grasslands

Species Richness = 29

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	9	220	24.4	0.449	37	785	21.2	2.126	27	675	25.0	1.317	22	765	34.8	0.772	95	2445	25.7	1.125	0.73	0.37
Grasshopper Sparrow	13	345	26.5	0.597	22	510	23.2	1.157	13	295	22.7	0.699	6	90	15.0	0.488	54	1240	23.0	0.717	0.29	0.15
Western Meadowlark	25	1110	44.4	0.687	38	1790	47.1	0.984	23	765	33.3	0.843	13	785	60.4	0.263	99	4450	45.0	0.671	0.31	0.16
Red-winged Blackbird	8	300	37.5	0.260	5	370	74.0	0.082	1	15	15.0	0.081	5	435	87.0	0.070	19	1120	59.0	0.098	0.09	0.05
Horned Lark	2	50	25.0	0.098					2	10	5.0	0.488					4	60	15.0	0.081	0.23	0.12
American Goldfinch	1	25	25.0	0.049	5	310	62.0	0.098	1	100	100.0	0.012	4	230	57.5	0.085	11	665	60.5	0.055	0.04	0.02
Barn Swallow	5	275	55.0	0.111	1	100	100.0	0.012	3	300	100.0	0.037	3	300	100.0	0.037	12	975	81.3	0.045	0.04	0.02
Common Nighthawk	1	5	5.0	0.244					2	60	30.0	0.081					3	65	21.7	0.042	0.12	0.06
White-crowned Sparrow	2	30	15.0	0.163													2	30	15.0	0.041	0.08	0.04
House Finch	5	305	61.0	0.100					4	310	77.5	0.063					9	615	68.3	0.040	0.05	0.02
Mourning Dove	3	225	75.0	0.049	1	100	100.0	0.012	1	100	100.0	0.012	4	220	55.0	0.089	9	645	71.7	0.038	0.04	0.02
European Starling									12	1200	100.0	0.146					12	1200	100.0	0.037	0.07	0.04
Black-billed Magpie	1	5	5.0	0.244	1	85	85.0	0.014	3	165	55.0	0.067	1	75	75.0	0.016	6	330	55.0	0.033	0.11	0.05
Say's Phoebe	2	90	45.0	0.054					1	15	15.0	0.081					3	105	35.0	0.026	0.04	0.02
Brown-headed Cowbird									2	50	25.0	0.098					2	50	25.0	0.024	0.05	0.02
Golden Eagle	2	115	57.5	0.042	1	15	15.0	0.081									3	130	43.3	0.021	0.04	0.02
Western Kingbird					1	15	15.0	0.081									1	15	15.0	0.020	0.04	0.02
Rufous-sided Towhee	1	40	40.0	0.030	1	75	75.0	0.016	1	45	45.0	0.027					3	160	53.3	0.017	0.01	0.01
Song Sparrow	1	15	15.0	0.081									1	85	85.0	0.014	2	100	50.0	0.012	0.04	0.02
Killdeer					1	75	75.0	0.016	1	45	45.0	0.027					2	120	60.0	0.010	0.01	0.01
American Kestrel									1	35	35.0	0.035	1	100	100.0	0.012	2	135	67.5	0.009	0.02	0.01
Mallard					2	200	100.0	0.024	1	100	100.0	0.012					3	300	100.0	0.009	0.01	0.01
Swainson's Hawk	1	100	100.0	0.012					1	100	100.0	0.012					2	200	100.0	0.006	0.01	0.00
Cliff Swallow									2	200	100.0	0.024					2	200	100.0	0.006	0.01	0.01
Common Yellowthroat													1	65	65.0	0.019	1	65	65.0	0.005	0.01	0.00
Great Blue Heron	1	100	100.0	0.012													1	100	100.0	0.003	0.01	0.00
Red-tailed Hawk	1	100	100.0	0.012													1	100	100.0	0.003	0.01	0.00
Brewer's Blackbird					1	100	100.0	0.012									1	100	100.0	0.003	0.01	0.00
Common Snipe					1	100	100.0	0.012									1	100	100.0	0.003	0.01	0.00
Totals	84	3455	41.1	2.491	118	4630	39.2	3.667	102	4585	45.0	2.767	61	3150	51.6	1.441	365	15820	43.3	2.567	0.92	0.46

Breeding Season 1995

Habitat = Xeric Mixed Grasslands

Species Richness = 22

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	23	587	25.5	1.099	16	427	26.7	0.731	19	315	16.6	1.398	39	949	24.3	1.955	97	2278	23.5	1.260	0.52	0.26
Western Meadowlark	26	1306	50.2	0.631	23	960	41.7	0.672	20	835	41.8	0.584	23	944	41.0	0.683	92	4045	44.0	0.638	0.04	0.02
Grasshopper Sparrow	2	20	10.0	0.244	5	135	27.0	0.226	15	305	20.3	0.900	16	370	23.1	0.844	38	830	21.8	0.530	0.37	0.18
House Finch	3	205	68.3	0.054	3	25	8.3	0.439	3	15	5.0	0.732	8	415	51.9	0.188	17	660	38.8	0.134	0.30	0.15
Brewer's Blackbird	5	75	15.0	0.407									3	127	42.3	0.086	8	202	25.3	0.097	0.19	0.10
Red-winged Blackbird	6	195	32.5	0.225	4	305	76.3	0.064	2	40	20.0	0.122	1	5	5.0	0.244	13	545	41.9	0.095	0.09	0.04
Mourning Dove	1	100	100.0	0.012	1	15	15.0	0.081	2	105	52.5	0.046	6	110	18.3	0.399	10	330	33.0	0.092	0.18	0.09
American Goldfinch	1	100	100.0	0.012	5	25	5.0	1.220					3	225	75.0	0.049	9	350	38.9	0.071	0.60	0.30
Eastern Kingbird													1	5	5.0	0.244	1	5	5.0	0.061	0.12	0.06
Say's Phoebe					1	5	5.0	0.244									1	5	5.0	0.061	0.12	0.06
Common Nighthawk					2	10	5.0	0.488	5	310	62.0	0.098	1	15	15.0	0.081	8	335	41.9	0.058	0.22	0.11
Horned Lark	1	15	15.0	0.081					2	60	30.0	0.081	1	100	100.0	0.012	4	175	43.8	0.028	0.04	0.02
Barn Swallow	3	300	100.0	0.037					3	300	100.0	0.037	1	100	100.0	0.012	7	700	100.0	0.021	0.02	0.01
Lesser Goldfinch													1	15	15.0	0.081	1	15	15.0	0.020	0.04	0.02
Black-billed Magpie	1	15	15.0	0.081	1	100	100.0	0.012									2	115	57.5	0.011	0.04	0.02
Great Blue Heron	1	100	100.0	0.012	1	100	100.0	0.012									2	200	100.0	0.006	0.01	0.00
American Kestrel													1	62	62.0	0.020	1	62	62.0	0.005	0.01	0.01
Mallard					1	87	87.0	0.014									1	87	87.0	0.004	0.01	0.00
Cliff Swallow													1	100	100.0	0.012	1	100	100.0	0.003	0.01	0.00
Brown-headed Cowbird													1	100	100.0	0.012	1	100	100.0	0.003	0.01	0.00
European Starling	1	100	100.0	0.012													1	100	100.0	0.003	0.01	0.00
Western Kingbird					1	100	100.0	0.012									1	100	100.0	0.003	0.01	0.00
Totals	74	3118	42.1	2.142	64	2294	35.8	2.177	71	2285	32.2	2.690	107	3642	34.0	3.834	316	11339	35.9	2.685	0.79	0.39

316

Breeding Season 1991

Habitat = Mesic Mixed Grasslands

Species Richness = 15

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	15	569	37.9	0.989	14	409	29.2	1.198	16	240	15.0	2.667	45	1218	27.1	1.385	0.91	0.53
House Finch					91	6899	75.8	3.001	28	1834	65.5	1.069	119	8733	73.4	1.351	1.52	0.88
Western Meadowlark	11	480	43.6	0.630	15	1029	68.6	0.547	22	1092	49.6	1.108	48	2601	54.2	0.738	0.30	0.17
Red-winged Blackbird	2	102	51.0	0.098	2	122	61.0	0.082	3	262	87.3	0.086	7	486	69.4	0.084	0.01	0.00
Western Kingbird					2	10	5.0	1.000	1	100	100.0	0.025	3	110	36.7	0.068	0.57	0.33
American Goldfinch					2	105	52.5	0.095	1	100	100.0	0.025	3	205	68.3	0.037	0.05	0.03
Mourning Dove	1	100	100.0	0.025	2	187	93.5	0.053					3	287	95.7	0.026	0.03	0.02
Killdeer					1	87	87.0	0.029	1	87	87.0	0.029	2	174	87.0	0.019	0.02	0.01
Blue Grosbeak					1	45	45.0	0.056					1	45	45.0	0.019	0.03	0.02
Barn Swallow	2	200	100.0	0.050									2	200	100.0	0.017	0.03	0.02
Red-tailed Hawk					1	62	62.0	0.040					1	62	62.0	0.013	0.02	0.01
Ferruginous Hawk	1	62	62.0	0.040									1	62	62.0	0.013	0.02	0.01
Say's Phoebe					1	62	62.0	0.040					1	62	62.0	0.013	0.02	0.01
Brewer's Blackbird	1	100	100.0	0.025									1	100	100.0	0.008	0.01	0.01
Cliff Swallow	1	100	100.0	0.025									1	100	100.0	0.008	0.01	0.01
Totals	34	1713	50.4	1.687	132	9017	68.3	4.831	72	3715	51.6	3.489	238	14445	60.7	3.268	1.58	0.91

Breeding Season 1993

Habitat = Mesic Mixed Grasslands

Species Richness = 12

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Western Meadowlark	20	1150	57.5	0.870	17	625	36.8	1.156	10	322	32.2	0.776	47	2097	44.6	0.658	0.20	0.11
Vesper Sparrow	6	120	20.0	0.750	9	274	30.4	0.739	7	157	22.4	0.780	22	551	25.1	0.549	0.02	0.01
Grasshopper Sparrow	9	282	31.3	0.718	2	70	35.0	0.143	3	75	25.0	0.300	14	427	30.5	0.287	0.30	0.17
House Finch	5	225	45.0	0.278	3	262	87.3	0.086	14	722	51.6	0.679	22	1209	55.0	0.250	0.30	0.17
Song Sparrow					2	107	53.5	0.093	6	167	27.8	0.539	8	274	34.3	0.146	0.29	0.17
Red-winged Blackbird	3	137	45.7	0.164	1	100	100.0	0.025	5	275	55.0	0.227	9	512	56.9	0.099	0.10	0.06
American Goldfinch									3	65	21.7	0.346	3	65	21.7	0.087	0.20	0.12
Horned Lark	1	25	25.0	0.100									1	25	25.0	0.025	0.06	0.03
Blue Grosbeak					1	25	25.0	0.100					1	25	25.0	0.025	0.06	0.03
Brown-headed Cowbird					3	261	87.0	0.086					3	261	87.0	0.022	0.05	0.03
Say's Phoebe	1	45	45.0	0.056									1	45	45.0	0.014	0.03	0.02
Mourning Dove	1	45	45.0	0.056									1	45	45.0	0.014	0.03	0.02
Totals	46	2029	44.1	2.607	38	1724	45.4	2.094	48	1783	37.1	3.231	132	5536	41.9	2.623	0.57	0.33

Breeding Season 1994

Habitat = Mesic Mixed Grasslands

Species Richness = 30

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
House Finch	7	245	35.00	0.500	15	1000	66.67	0.562	55	2805	51	2.696	27	815	30.19	2.236	104	4865	46.78	1.389	1.13	0.57
Western Meadowlark	19	825	43.42	1.09	22	770	35.00	1.57	17	535	31.47	1.35	9	325.00	36.11	0.62	67	2455	36.64	1.14	0.41	0.20
Vesper Sparrow	6	130	21.67	0.69	12	550	45.83	0.66	16	300	18.75	2.13	16	390	24.38	1.64	50	1370	27.40	1.14	0.73	0.36
Red-winged Blackbird	4	120	30.00	0.333	9	195	21.67	1.038	3	195	65.00	0.115	7	310	44.29	0.395	23	820	35.65	0.403	0.40	0.20
Grasshopper Sparrow	2	50	25.00	0.200	1	15	15.00	0.167	4	80	20.00	0.500	2	30	15.00	0.333	9	175	19.44	0.289	0.15	0.08
Mourning Dove	1	95	95.00	0.03	5	330	66.00	0.19	17	965	56.76	0.75	5	340.00	68.00	0.18	28	1730	61.79	0.28	0.32	0.16
Cassin's Finch													6	90	15	1	6	90	15.00	0.250	0.50	0.25
Lesser Goldfinch													2	10	5	1	2	10	5.00	0.250	0.50	0.25
American Goldfinch	2	70	35.00	0.143	1	5	5.00	0.500	7	400	57.14	0.306	3	35	11.67	0.643	13	510	39.23	0.207	0.22	0.11
Northern Oriole	4	175	43.75	0.23	4	210	52.50	0.19	2	30	15.00	0.33	3	110	36.67	0.21	13	525	40.38	0.20	0.06	0.03
Song Sparrow	3	105	35.00	0.21	2	70	35.00	0.14	5	220	44.00	0.28	1	35	35.00	0.07	11	430	39.09	0.18	0.09	0.05
Killdeer	4	30	7.5	1.333	2	105	52.5	0.095	3	225	75.00	0.100					9	360	40.00	0.141	0.64	0.32
European Starling	12	815	67.92	0.44	3	205	68.33	0.11									15	1020	68.00	0.14	0.21	0.10
Cliff Swallow	2	200	100.00	0.05	12	810	67.50	0.44	2	200	100.00	0.05					16	1210	75.63	0.13	0.21	0.10
Western Kingbird									1	45	45.00	0.06	3	35.00	11.67	0.64	4	80	20.00	0.13	0.31	0.16
Barn Swallow	8	800	100.00	0.20	5	500	100.00	0.13	3	300	100.00	0.08	2	200	100.00	0.05	18	1800	100.00	0.11	0.07	0.03
American Robin					4	165	41.25	0.24	2	110	55.00	0.09					6	275	45.83	0.08	0.11	0.06
Say's Phoebe					2	60	30.00	0.17					1	25.00	25.00	0.10	3	85	28.33	0.07	0.08	0.04
Common Nighthawk									1	15	15.00	0.167					1	15	15.00	0.042	0.08	0.04
Horned Lark	1	100	100.00	0.025					2	40	20	0.25					3	140	46.67	0.040	0.12	0.06
Mallard	1	45	45.00	0.056	1	25	25	0.1									2	70	35.00	0.036	0.05	0.02
Common Yellowthroat	2	80	40.00	0.125													2	80	40.00	0.031	0.06	0.03
Common Grackle	2	200	100.00	0.05	3	300	100.00	0.08									5	500	100.00	0.03	0.04	0.02
Black-billed Magpie									1	25	25.00	0.10					1	25	25.00	0.03	0.05	0.03
Blue Grosbeak									2	105	52.50	0.10					2	105	52.50	0.02	0.05	0.02
Brown-headed Cowbird					3	300	100.00	0.08									3	300	100.00	0.02	0.04	0.02
Brewer's Blackbird					1	100	100	0.025					1	100	100.00	0.025	2	200	100.00	0.013	0.01	0.01
Great Blue Heron					1	100	100.00	0.025	1	100	100.00	0.025					2	200	100.00	0.013	0.01	0.01
Common Raven													1	100	100.00	0.025	1	100	100.00	0.006	0.01	0.01
Rock Dove					1	100	100.00	0.025									1	100	100.00	0.006	0.01	0.01
Totals	80	4085	51.06	3.92	109	5915	54.27	5.02	144	6695	46.49	7.74	89	2950	33.15	6.71	422	19645	46.55	5.67	1.71	0.85

Breeding Season 1995

Habitat = Mesic Mixed Grasslands

Species Richness = 22

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
House Finch	19	315	16.58	2.87	36	260	7.22	12.47	20	720	36	1.39	7	625	89.29	0.20	82	1920	23.41	2.19	5.60	2.80
Western Meadowlark	19	952	50.11	0.95	8	371	46.38	0.43	18	637	35.39	1.27	21	507	24.14	2.18	66	2467	37.38	1.10	0.73	0.37
European Starling					8	480	60.00	0.33	27	1020	37.78	1.79	16	280	17.5	2.29	51	1780	34.90	0.91	1.11	0.55
Vesper Sparrow	11	262	23.82	1.15	3	75	25	0.30	8	140	17.50	1.14	10	327	32.70	0.77	32	804	25.13	0.80	0.40	0.20
Red-winged Blackbird	8	422	52.75	0.38	6	145	24.17	0.62					12	185	15.42	1.95	26	752	28.92	0.56	0.85	0.42
Grasshopper Sparrow	2	50	25.00	0.20	1	25	25.00	0.10	2	40	20.00	0.25	6	120	20.00	0.75	11	235	21.36	0.32	0.29	0.15
Eastern Kingbird					2	10	5.00	1.00									2	10	5.00	0.25	0.50	0.25
American Goldfinch	1	5	5.00	0.50	2	10	5	1.00	4	120	30.00	0.33	5	255	51	0.25	12	390	32.50	0.23	0.34	0.17
Mourning Dove	4	325	81.25	0.12	3	25	8.33	0.90					4	345	86.25	0.12	11	695	63.18	0.11	0.41	0.21
Barn Swallow	3	235	78.33	0.10	5	500	100.00	0.13	2	200	100.00	0.05	5	500	100.00	0.13	15	1435	95.67	0.10	0.04	0.02
Brewer's Blackbird					2	10	5.00	1.00					5	330	66	0.19	7	340	48.57	0.09	0.48	0.24
American Robin	2	70	35.00	0.14					1	25	25.00	0.10					3	95	31.67	0.06	0.07	0.04
Western Kingbird					1	35	35	0.07	1	5	5	0.50	2	145	72.5	0.07	4	185	46.25	0.05	0.23	0.11
Common Yellowthroat	2	60	30.00	0.17													2	60	30.00	0.04	0.08	0.04
Blue Grosbeak	1	15	15.00	0.17													1	15	15.00	0.04	0.08	0.04
Northern Oriole	1	15	15.00	0.17													1	15	15.00	0.04	0.08	0.04
Cliff Swallow					1	100	100	0.03					4	400	100	0.10	5	500	100.00	0.03	0.05	0.02
Lesser Goldfinch													4	400	100.00	0.10	4	400	100.00	0.03	0.05	0.03
Common Grackle	1	35	35	0.07									1	100	100.00	0.03	2	135	67.50	0.02	0.03	0.02
Say's Phoebe									1	45	45.00	0.06					1	45	45.00	0.01	0.03	0.01
Red-tailed Hawk					1	100	100.00	0.03									1	100	100.00	0.01	0.01	0.01
Killdeer					1	100	100.00	0.03									1	100	100.00	0.01	0.01	0.01
Totals	74	2761	37.31	4.96	80	2246	28.08	7.12	84	2952	35.14	5.98	102	4519	44.30	5.76	340	12478	36.70	5.79	0.89	0.45

Breeding Season 1991

Habitat = Reclaimed Grasslands

Species Richness = 15

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Western Meadowlark	24	564	23.5	2.043	23	1137	49.4	0.931	17	837	49.2	0.690	64	2538	39.7	1.076	0.72	0.42
Vesper Sparrow	15	282	18.8	1.596	23	897	39.0	1.179	26	1396	53.7	0.969	64	2575	40.2	1.061	0.32	0.18
House Finch	31	1545	49.8	1.244	2	200	100.0	0.040	10	390	39.0	0.513	43	2135	49.7	0.577	0.61	0.35
Grasshopper Sparrow	2	90	45.0	0.089	8	395	49.4	0.324	7	296	42.3	0.331	17	781	45.9	0.247	0.14	0.08
Mourning Dove	3	65	21.7	0.277	5	317	63.4	0.158	8	735	91.9	0.174	16	1117	69.8	0.153	0.06	0.04
Red-winged Blackbird	2	70	35.0	0.114	4	277	69.3	0.116	3	274	91.3	0.066	9	621	69.0	0.087	0.03	0.02
Cliff Swallow	7	700	100.0	0.140									7	700	100.0	0.047	0.08	0.05
Savannah Sparrow					1	15	15.0	0.133					1	15	15.0	0.044	0.08	0.04
Barn Swallow	3	300	100.0	0.060	1	100	100.0	0.020					4	400	100.0	0.027	0.03	0.02
Common Grackle					1	100	100.0	0.020	1	25	25.0	0.080	2	125	62.5	0.021	0.04	0.02
European Starling					3	300	100.0	0.060					3	300	100.0	0.020	0.03	0.02
Western Kingbird									1	35	35.0	0.057	1	35	35.0	0.019	0.03	0.02
American Robin	1	45	45.0	0.044									1	45	45.0	0.015	0.03	0.01
Mallard	1	100	100.0	0.020									1	100	100.0	0.007	0.01	0.01
Say's Phoebe									1	100	100.0	0.020	1	100	100.0	0.007	0.01	0.01
Totals	89	3761	42.3	4.212	71	3738	52.6	2.697	74	4088	55.2	2.679	234	11587	49.5	3.150	0.88	0.51

Breeding Season 1993

Habitat = Reclaimed Grasslands

Species Richness = 23

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	16	357	22.3	1.793	7	155	22.1	0.790	8	189	23.6	0.846	31	701	22.6	0.857	0.56	0.33
Grasshopper Sparrow	10	327	32.7	0.765	15	372	24.8	1.512	10	202	20.2	1.238	35	901	25.7	0.850	0.38	0.22
Western Meadowlark	10	344	34.4	0.727	15	464	30.9	1.212	17	777	45.7	0.930	42	1585	37.7	0.696	0.24	0.14
Mourning Dove	4	50	12.5	0.800	2	125	62.5	0.080					6	175	29.2	0.129	0.44	0.25
Red-winged Blackbird	3	202	67.3	0.111	4	120	30.0	0.333					7	322	46.0	0.095	0.17	0.10
House Finch	6	360	60.0	0.250	3	300	100.0	0.075	2	200	100.0	0.050	11	860	78.2	0.088	0.11	0.06
Common Raven	6	470	78.3	0.191					5	500	100.0	0.125	11	970	88.2	0.078	0.10	0.06
Killdeer					3	75	25.0	0.300					3	75	25.0	0.075	0.17	0.10
Say's Phoebe									2	40	20.0	0.250	2	40	20.0	0.063	0.14	0.08
Yellow-headed Blackbird	3	95	31.7	0.237	1	100	100.0	0.025					4	195	48.8	0.051	0.13	0.08
Horned Lark					1	15	15.0	0.167					1	15	15.0	0.042	0.10	0.06
Song Sparrow									1	15	15.0	0.167	1	15	15.0	0.042	0.10	0.06
Brown-headed Cowbird									1	15	15.0	0.167	1	15	15.0	0.042	0.10	0.06
Great Horned Owl	1	25	25.0	0.100									1	25	25.0	0.025	0.06	0.03
Western Kingbird									1	25	25.0	0.100	1	25	25.0	0.025	0.06	0.03
Northern Oriole									1	45	45.0	0.056	1	45	45.0	0.014	0.03	0.02
American Crow					2	200	100.0	0.050					2	200	100.0	0.013	0.03	0.02
Barn Swallow					1	100	100.0	0.025	1	100	100.0	0.025	2	200	100.0	0.013	0.01	0.01
European Starling	1	87	87.0	0.029									1	87	87.0	0.007	0.02	0.01
Great Blue Heron	1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Red-tailed Hawk									1	100	100.0	0.025	1	100	100.0	0.006	0.01	0.01
Brewer's Blackbird	1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Common Grackle	1	100	100.0	0.025									1	100	100.0	0.006	0.01	0.01
Totals	63	2617	41.5	3.792	54	2026	37.5	3.598	50	2208	44.2	2.831	167	6851	41.0	3.392	0.51	0.29

Breeding Season 1994

Habitat = Reclaimed Grasslands

Species Richness = 23

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Western Meadowlark	23	960	41.7	1.102	22	1000	45.5	0.968	22	700	31.8	1.383	29	1245	42.9	1.351	96	3905	40.7	1.180	0.20	0.10
Vesper Sparrow	16	550	34.4	0.931	14	550	39.3	0.713	14	320	22.9	1.225	20	740	37.0	1.081	64	2160	33.8	0.948	0.22	0.11
Mourning Dove	7	485	69.3	0.202	11	770	70.0	0.314					9	380	42.2	0.426	27	1635	60.6	0.223	0.18	0.09
Grasshopper Sparrow	15	455	30.3	0.989	12	410	34.2	0.702	8	205	25.6	0.624	4	90	22.5	0.356	39	1160	29.7	0.656	0.26	0.13
Western Kingbird													1	15	15.0	0.133	1	15	15.0	0.033	0.07	0.03
House Finch	4	335	83.8	0.096	6	260	43.3	0.277	9	530	58.9	0.306	5	445	89.0	0.112	24	1570	65.4	0.183	0.11	0.05
Song Sparrow	2	60	30.0	0.133					7	375	53.6	0.261	2	80	40.0	0.100	11	515	46.8	0.117	0.11	0.05
Brown-headed Cowbird													5	500	100.0	0.100	5	500	100.0	0.025	0.05	0.03
Common Grackle	1	100	100.0	0.020	5	475	95.0	0.105					3	195	65.0	0.092	9	770	85.6	0.053	0.05	0.03
Barn Swallow	1	100	100.0	0.020	1	100	100.0	0.020	2	200	100.0	0.040	2	200	100.0	0.040	6	600	100.0	0.030	0.01	0.01
Red-winged Blackbird	2	105	52.5	0.076	1	100	100.0	0.020	4	250	62.5	0.128	1	65	65.0	0.031	8	520	65.0	0.062	0.05	0.02
Turkey Vulture													1	100	100.0	0.020	1	100	100.0	0.005	0.01	0.01
Northern Oriole	1	45	45.0	0.044	1	15	15.0	0.133	1	55	55.0	0.036	1	100	100.0	0.020	4	215	53.8	0.037	0.05	0.03
Great Blue Heron					1	100	100.0	0.020									1	100	100.0	0.005	0.01	0.01
American Goldfinch	3	300	100.0	0.060					2	80	40.0	0.100					5	380	76.0	0.033	0.05	0.02
Killdeer	1	85	85.0	0.024	3	215	71.7	0.084	1	100	100.0	0.020					5	400	80.0	0.031	0.04	0.02
Common Raven	10	1000	100.0	0.200	3	300	100.0	0.060									13	1300	100.0	0.065	0.09	0.05
Horned Lark	1	85	85.0	0.024													1	85	85.0	0.006	0.01	0.01
Brewer's Blackbird	11	1100	100.0	0.220													11	1100	100.0	0.055	0.11	0.06
Blue Grosbeak									2	60	30.0	0.133					2	60	30.0	0.033	0.07	0.03
Say's Phoebe					1	100	100.0	0.020	1	45	45.0	0.044					2	145	72.5	0.014	0.02	0.01
European Starling					4	400	100.0	0.080									4	400	100.0	0.020	0.04	0.02
Eastern Kingbird	1	55	55.0	0.036													1	55	55.0	0.009	0.02	0.01
Totals	99	5820	58.8	4.210	85	4795	56.4	3.767	73	2920	40.0	4.563	83	4155	50.1	4.145	340	17690	52.0	4.084	0.33	0.16

Breeding Season 1995

Habitat = Reclaimed Grasslands

Species Richness = 24

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Vesper Sparrow	13	287	22.1	1.178	11	426	38.7	0.568	14	648	46.3	0.605	27	870	32.2	1.676	65	2231	34.3	0.947	0.53	0.26
Grasshopper Sparrow	14	320	22.9	1.225	8	292	36.5	0.438	7	175	25.0	0.560	12	402	33.5	0.716	41	1189	29.0	0.707	0.35	0.17
Western Meadowlark	17	945	55.6	0.612	18	725	40.3	0.894	18	589	32.7	1.100	17	836	49.2	0.691	70	3095	44.2	0.792	0.22	0.11
House Finch	11	650	59.1	0.372	9	750	83.3	0.216	4	250	62.5	0.128	6	217	36.2	0.332	30	1867	62.2	0.241	0.11	0.06
Northern Oriole													1	15	15.0	0.133	1	15	15.0	0.033	0.07	0.03
Mourning Dove	2	30	15.0	0.267	4	137	34.3	0.234	1	25	25.0	0.080	4	290	72.5	0.110	11	482	43.8	0.126	0.09	0.05
European Starling	8	800	100.0	0.160	1	100	100.0	0.020					4	400	100.0	0.080	13	1300	100.0	0.065	0.07	0.04
Killdeer													1	100	100.0	0.020	1	100	100.0	0.005	0.01	0.01
Barn Swallow	8	725	90.6	0.177									1	100	100.0	0.020	9	825	91.7	0.049	0.09	0.04
Red-winged Blackbird	3	300	100.0	0.060	3	235	78.3	0.077	3	300	100.0	0.060					9	835	92.8	0.049	0.03	0.02
American Goldfinch	6	365	60.8	0.197					1	100	100.0	0.020					7	465	66.4	0.053	0.10	0.05
Common Raven	7	160	22.9	0.612													7	160	22.9	0.153	0.31	0.15
Horned Lark	1	35	35.0	0.057													1	35	35.0	0.014	0.03	0.01
Brewer's Blackbird	2	135	67.5	0.059													2	135	67.5	0.015	0.03	0.01
American Kestrel	1	100	100.0	0.020													1	100	100.0	0.005	0.01	0.01
Cliff Swallow	2	200	100.0	0.040													2	200	100.0	0.010	0.02	0.01
Song Sparrow					1	45	45.0	0.044									1	45	45.0	0.011	0.02	0.01
Brown-headed Cowbird	2	145	72.5	0.055													2	145	72.5	0.014	0.03	0.01
American White Pelican					26	2600	100.0	0.520									26	2600	100.0	0.130	0.26	0.13
Double-crested Cormorant									3	300	100.0	0.060					3	300	100.0	0.015	0.03	0.02
Common Grackle					1	100	100.0	0.020									1	100	100.0	0.005	0.01	0.01
Say's Phoebe					1	15	15.0	0.133	1	100	100.0	0.020					2	115	57.5	0.017	0.06	0.03
American Robin	2	50	25.0	0.160													2	50	25.0	0.040	0.08	0.04
Western Kingbird									1	100	100.0	0.020					1	100	100.0	0.005	0.01	0.01
Totals	99	5247	53.0	3.736	83	5425	65.4	2.540	53	2587	48.8	2.172	73	3230	44.2	3.300	308	16489	53.5	2.877	0.71	0.36

Breeding Season 1991

Habitat = Wetlands

Species Richness = 26

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Red-winged Blackbird	62	1415	22.8	4.528	106	2803	26.4	6.682	69	1461	21.2	5.432	237	5679	24.0	5.495	1.08	0.62
Western Meadowlark	18	1096	60.9	0.493	21	1253	59.7	0.587	9	436	48.4	0.310	48	2785	58.0	0.460	0.14	0.08
House Finch	26	1356	52.2	0.831	17	1609	94.7	0.299	12	958	79.8	0.251	55	3923	71.3	0.428	0.32	0.19
Mallard	8	230	28.8	0.464	3	15	5.0	1.000	4	115	28.8	0.232	15	360	24.0	0.347	0.39	0.23
Song Sparrow	6	70	11.7	0.857	5	152	30.4	0.274					11	222	20.2	0.303	0.44	0.25
Common Yellowthroat	3	45	15.0	0.333	3	55	18.3	0.273	2	40	20.0	0.167	8	140	17.5	0.254	0.08	0.05
European Starling	27	2700	100.0	0.450	2	200	100.0	0.033	4	315	78.8	0.085	33	3215	97.4	0.188	0.23	0.13
Barn Swallow	5	500	100.0	0.083	20	1880	94.0	0.355	4	400	100.0	0.067	29	2780	95.9	0.168	0.16	0.09
Mourning Dove	4	274	68.5	0.097	6	240	40.0	0.250	4	155	38.8	0.172	14	669	47.8	0.163	0.08	0.04
Common Grackle					6	205	34.2	0.293	3	75	25.0	0.200	9	280	31.1	0.161	0.15	0.09
Common Snipe	3	215	71.7	0.070	5	25	5.0	1.667					8	240	30.0	0.148	0.94	0.54
Northern Oriole	5	291	58.2	0.143	2	50	25.0	0.133	2	10	5.0	0.667	9	351	39.0	0.128	0.31	0.18
American Goldfinch					1	100	100.0	0.017	5	65	13.0	0.641	6	165	27.5	0.121	0.37	0.21
Black-crowned Night-heron					1	5	5.0	0.333					1	5	5.0	0.111	0.19	0.11
American Robin	1	5	5.0	0.333									1	5	5.0	0.111	0.19	0.11
Killdeer					3	97	32.3	0.155	2	30	15.0	0.222	5	127	25.4	0.109	0.11	0.07
Black-billed Magpie									4	180	45.0	0.148	4	180	45.0	0.049	0.09	0.05
Vesper Sparrow	2	174	87.0	0.038	1	15	15.0	0.111	1	25	25.0	0.067	4	214	53.5	0.042	0.04	0.02
Yellow Warbler	1	15	15.0	0.111									1	15	15.0	0.037	0.06	0.04
Say's Phoebe					4	311	77.8	0.086					4	311	77.8	0.029	0.05	0.03
Grasshopper Sparrow	1	87	87.0	0.019	1	45	45.0	0.037	1	45	45.0	0.037	3	177	59.0	0.028	0.01	0.01
Eastern Kingbird					1	35	35.0	0.048					1	35	35.0	0.016	0.03	0.02
Great Blue Heron					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
Common Raven					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
Rufous-sided Towhee	1	87	87.0	0.019									1	87	87.0	0.006	0.01	0.01
Violet-green Swallow									1	100	100.0	0.017	1	100	100.0	0.006	0.01	0.01
Totals	173	8560	49.5	5.827	210	9295	44.3	7.907	127	4410	34.7	6.096	510	22265	43.7	6.490	1.13	0.65

Breeding Season 1993

Habitat = Wetlands

Species Richness = 32

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Red-winged Blackbird	150	3005	20.0	12.481	110	1639	14.9	12.304	80	2039	25.5	5.231	340	6683	19.7	7.206	4.14	2.39
Western Meadowlark	28	1162	41.5	1.124	30	952	31.7	1.576	21	860	41.0	0.855	79	2974	37.7	0.874	0.36	0.21
Mallard	7	130	18.6	0.628	5	45	9.0	0.926	4	20	5.0	1.333	16	195	12.2	0.547	0.35	0.20
Common Snipe	3	15	5.0	1.000	5	25	5.0	1.667	5	95	19.0	0.439	13	135	10.4	0.522	0.61	0.35
Common Yellowthroat	4	90	22.5	0.296	14	277	19.8	1.179	7	152	21.7	0.537	25	519	20.8	0.502	0.46	0.26
Grasshopper Sparrow	8	302	37.8	0.353	5	115	23.0	0.362	10	354	35.4	0.471	23	771	33.5	0.286	0.07	0.04
American Robin					4	30	7.5	0.889					4	30	7.5	0.222	0.51	0.30
House Finch	4	400	100.0	0.067	12	850	70.8	0.282	14	775	55.4	0.421	30	2025	67.5	0.185	0.18	0.10
Blue Grosbeak					2	10	5.0	0.667					2	10	5.0	0.167	0.39	0.22
Song Sparrow	4	137	34.3	0.195	3	157	52.3	0.096	8	282	35.3	0.378	15	576	38.4	0.163	0.14	0.08
Mourning Dove	3	287	95.7	0.052	5	180	36.0	0.231	9	362	40.2	0.373	17	829	48.8	0.145	0.16	0.09
Barn Swallow	10	740	74.0	0.225	11	904	82.2	0.223	5	445	89.0	0.094	26	2089	80.4	0.135	0.08	0.04
Vesper Sparrow	4	120	30.0	0.222					7	332	47.4	0.246	11	452	41.1	0.112	0.14	0.08
Great Horned Owl	1	5	5.0	0.333									1	5	5.0	0.083	0.19	0.11
Yellow Warbler					2	20	10.0	0.333					2	20	10.0	0.083	0.19	0.11
Eastern Kingbird	2	30	15.0	0.222									2	30	15.0	0.056	0.13	0.07
Killdeer					2	60	30.0	0.111	1	35	35.0	0.048	3	95	31.7	0.039	0.06	0.03
Black-billed Magpie	1	100	100.0	0.017	2	40	20.0	0.167	1	100	100.0	0.017	4	240	60.0	0.028	0.09	0.05
Northern Oriole	1	45	45.0	0.037					1	35	35.0	0.048	2	80	40.0	0.021	0.03	0.01
Brown-headed Cowbird	2	90	45.0	0.074									2	90	45.0	0.019	0.04	0.02
Horned Lark	2	200	100.0	0.033					1	25	25.0	0.067	3	225	75.0	0.017	0.03	0.02
Eastern Phoebe					1	25	25.0	0.067					1	25	25.0	0.017	0.04	0.02
Common Grackle									2	105	52.5	0.063	2	105	52.5	0.016	0.04	0.02
Say's Phoebe	2	107	53.5	0.062									2	107	53.5	0.016	0.04	0.02
Savannah Sparrow	1	35	35.0	0.048									1	35	35.0	0.012	0.03	0.02
Swainson's Hawk	2	174	87.0	0.038									2	174	87.0	0.010	0.02	0.01
Loggerhead Shrike					1	45	45.0	0.037					1	45	45.0	0.009	0.02	0.01
Brewer's Blackbird					1	62	62.0	0.027					1	62	62.0	0.007	0.02	0.01
American Goldfinch	3	300	100.0	0.050					4	3200	800.0	0.008	7	3500	500.0	0.006	0.03	0.02
Blue-winged Teal	1	100	100.0	0.017									1	100	100.0	0.004	0.01	0.01
Great Blue Heron	1	100	100.0	0.017									1	100	100.0	0.004	0.01	0.01
Common Nighthawk					1	100	100.0	0.017					1	100	100.0	0.004	0.01	0.01
Totals	244	7674	31.5	12.930	216	5536	25.6	14.046	180	9216	51.2	5.859	640	22426	35.0	10.147	4.44	2.56

Breeding Season 1994

Habitat = Wetlands

Species Richness = 31

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Red-winged Blackbird	66	1270	19.2	5.717	60	1215	20.3	4.938	107	2295	21.5	8.314	88	2030	23.1	6.357	321	6810	21.2	6.306	1.44	0.72
Common Snipe	1	5	5.0	0.333	8	185	23.1	0.576	9	225	25.0	0.600	5	35	7.0	1.190	23	450	19.6	0.490	0.36	0.18
Common Yellowthroat	4	90	22.5	0.296	2	30	15.0	0.222	8	170	21.3	0.627	9	145	16.1	0.931	23	435	18.9	0.507	0.33	0.16
Great Blue Heron													1	5	5.0	0.333	1	5	5.0	0.083	0.17	0.08
Northern Oriole	2	60	30.0	0.111					1	55	55.0	0.030	1	5	5.0	0.333	4	120	30.0	0.056	0.15	0.08
Mourning Dove	6	320	53.3	0.188	1	100	100.0	0.017	5	220	44.0	0.189	1	5	5.0	0.333	13	645	49.6	0.109	0.13	0.06
Song Sparrow	5	95	19.0	0.439	3	25	8.3	0.600	7	220	31.4	0.371	6	250	41.7	0.240	21	590	28.1	0.311	0.15	0.07
Western Meadowlark	7	285	40.7	0.287	8	395	49.4	0.270	12	640	53.3	0.375	7	345	49.3	0.237	34	1665	49.0	0.289	0.06	0.03
American Kestrel									1	85	85.0	0.020	3	105	35.0	0.143	4	190	47.5	0.035	0.07	0.03
Grasshopper Sparrow	5	165	33.0	0.253	2	80	40.0	0.083	8	210	26.3	0.508	2	60	30.0	0.111	17	515	30.3	0.234	0.19	0.10
Vesper Sparrow	2	70	35.0	0.095	5	240	48.0	0.174	3	125	41.7	0.120	1	25	25.0	0.067	11	460	41.8	0.110	0.05	0.02
House Finch	4	400	100.0	0.067	10	660	66.0	0.253	5	500	100.0	0.083	2	200	100.0	0.033	21	1760	83.8	0.104	0.10	0.05
American Goldfinch	3	55	18.3	0.273	4	240	60.0	0.111	1	55	55.0	0.030	2	200	100.0	0.033	10	550	55.0	0.076	0.11	0.06
Double-crested Cormorant													2	200	100.0	0.033	2	200	100.0	0.008	0.02	0.01
Common Grackle					1	100	100.0	0.017	1	5	5.0	0.333	2	200	100.0	0.033	4	305	76.3	0.022	0.18	0.09
Cliff Swallow					2	200	100.0	0.033	2	200	100.0	0.033	1	100	100.0	0.017	5	500	100.0	0.021	0.02	0.01
Brown-headed Cowbird	2	90	45.0	0.074									1	100	100.0	0.017	3	190	63.3	0.020	0.04	0.02
European Starling	1	100	100.0	0.017					2	125	62.5	0.053	1	100	100.0	0.017	4	325	81.3	0.021	0.02	0.01
Cinnamon Teal					2	10	5.0	0.667									2	10	5.0	0.167	0.33	0.17
Mallard	7	465	66.4	0.176	4	20	5.0	1.333									11	485	44.1	0.104	0.64	0.32
Red-tailed Hawk					1	100	100.0	0.017									1	100	100.0	0.004	0.01	0.00
Northern Flicker	1	65	65.0	0.026													1	65	65.0	0.006	0.01	0.01
Horned Lark	1	25	25.0	0.067													1	25	25.0	0.017	0.03	0.02
Blue Grosbeak					1	15	15.0	0.111									1	15	15.0	0.028	0.06	0.03
Barn Swallow	8	725	90.6	0.147	11	1045	95.0	0.193	15	1500	100.0	0.250					34	3270	96.2	0.147	0.11	0.05
Rufous-sided Towhee									1	65	65.0	0.026					1	65	65.0	0.006	0.01	0.01
Black-billed Magpie	1	85	85.0	0.020					1	65	65.0	0.026					2	150	75.0	0.011	0.01	0.01
Rock Wren									1	100	100.0	0.017					1	100	100.0	0.004	0.01	0.00
Say's Phoebe	1	45	45.0	0.037	1	15	15.0	0.111	2	10	5.0	0.667					4	70	17.5	0.095	0.34	0.17
Eastern Kingbird	1	25	25.0	0.067													1	25	25.0	0.017	0.03	0.02
Western Kingbird					1	25	25.0	0.067									1	25	25.0	0.017	0.03	0.02
Totals	128	4440	34.7	6.150	127	4700	37.0	5.720	192	6870	35.8	8.943	135	4110	30.4	7.391	582	20120	34.6	7.015	1.45	0.72

Breeding Season 1995

Habitat = Wetlands

Species Richness = 27

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Red-winged Blackbird	64	1352	21.1	5.048	77	1205	15.7	8.200	49	1015	20.7	3.943	59	1125	19.1	5.156	249	4697	18.9	5.501	1.83	0.91
Mourning Dove	7	275	39.3	0.297	5	65	13.0	0.641	5	225	45.0	0.185	5	35	7.0	1.190	22	600	27.3	0.336	0.45	0.23
Common Yellowthroat	7	105	15.0	0.778	13	165	12.7	1.707	8	140	17.5	0.762	7	75	10.7	1.089	35	485	13.9	1.052	0.44	0.22
Common Snipe	2	105	52.5	0.063	4	50	12.5	0.533	3	25	8.3	0.600	3	25	8.3	0.600	12	205	17.1	0.293	0.26	0.13
Song Sparrow	7	105	15.0	0.778	8	90	11.3	1.185	9	142	15.8	0.951	4	50	12.5	0.533	28	387	13.8	0.844	0.28	0.14
House Finch	2	20	10.0	0.333	2	10	5.0	0.667	1	100	100.0	0.017	8	255	31.9	0.418	13	385	29.6	0.183	0.27	0.13
Mallard	5	310	62.0	0.134	1	5	5.0	0.333	1	100	100.0	0.017	1	5	5.0	0.333	8	420	52.5	0.063	0.16	0.08
American Kestrel													1	5	5.0	0.333	1	5	5.0	0.083	0.17	0.08
Say's Phoebe													1	5	5.0	0.333	1	5	5.0	0.083	0.17	0.08
Western Meadowlark	4	172	43.0	0.155	5	190	38.0	0.219					6	205	34.2	0.293	15	567	37.8	0.165	0.12	0.06
Vesper Sparrow	1	87	87.0	0.019	2	30	15.0	0.222	3	75	25.0	0.200	5	160	32.0	0.260	11	352	32.0	0.143	0.11	0.05
Grasshopper Sparrow	1	5	5.0	0.333	1	25	25.0	0.067					1	15	15.0	0.111	3	45	15.0	0.083	0.14	0.07
Brewer's Blackbird													1	15	15.0	0.111	1	15	15.0	0.028	0.06	0.03
American Robin													1	15	15.0	0.111	1	15	15.0	0.028	0.06	0.03
American Goldfinch	1	25	25.0	0.067	2	200	100.0	0.033	2	50	25.0	0.133	6	600	100.0	0.100	11	875	79.6	0.058	0.04	0.02
Rufous-sided Towhee													1	25	25.0	0.067	1	25	25.0	0.017	0.03	0.02
Barn Swallow	7	700	100.0	0.117	7	700	100.0	0.117					2	200	100.0	0.033	16	1600	100.0	0.067	0.06	0.03
Common Nighthawk	1	100	100.0	0.017	2	200	100.0	0.033	1	35	35.0	0.048					4	335	83.8	0.020	0.02	0.01
Killdeer	1	100	100.0	0.017													1	100	100.0	0.004	0.01	0.00
Yellow Warbler									1	62	62.0	0.027					1	62	62.0	0.007	0.01	0.01
Northern Oriole					1	5	5.0	0.333	1	100	100.0	0.017					2	105	52.5	0.016	0.16	0.08
Brown-headed Cowbird					1	100	100.0	0.017									1	100	100.0	0.004	0.01	0.00
Common Grackle									2	124	62.0	0.054					2	124	62.0	0.013	0.03	0.01
European Starling	1	62	62.0	0.027					3	262	87.3	0.057					4	324	81.0	0.021	0.03	0.01
Tree Swallow	1	100	100.0	0.017													1	100	100.0	0.004	0.01	0.00
Eastern Kingbird					1	5	5.0	0.333									1	5	5.0	0.083	0.17	0.08
Western Kingbird	1	25	25.0	0.067													1	25	25.0	0.017	0.03	0.02
Totals	113	3648	32.3	5.834	132	3045	23.1	9.537	89	2455	27.6	5.377	112	2815	25.1	7.427	446	11963	26.8	6.928	1.88	0.94

Breeding Season 1991

Habitat = Riparian Woodlands

Species Richness = 31

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
House Finch	10	70	7.0	2.381	43	845	19.7	3.647	101	1670	16.5	10.184	154	2585	16.8	5.096	4.19	2.42
Northern Oriole	7	140	20.0	0.583	16	130	8.1	3.280	13	220	16.9	1.281	36	490	13.6	1.470	1.40	0.81
American Goldfinch	19	215	11.3	2.797	9	55	6.1	2.455	3	110	36.7	0.136	31	380	12.3	1.405	1.45	0.84
Song Sparrow	9	45	5.0	3.000	5	65	13.0	0.641	7	85	12.1	0.961	21	195	9.3	1.256	1.28	0.74
Yellow Warbler	7	35	5.0	2.333	2	10	5.0	0.667	2	10	5.0	0.667	11	55	5.0	1.222	0.96	0.56
Red-winged Blackbird	40	1984	49.6	1.344	20	521	26.1	1.280	19	605	31.8	0.995	79	3110	39.4	1.115	0.19	0.11
Vesper Sparrow	1	5	5.0	0.333	2	30	15.0	0.222	14	110	7.9	2.969	17	145	8.5	1.107	1.55	0.90
European Starling	2	200	100.0	0.033	32	1300	40.6	1.313	24	215	9.0	4.464	58	1715	29.6	1.090	2.28	1.32
Mourning Dove	29	1572	54.2	0.892	19	690	36.3	0.872	16	515	32.2	0.828	64	2777	43.4	0.819	0.03	0.02
Western Kingbird	4	20	5.0	1.333	8	110	13.8	0.970	6	122	20.3	0.492	18	252	14.0	0.714	0.42	0.24
Red-tailed Hawk	6	30	5.0	2.000	5	140	28.0	0.298	8	132	16.5	0.808	19	302	15.9	0.664	0.87	0.50
Western Meadowlark	16	1023	63.9	0.417	14	709	50.6	0.461	26	990	38.1	1.138	56	2722	48.6	0.640	0.40	0.23
Eastern Kingbird	4	30	7.5	0.889	3	45	15.0	0.333	1	5	5.0	0.333	8	80	10.0	0.444	0.32	0.19
Brewer's Blackbird	15	530	35.3	0.708	8	647	80.9	0.165	5	215	43.0	0.194	28	1392	49.7	0.313	0.31	0.18
Horned Lark									2	10	5.0	0.667	2	10	5.0	0.222	0.39	0.22
Brown-headed Cowbird					2	10	5.0	0.667					2	10	5.0	0.222	0.39	0.22
Warbling Vireo	1	5	5.0	0.333	1	5	5.0	0.333					2	10	5.0	0.222	0.19	0.11
Common Yellowthroat					3	25	8.3	0.600					3	25	8.3	0.200	0.35	0.20
Common Grackle	2	105	52.5	0.063	1	5	5.0	0.333	4	30	7.5	0.889	7	140	20.0	0.194	0.42	0.24
Blue Grosbeak	2	10	5.0	0.667	4	210	52.5	0.127	2	92	46.0	0.072	8	312	39.0	0.114	0.33	0.19
Lesser Goldfinch					1	5	5.0	0.333					1	5	5.0	0.111	0.19	0.11
Rufous-sided Towhee	2	10	5.0	0.667					1	35	35.0	0.048	3	45	15.0	0.111	0.37	0.21
Say's Phoebe	1	5	5.0	0.333									1	5	5.0	0.111	0.19	0.11
House Wren	1	5	5.0	0.333									1	5	5.0	0.111	0.19	0.11
Killdeer									3	120	40.0	0.125	3	120	40.0	0.042	0.07	0.04
Black-billed Magpie	1	35	35.0	0.048	2	200	100.0	0.033					3	235	78.3	0.021	0.02	0.01
American Robin					2	200	100.0	0.033					2	200	100.0	0.011	0.02	0.01
Mallard					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
Great Blue Heron									1	100	100.0	0.017	1	100	100.0	0.006	0.01	0.01
Common Nighthawk									1	100	100.0	0.017	1	100	100.0	0.006	0.01	0.01
Barn Swallow					1	100	100.0	0.017					1	100	100.0	0.006	0.01	0.01
Totals	179	6074	33.9	8.792	204	6157	30.2	11.265	259	5491	21.2	20.361	642	17722	27.6	12.921	6.09	3.52

329

Breeding Season 1993

Habitat = Riparian Woodlands

Species Richness = 30

	Week 1				Week 2				Week 3				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
Yellow Warbler					6	30	5.0	2.000	11	55	5.0	3.667	17	85	5.0	1.417	1.84	1.06
House Finch	40	620	15.5	4.301	16	435	27.2	0.981	29	1252	43.2	1.120	85	2307	27.1	1.305	1.88	1.08
Northern Oriole	9	55	6.1	2.455	5	35	7.0	1.190	9	85	9.4	1.589	23	175	7.6	1.259	0.65	0.37
Western Meadowlark	16	935	58.4	0.456	48	1224	25.5	3.137	29	1397	48.2	1.003	93	3556	38.2	1.013	1.42	0.82
Brewer's Blackbird	43	995	23.1	3.097	8	230	28.8	0.464	35	2740	78.3	0.745	86	3965	46.1	0.777	1.45	0.83
American Goldfinch	12	130	10.8	1.847	10	525	52.5	0.317	28	1070	38.2	1.221	50	1725	34.5	0.604	0.77	0.44
Blue Grosbeak	2	10	5.0	0.667	1	5	5.0	0.333	2	10	5.0	0.667	5	25	5.0	0.417	0.19	0.11
Song Sparrow	6	132	22.0	0.455	1	15	15.0	0.111	9	212	23.6	0.637	16	359	22.4	0.297	0.27	0.15
Vesper Sparrow									10	150	15.0	1.111	10	150	15.0	0.278	0.64	0.37
European Starling	10	385	38.5	0.433	2	105	52.5	0.063	10	430	43.0	0.388	22	920	41.8	0.219	0.20	0.12
Mourning Dove	3	120	40.0	0.125	12	245	20.4	0.979	7	592	84.6	0.138	22	957	43.5	0.211	0.49	0.28
Rufous-sided Towhee	4	60	15.0	0.444					2	20	10.0	0.333	6	80	13.3	0.188	0.23	0.13
Great Horned Owl									2	10	5.0	0.667	2	10	5.0	0.167	0.39	0.22
Wilson's Warbler					4	40	10.0	0.667					4	40	10.0	0.167	0.39	0.22
Red-winged Blackbird	6	415	69.2	0.145	9	720	80.0	0.188	3	150	50.0	0.100	18	1285	71.4	0.105	0.04	0.03
Common Yellowthroat	1	5	5.0	0.333									1	5	5.0	0.083	0.19	0.11
House Wren					1	5	5.0	0.333					1	5	5.0	0.083	0.19	0.11
Eastern Kingbird	1	15	15.0	0.111	1	5	5.0	0.333					2	20	10.0	0.083	0.17	0.10
Western Kingbird													1	5	5.0	0.083	0.00	0.00
Red-tailed Hawk	3	110	36.7	0.136					3	110	36.7	0.136	6	220	36.7	0.068	0.08	0.05
Barn Swallow	4	400	100.0	0.067	4	400	100.0	0.067	6	600	100.0	0.100	14	1400	100.0	0.058	0.02	0.01
Grasshopper Sparrow					4	273	68.3	0.098	2	50	25.0	0.133	6	323	53.8	0.046	0.07	0.04
Brown-headed Cowbird	2	50	25.0	0.133					4	400	100.0	0.067	6	450	75.0	0.033	0.07	0.04
Black-billed Magpie					1	15	15.0	0.111					1	15	15.0	0.028	0.06	0.04
Common Grackle									2	115	57.5	0.058	2	115	57.5	0.014	0.03	0.02
Tree Swallow					1	100	100.0	0.017	1	100	100.0	0.017	2	200	100.0	0.008	0.01	0.01
Turkey Vulture					1	100	100.0	0.017					1	100	100.0	0.004	0.01	0.01
Killdeer									1	100	100.0	0.017	1	100	100.0	0.004	0.01	0.01
Cliff Swallow	1	100	100.0	0.017									1	100	100.0	0.004	0.01	0.01
Double-crested Cormorant									1	100	100.0	0.017	1	100	100.0	0.004	0.01	0.01
Totals	163	4537	27.8	9.760	135	4507	33.4	6.740	206	9748	47.3	7.256	504	18792	37.3	7.510	1.62	0.93

Breeding Season 1994

Habitat = Riparian Woodlands

Species Richness = 33

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
House Finch	22	485	22.1	1.663	14	70	5.0	4.667	26	180	6.9	6.262	20	100	5.0	6.667	82	835	10.2	3.356	2.27	1.14
Vesper Sparrow	3	75	25.0	0.200	8	60	7.5	1.778	5	65	13.0	0.641	19	205	10.8	2.935	35	405	11.6	1.260	1.23	0.61
Song Sparrow	14	130	9.3	2.512	7	35	5.0	2.333	7	150	21.4	0.544	10	60	6.0	2.778	38	375	9.9	1.604	1.02	0.51
Northern Oriole	7	45	6.4	1.814	10	50	5.0	3.333	18	150	8.3	3.601	12	155	12.9	1.548	47	400	8.5	2.301	1.04	0.52
European Starling	10	300	30.0	0.556	6	375	62.5	0.160	28	180	6.4	7.258	14	260	18.6	1.257	58	1115	19.2	1.257	3.33	1.67
Western Meadowlark	21	1040	49.5	0.707	20	665	33.3	1.003	14	320	22.9	1.021	16	365	22.8	1.169	71	2390	33.7	0.879	0.19	0.10
Brown-headed Cowbird	13	215	16.5	1.310	2	105	52.5	0.063	11	95	8.6	2.122	3	15	5.0	1.000	29	430	14.8	0.815	0.85	0.43
Western Kingbird					6	130	21.7	0.461	3	25	8.3	0.600	5	55	11.0	0.758	14	210	15.0	0.389	0.33	0.16
Mourning Dove	3	215	71.7	0.070	9	200	22.2	0.675	8	40	5.0	2.667	13	390	30.0	0.722	33	845	25.6	0.537	1.13	0.56
American Goldfinch	13	180	13.9	1.564	16	375	23.4	1.138	2	30	15.0	0.222	8	230	28.8	0.464	39	815	20.9	0.778	0.62	0.31
Brewer's Blackbird	3	300	100.0	0.050	57	2385	41.8	2.271	6	505	84.2	0.119	5	120	24.0	0.347	71	3310	46.6	0.635	1.06	0.53
Great Horned Owl	1	5	5.0	0.333	1	5	5.0	0.333					1	5	5.0	0.333	3	15	5.0	0.250	0.17	0.08
Yellow Warbler									2	10	5.0	0.667	1	5	5.0	0.333	3	15	5.0	0.250	0.32	0.16
Rufous-sided Towhee	1	15	15.0	0.111									1	5	5.0	0.333	2	20	10.0	0.083	0.16	0.08
American Kestrel	1	5	5.0	0.333					1	5	5.0	0.333	3	130	43.3	0.115	5	140	28.0	0.074	0.17	0.08
American Robin					1	5	5.0	0.333					2	200	100.0	0.033	3	205	68.3	0.018	0.16	0.08
Red-winged Blackbird	10	635	63.5	0.262	15	465	31.0	0.806	2	105	52.5	0.063	1	100	100.0	0.017	27	1205	44.6	0.252	0.36	0.18
Northern Flicker	1	5	5.0	0.333									1	100	100.0	0.017	2	105	52.5	0.016	0.16	0.08
Barn Swallow	9	900	100.0	0.150	19	1900	100.0	0.317	4	400	100.0	0.067	1	100	100.0	0.017	33	3300	100.0	0.138	0.13	0.07
Double-crested Cormorant	2	200	100.0	0.033					2	200	100.0	0.033	1	100	100.0	0.017	5	500	100.0	0.021	0.02	0.01
Mallard					3	300	100.0	0.050									3	300	100.0	0.013	0.03	0.01
Red-tailed Hawk	3	110	36.7	0.136	1	100	100.0	0.017	1	100	100.0	0.017					6	410	68.3	0.037	0.06	0.03
Lesser Goldfinch					2	10	5.0	0.667	2	10	5.0	0.667					4	20	5.0	0.333	0.39	0.19
Killdeer					1	100	100.0	0.017	2	30	15.0	0.222					3	130	43.3	0.029	0.11	0.05
Common Yellowthroat	1	5	5.0	0.333													1	5	5.0	0.083	0.17	0.08
Blue Grosbeak	2	10	5.0	0.667	6	30	5.0	2.000									8	40	5.0	0.667	0.94	0.47
Cliff Swallow	3	300	100.0	0.050	1	100	100.0	0.017	2	200	100.0	0.033					6	600	100.0	0.025	0.02	0.01
Black-billed Magpie	1	45	45.0	0.037	1	5	5.0	0.333	1	100	100.0	0.017					3	150	50.0	0.025	0.16	0.08
Common Grackle					1	100	100.0	0.017	1	5	5.0	0.333					2	105	52.5	0.016	0.16	0.08
Say's Phoebe					1	75	75.0	0.022									1	75	75.0	0.006	0.01	0.01
House Wren	1	5	5.0	0.333													1	5	5.0	0.083	0.17	0.08
Eastern Kingbird	2	20	10.0	0.333					1	25	25.0	0.067					3	45	15.0	0.083	0.16	0.08
Warbling Vireo					1	5	5.0	0.333									1	5	5.0	0.083	0.17	0.08
Totals	147	5245	35.7	6.867	209	7650	36.6	9.517	149	2930	19.7	12.629	137	2700	19.7	11.586	642	18525	28.9	9.270	2.54	1.27

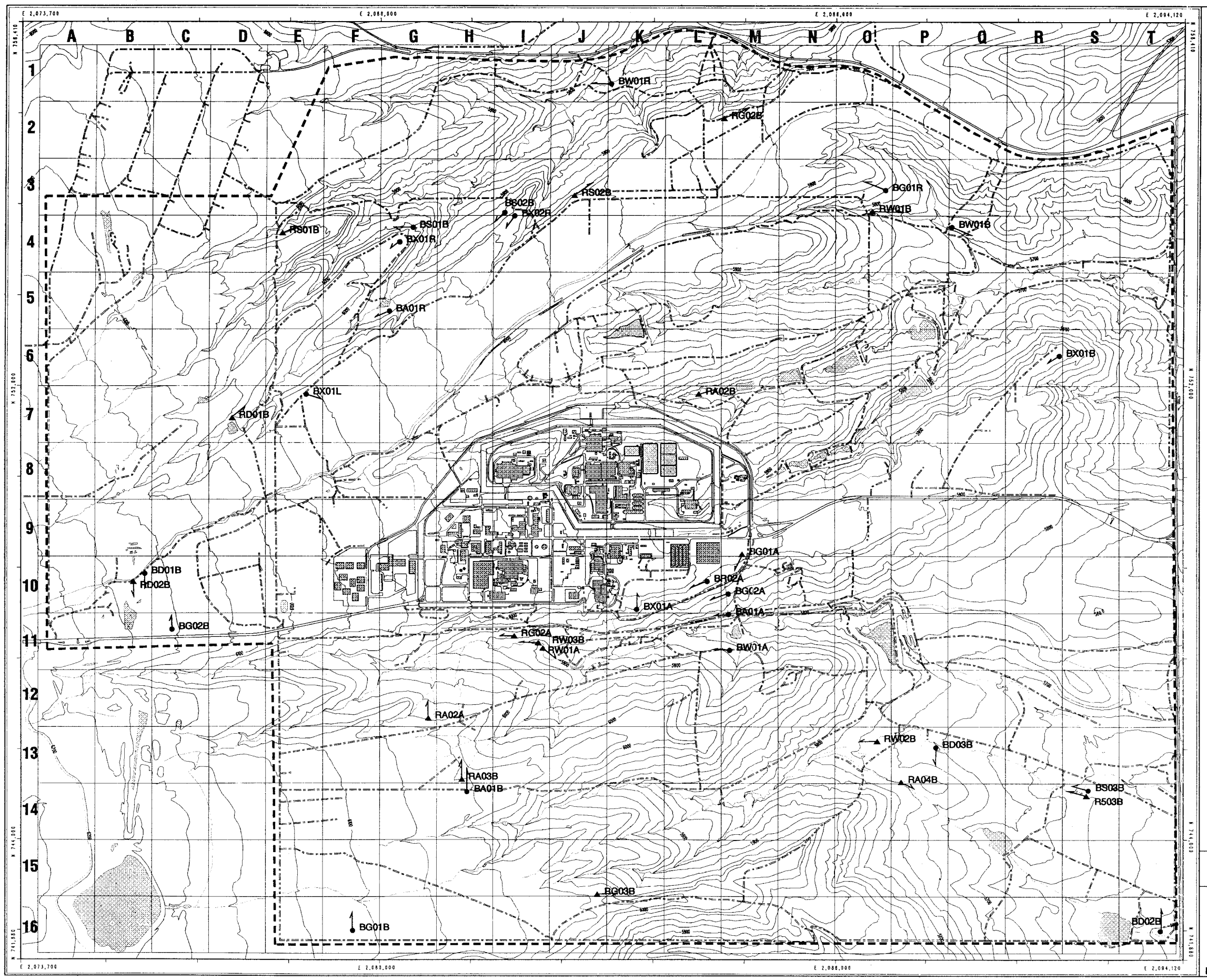
Breeding Season 1995

Habitat = Riparian Woodlands

Species Richness = 38

	Week 1				Week 2				Week 3				Week 4				Total					
Species	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	n	Sum d	Mean d	D	s	SE
House Finch	3	45	15.0	0.333	3	15	5.0	1.000	11	205	18.6	0.984	10	50	5.0	3.333	27	315	11.7	0.964	1.32	0.66
Northern Oriole	5	25	5.0	1.667	7	65	9.3	1.256	12	60	5.0	4.000	10	70	7.0	2.381	34	220	6.5	2.190	1.21	0.60
Song Sparrow	9	55	6.1	2.455	6	60	10.0	1.000	6	50	8.3	1.200	12	120	10.0	2.000	33	285	8.6	1.591	0.68	0.34
European Starling	16	575	35.9	0.742	24	320	13.3	3.001	31	1270	41.0	1.261	16	330	20.6	1.293	87	2495	28.7	1.264	0.98	0.49
Yellow Warbler	1	100	100.0	0.017	5	25	5.0	1.667	3	55	18.3	0.273	3	15	5.0	1.000	12	195	16.3	0.308	0.75	0.37
Western Meadowlark	8	100	12.5	1.067	7	147	21.0	0.556	13	225	17.3	1.252	14	345	24.6	0.947	42	817	19.5	0.900	0.29	0.15
American Goldfinch	10	335	33.5	0.498	7	130	18.6	0.628	16	495	30.9	0.862	11	295	26.8	0.684	44	1255	28.5	0.643	0.15	0.08
Brewer's Blackbird	10	100	10.0	1.667	9	55	6.1	2.455	21	675	32.1	1.089	2	10	5.0	0.667	42	840	20.0	0.875	0.77	0.39
Mourning Dove	12	470	39.2	0.511	14	405	28.9	0.807	8	135	16.9	0.790	11	305	27.7	0.661	45	1315	29.2	0.642	0.14	0.07
Western Kingbird	2	10	5.0	0.667					9	140	15.6	0.964	6	110	18.3	0.546	17	260	15.3	0.463	0.40	0.20
Red-winged Blackbird	7	170	24.3	0.480	12	585	48.8	0.410					1	5	5.0	0.333	20	760	38.0	0.219	0.21	0.11
Common Yellowthroat	2	20	10.0	0.333	3	25	8.3	0.600					1	5	5.0	0.333	6	50	8.3	0.300	0.25	0.12
Brown-headed Cowbird	4	30	7.5	0.889	2	10	5.0	0.667	2	105	52.5	0.063	1	5	5.0	0.333	9	150	16.7	0.225	0.36	0.18
Rufous-sided Towhee					2	67	33.5	0.100	2	50	25.0	0.133	1	5	5.0	0.333	5	122	24.4	0.085	0.14	0.07
Vesper Sparrow	3	25	8.3	0.600	3	25	8.3	0.600	5	112	22.4	0.372	4	120	30.0	0.222	15	282	18.8	0.332	0.19	0.09
Barn Swallow	8	705	88.1	0.151	8	705	88.1	0.151	1	100	100.0	0.017	3	300	100.0	0.050	20	1810	90.5	0.092	0.07	0.03
Grasshopper Sparrow	1	25	25.0	0.067					1	25	25.0	0.067	1	35	35.0	0.048	3	85	28.3	0.044	0.03	0.02
Killdeer													2	200	100.0	0.033	2	200	100.0	0.008	0.02	0.01
Cliff Swallow					3	300	100.0	0.050					2	200	100.0	0.033	5	500	100.0	0.021	0.02	0.01
American Kestrel	1	100	100.0	0.017									1	62	62.0	0.027	2	162	81.0	0.010	0.01	0.01
Green-tailed Towhee													1	87	87.0	0.019	1	87	87.0	0.005	0.01	0.00
Red-tailed Hawk	1	5	5.0	0.333	3	205	68.3	0.073	2	10	5.0	0.667	1	100	100.0	0.017	7	320	45.7	0.064	0.30	0.15
Mallard	6	515	85.8	0.117	1	100	100.0	0.017	5	310	62.0	0.134					12	925	77.1	0.065	0.07	0.03
Great Blue Heron	1	100	100.0	0.017													1	100	100.0	0.004	0.01	0.00
Great Horned Owl	2	20	10.0	0.333	1	5	5.0	0.333									3	25	8.3	0.150	0.19	0.10
Lesser Goldfinch									5	55	11.0	0.758					5	55	11.0	0.189	0.38	0.19
Yellow-rumped Warbler	1	5	5.0	0.333													1	5	5.0	0.083	0.17	0.08
Blue Grosbeak					2	10	5.0	0.667	1	5	5.0	0.333					3	15	5.0	0.250	0.32	0.16
Ring-billed Gull	1	100	100.0	0.017													1	100	100.0	0.004	0.01	0.00
Common Merganser	1	15	15.0	0.111													1	15	15.0	0.028	0.06	0.03
Black-crowned Night-heron	2	200	100.0	0.033	1	100	100.0	0.017									3	300	100.0	0.013	0.02	0.01
Black-capped Chickadee	1	5	5.0	0.333													1	5	5.0	0.083	0.17	0.08
Double-crested Cormorant					2	200	100.0	0.033									2	200	100.0	0.008	0.02	0.01
Eastern Phoebe	2	10	5.0	0.667													2	10	5.0	0.167	0.33	0.17
Say's Phoebe	1	35	35.0	0.048	1	5	5.0	0.333	1	5	5.0	0.333					3	45	15.0	0.083	0.18	0.09
American Robin					1	5	5.0	0.333	1	5	5.0	0.333					2	10	5.0	0.167	0.19	0.10
Eastern Kingbird	1	5	5.0	0.333	2	20	10.0	0.333	2	10	5.0	0.667					5	35	7.0	0.298	0.27	0.14
White-crowned Sparrow					1	5	5.0	0.333									1	5	5.0	0.083	0.17	0.08
Totals	122	3905	32.0	6.353	130	3594	27.6	7.837	158	4102	26.0	10.143	114	2774	24.3	7.808	524	14375	27.4	7.959	1.57	0.78

332 | 332



Locations of Relative Abundance and Bird Survey Route Start Points

Figure 2-1

EXPLANATION

- ● Bird Transects
- ▲ Relative Abundance Transects

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

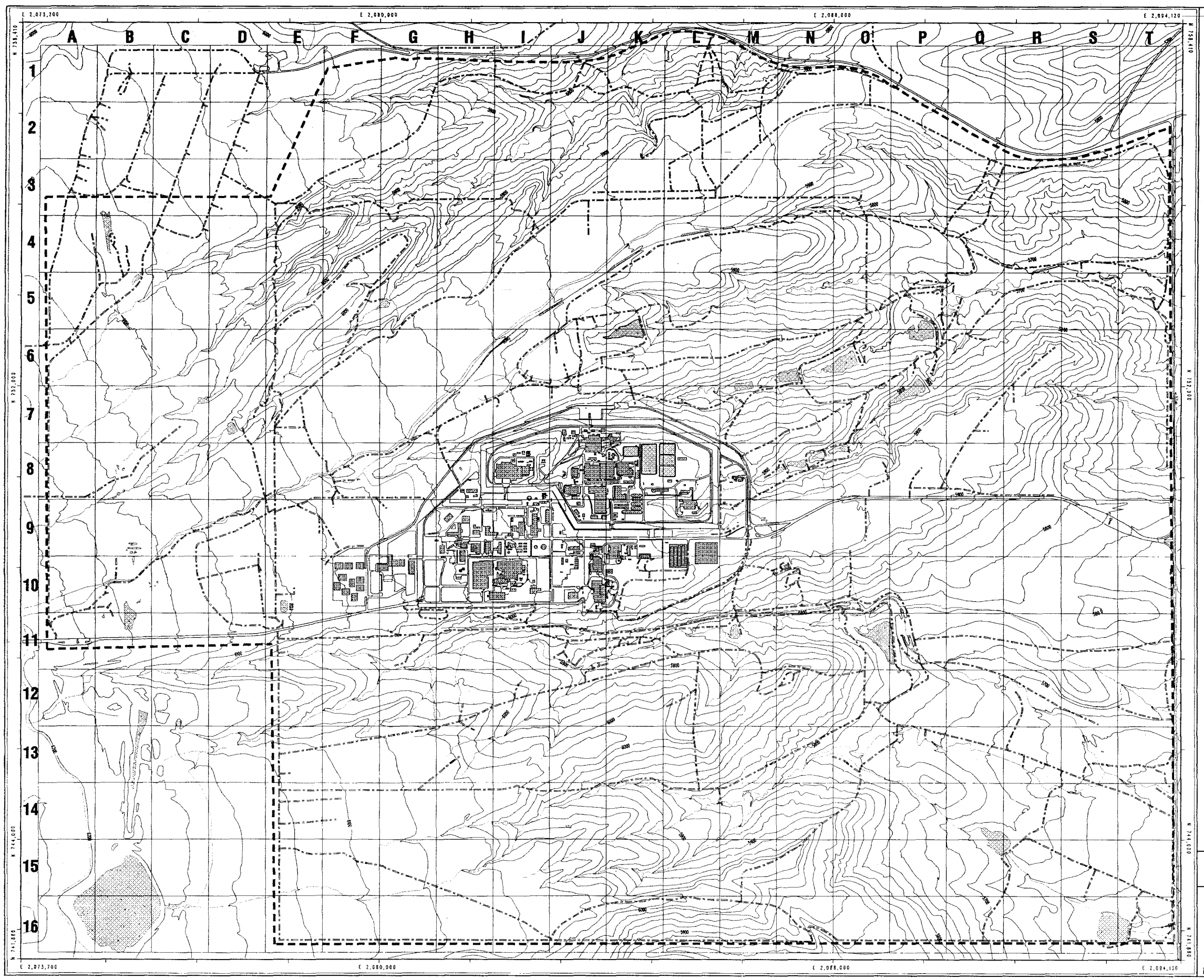
Prepared by:

RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: ***Draft***

May 01, 1996

/gis/data/rfp-map-amls/eco/habitat/fig2-1.aml



Grid Map of Rocky Flats Environmental Technology Site used for Location Data Entry into Significant Species Database

Figure 2-2

EXPLANATION

1000 Foot Grid

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

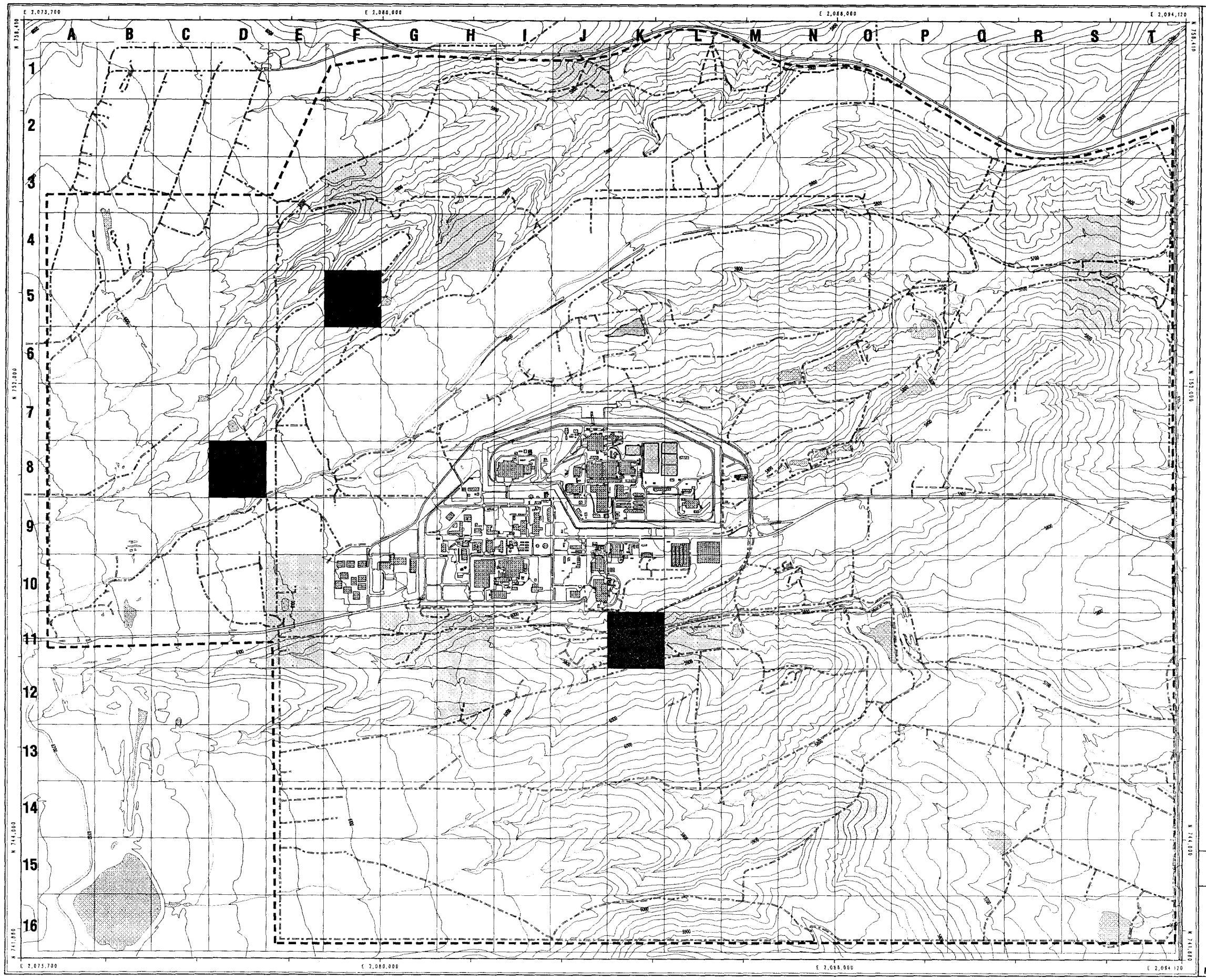
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig2-2

May 02, 1996

/gis/data/rfp-map-amls/eco/habRst/map-1.aml

13



Loggerhead Shrike Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-1

EXPLANATION

Loggerhead Shrike Use Areas

- Average
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

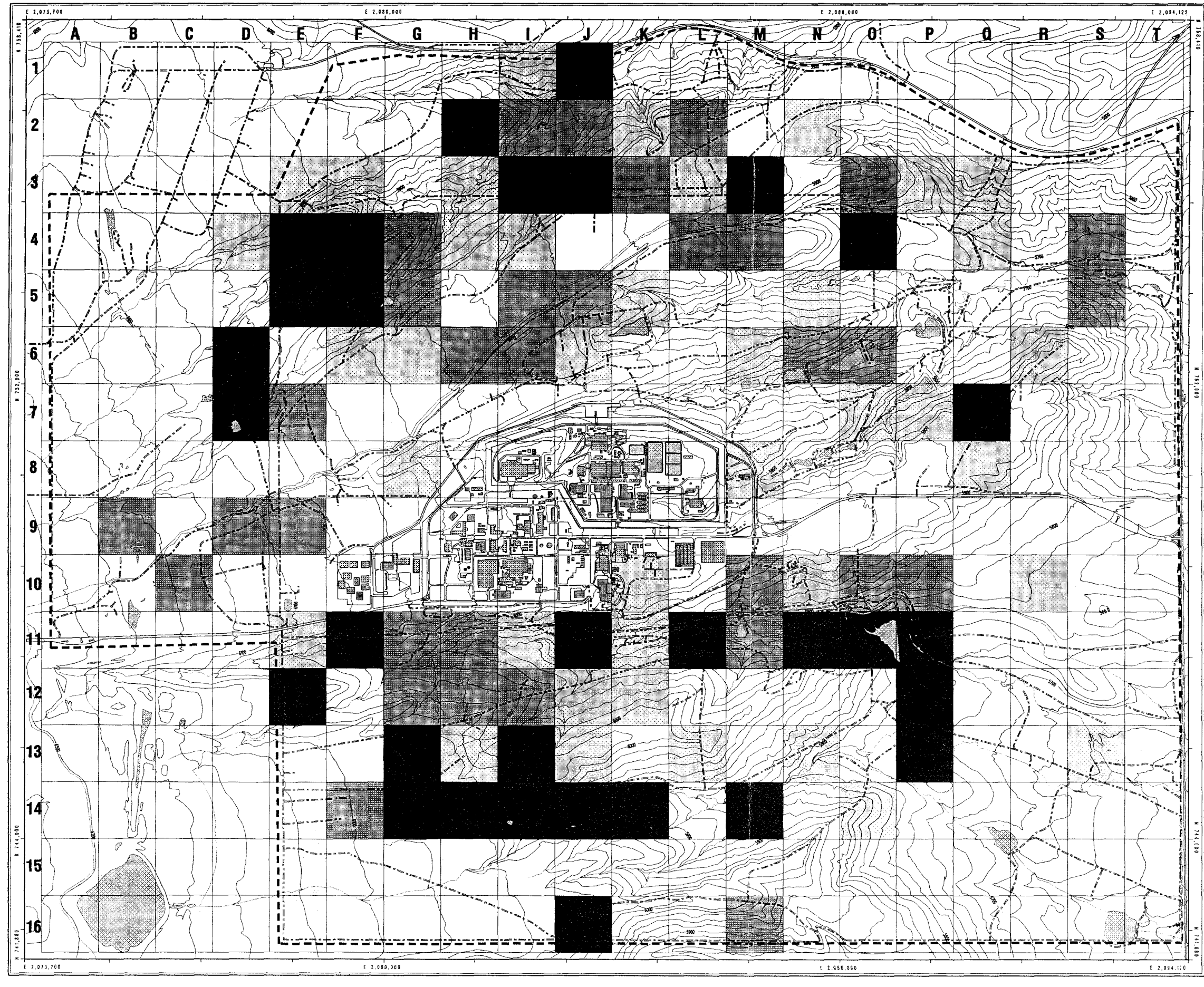
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-1

May 06, 1996

/gis1/data/rfp-map-amls/eco/habitat/fig3-1.aml

23



Mule Deer Spring Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-2

EXPLANATION

Mule Deer Spring Use Areas

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

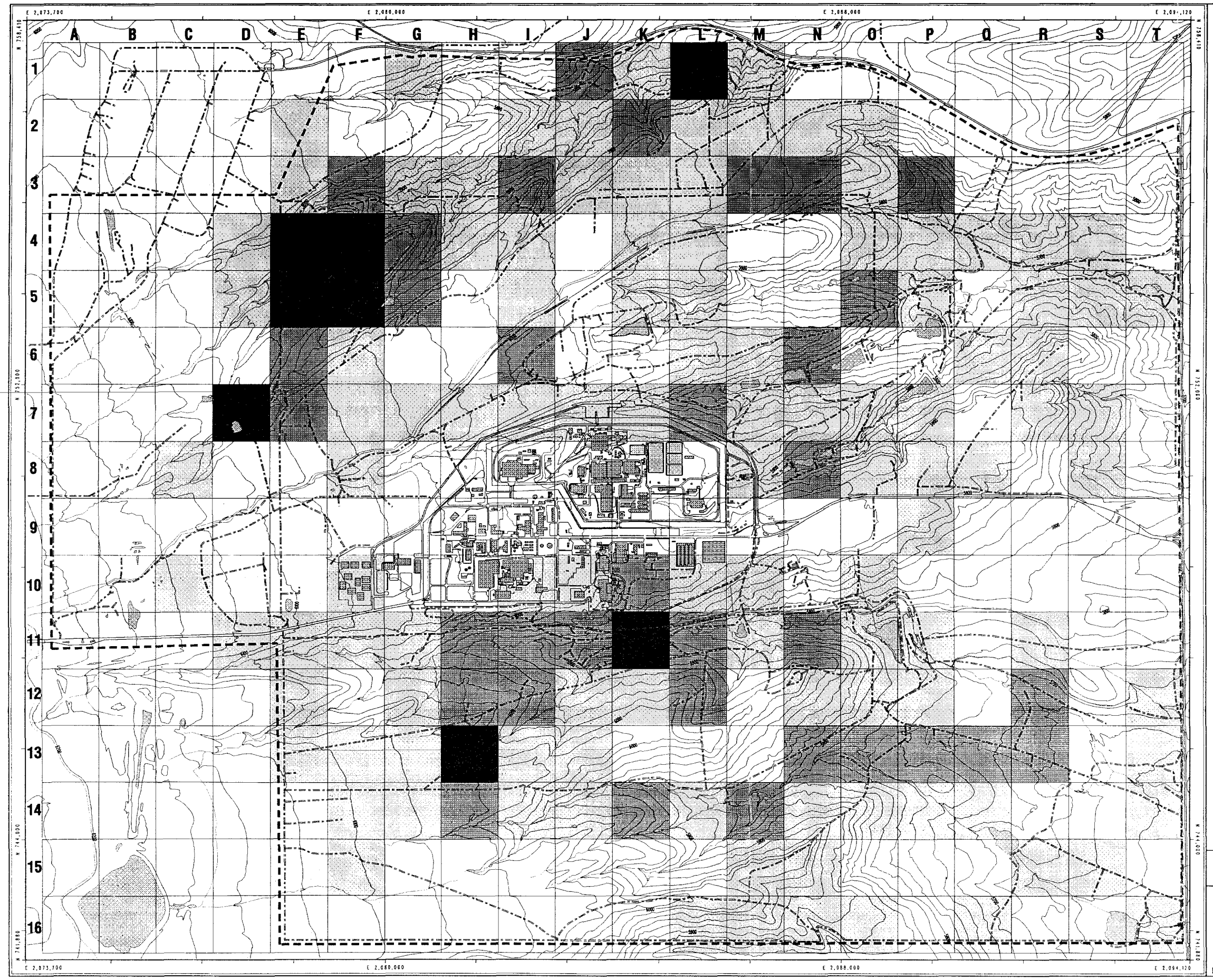
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-2

May 02, 1996

/gis/data/rfp-map-amls/eco/habitat/fig3-2.aml

33



35

Mule Deer Summer Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-3

EXPLANATION

Mule Deer Summer Use Areas

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

N

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

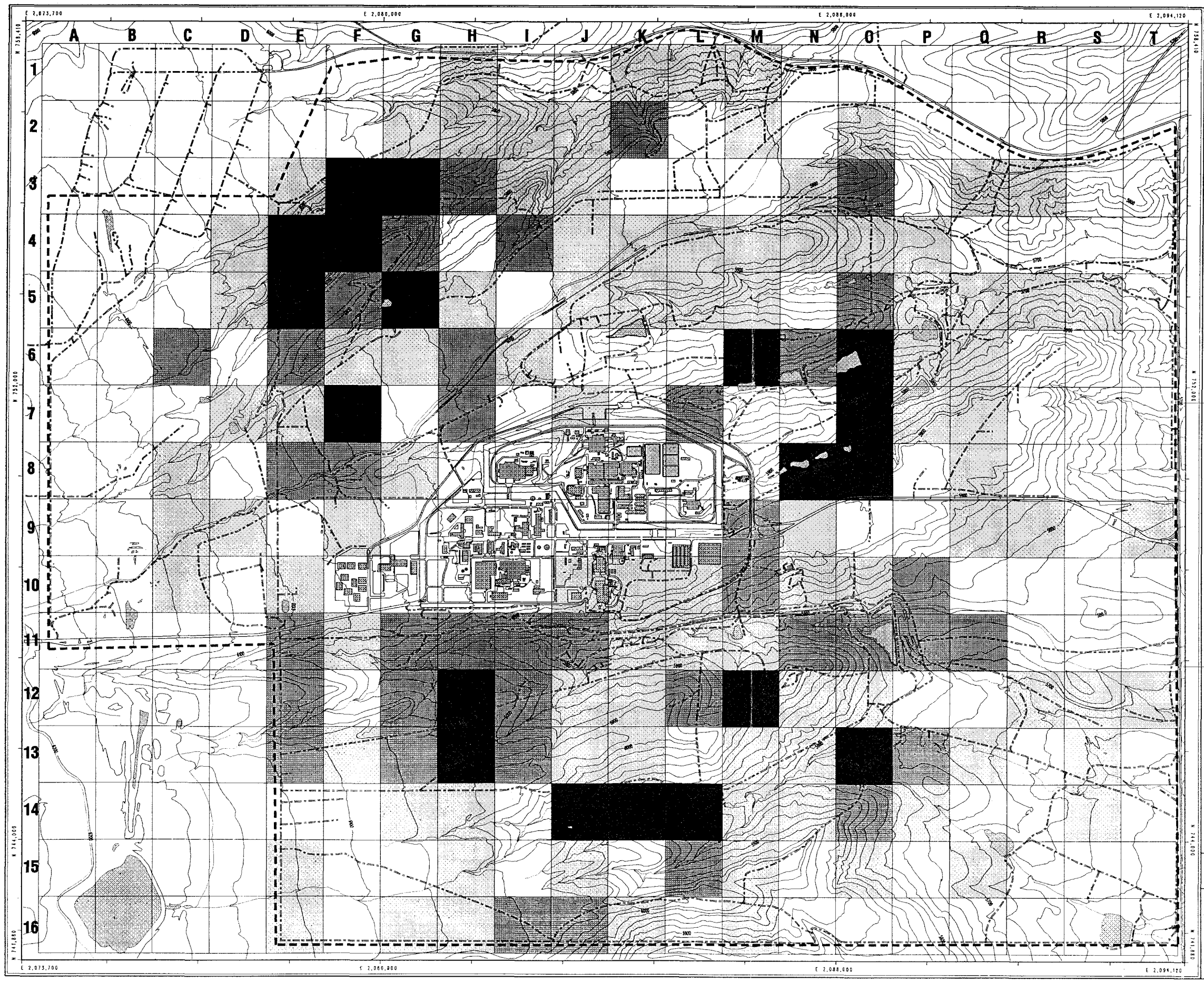
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-3

May 06, 1996

/gis1/data/rfp-map-amls/eco/habitat/fig3-3.aml

35



Mule Deer Fall Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-4

EXPLANATION

Mule Deer Use Areas

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

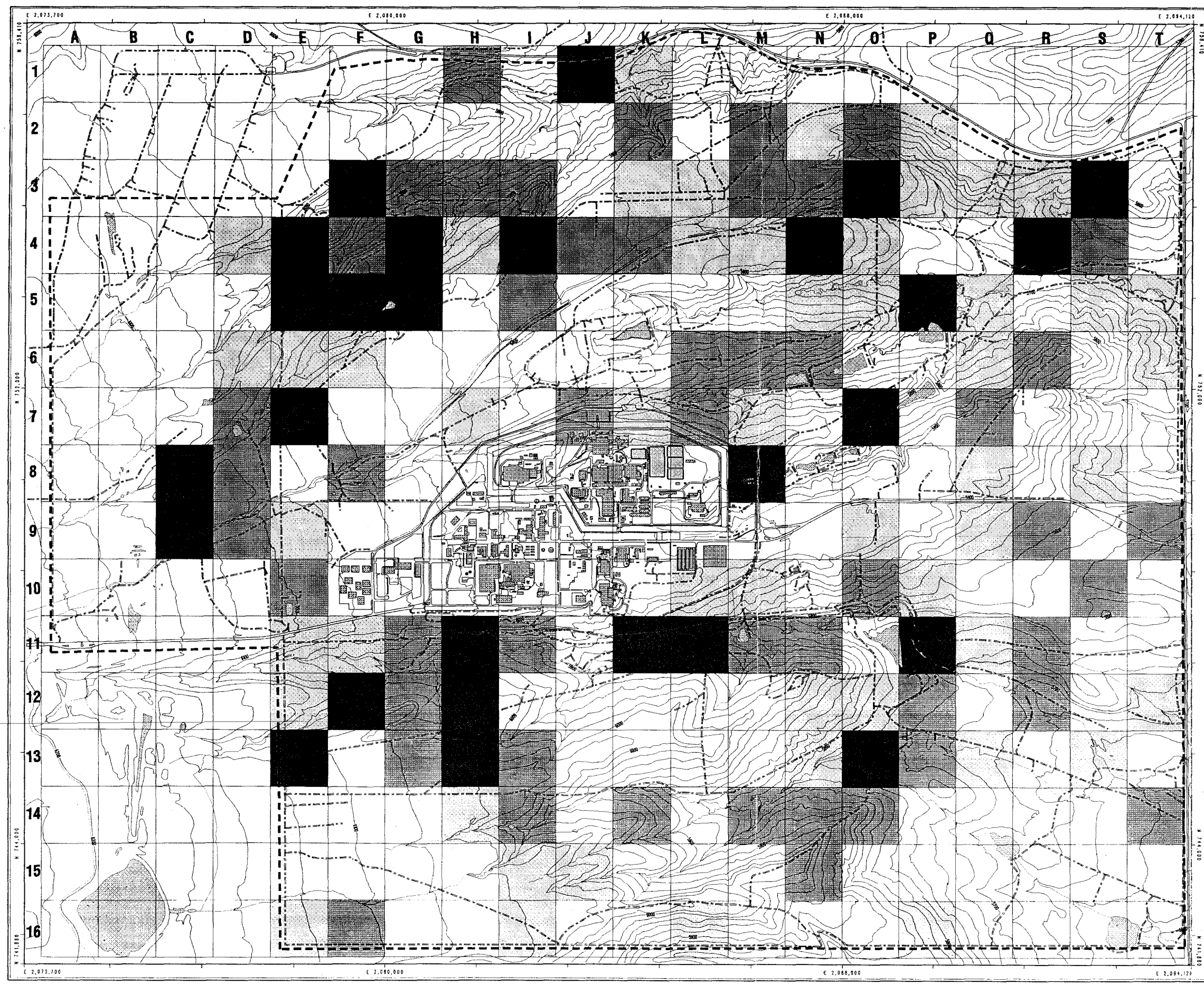
Prepared by:

RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-4

May 02, 1996

/gis/data/rfp-map-ami/eco/habitat/fig3-4.aml



Mule Deer Winter Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-5

EXPLANATION

Mule Deer Use Areas

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

N

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

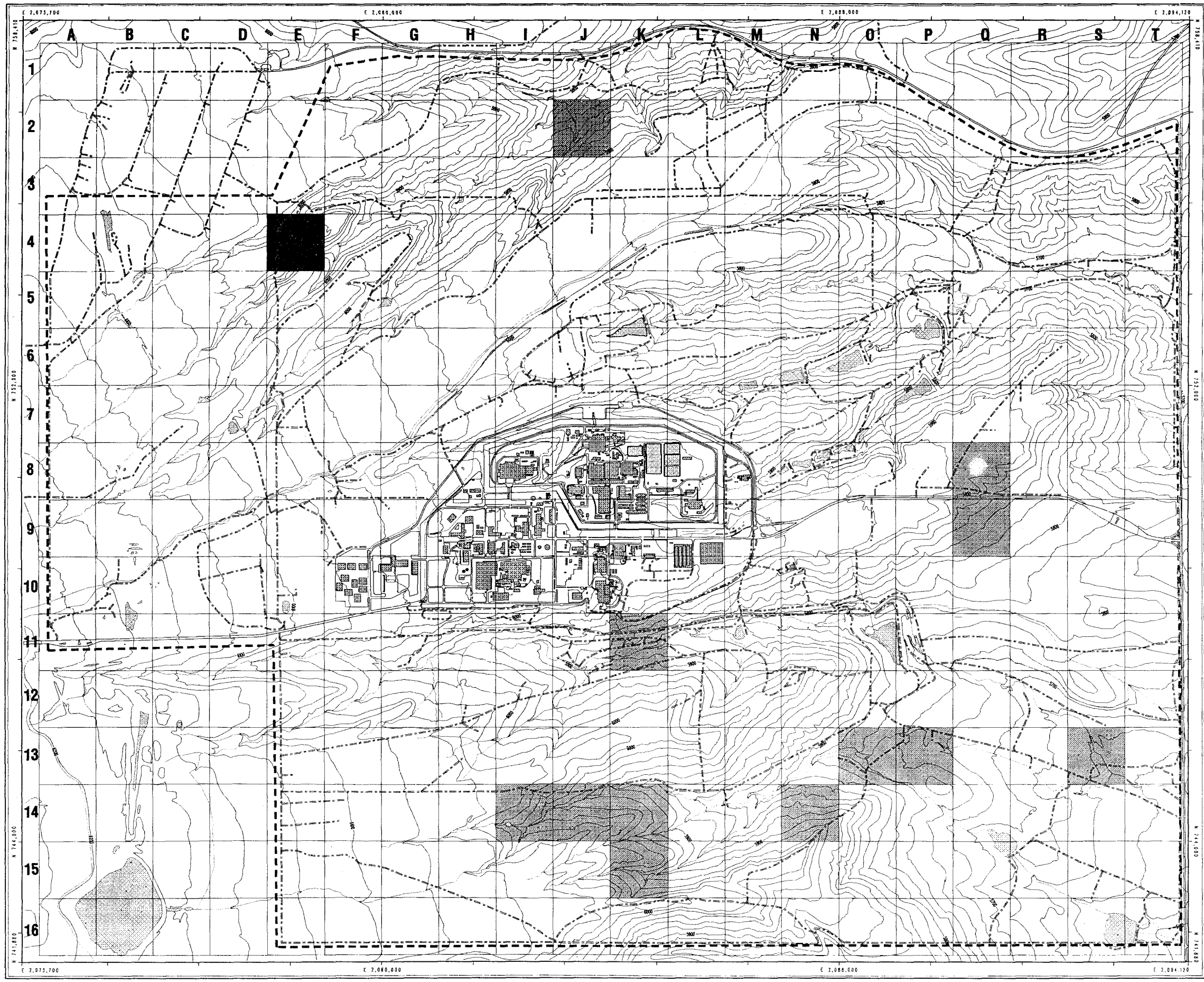
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-5

May 06, 1996

/gis1/data/fp-map-ecol/habitat/fig3-5.aml

37



39

Elk and White-Tailed Deer Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-6

EXPLANATION

Ungulate Use Areas

- Elk Use Area
- White-Tailed Deer Use Area

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

N

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

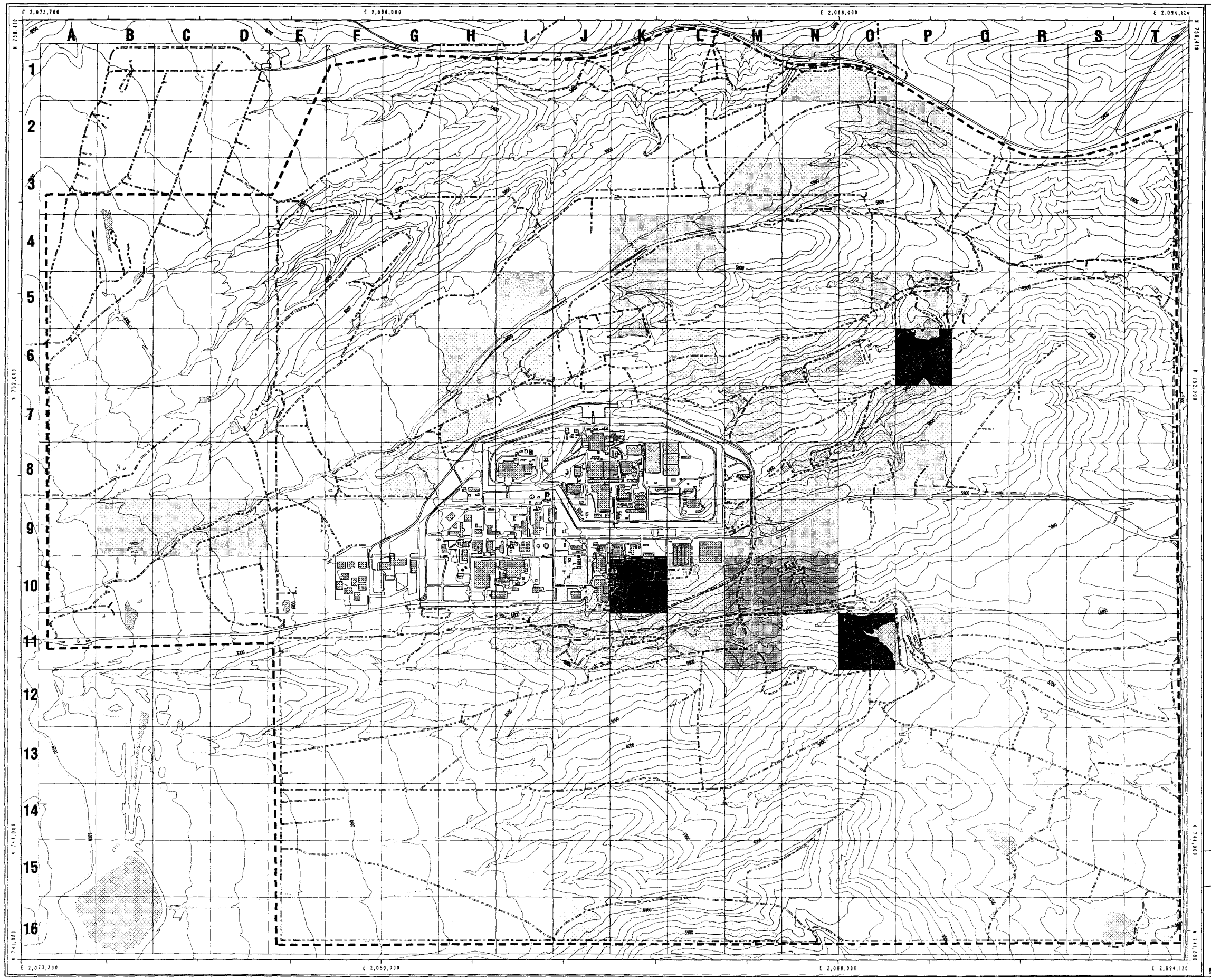
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-6

May 06, 1996

/gis1/data/rfp-map-amls/eco/habitat/fig3-6.aml

39



Desert Cottontail Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-7

EXPLANATION

Cottontail Use Areas

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20′ Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Realtree Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Merale Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

800 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

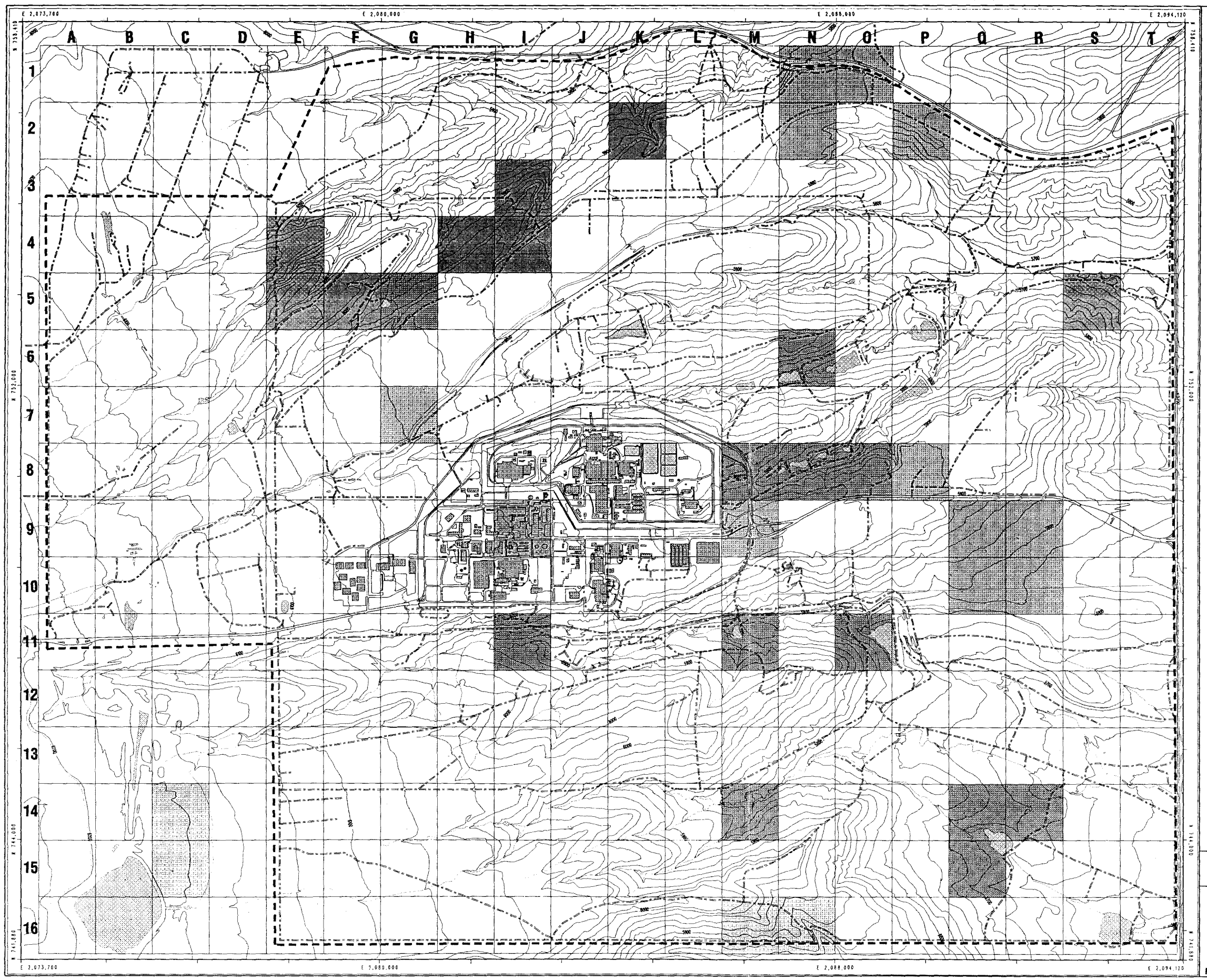
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-7

May 06, 1996

/gis1/data/fb-map-ems/ecohabitat/fig3-7.aml

41



Other Mid-Sized Mammal Species Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-8

EXPLANATION

Mammal Use Areas

- Black-tailed Prairie Dog
- Eastern Fox Squirrel
- Muskrat
- Porcupine

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcie Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

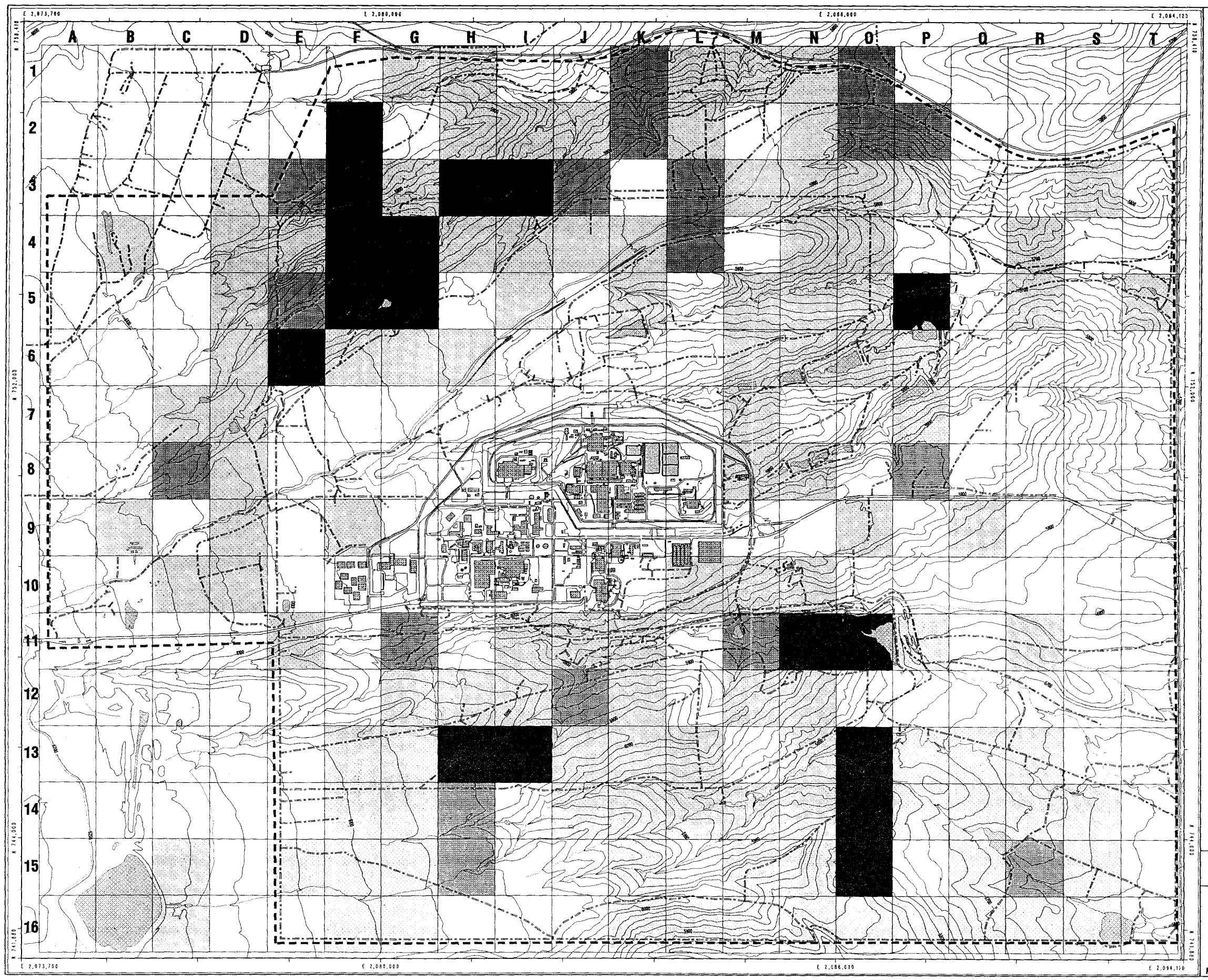
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-8

May 06, 1996

/gis1/data/rfp-map-amis/eco/habitat/fig3-8.aml

42



Coyote Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-9

EXPLANATION

Coyote Use Areas

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Fecilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1995.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

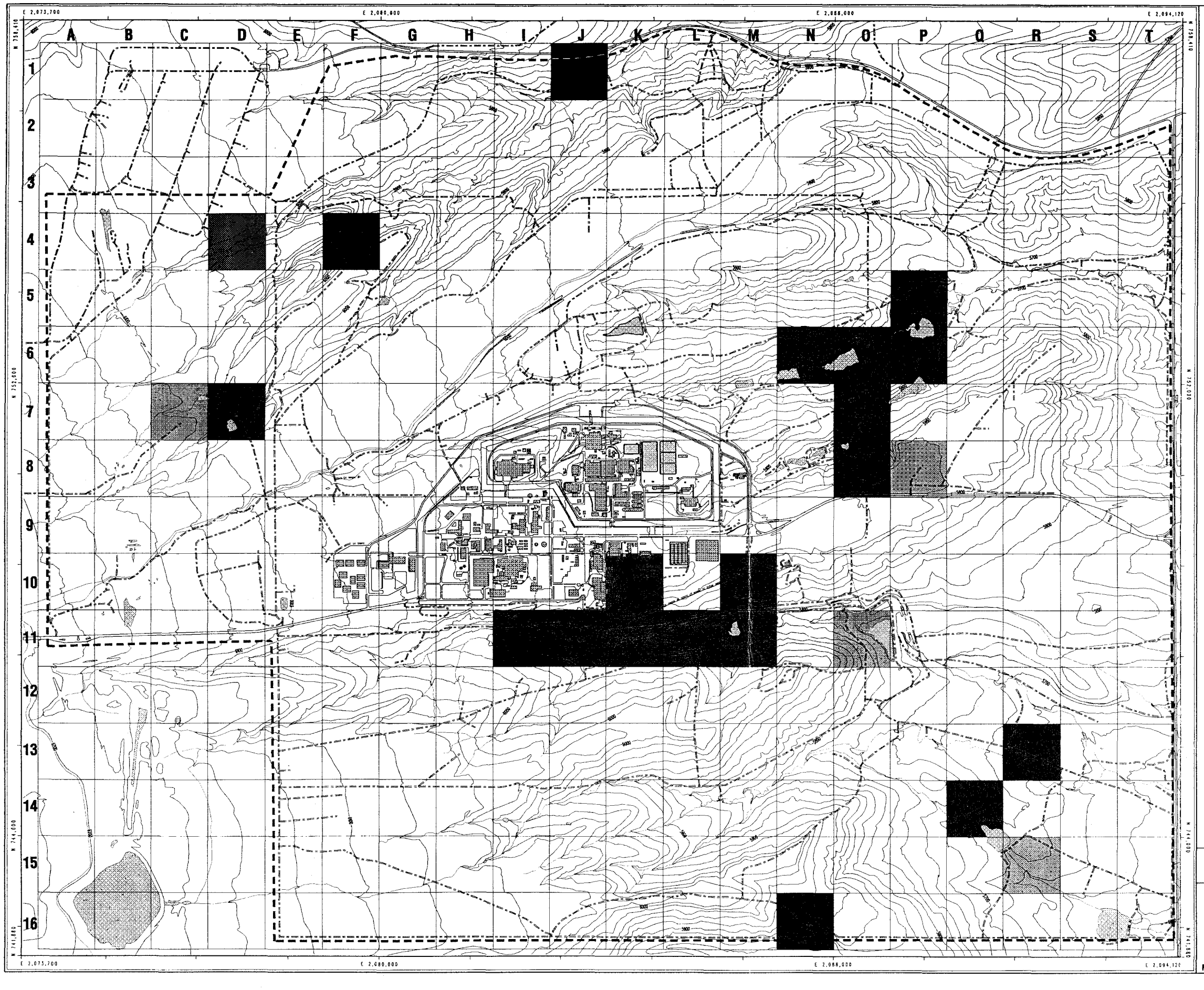
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-9

May 06, 1996

/gis1/data/rfp-map-ams/eco/habitat/fig3-9.aml

44



Carnivore Species (Excluding Coyotes) Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-10

EXPLANATION

Carnivore Use Areas

- Raccoon
- Long-tailed Weasel
- Badger
- Gray Fox
- Mountain Lion
- Bobcat

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marole Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

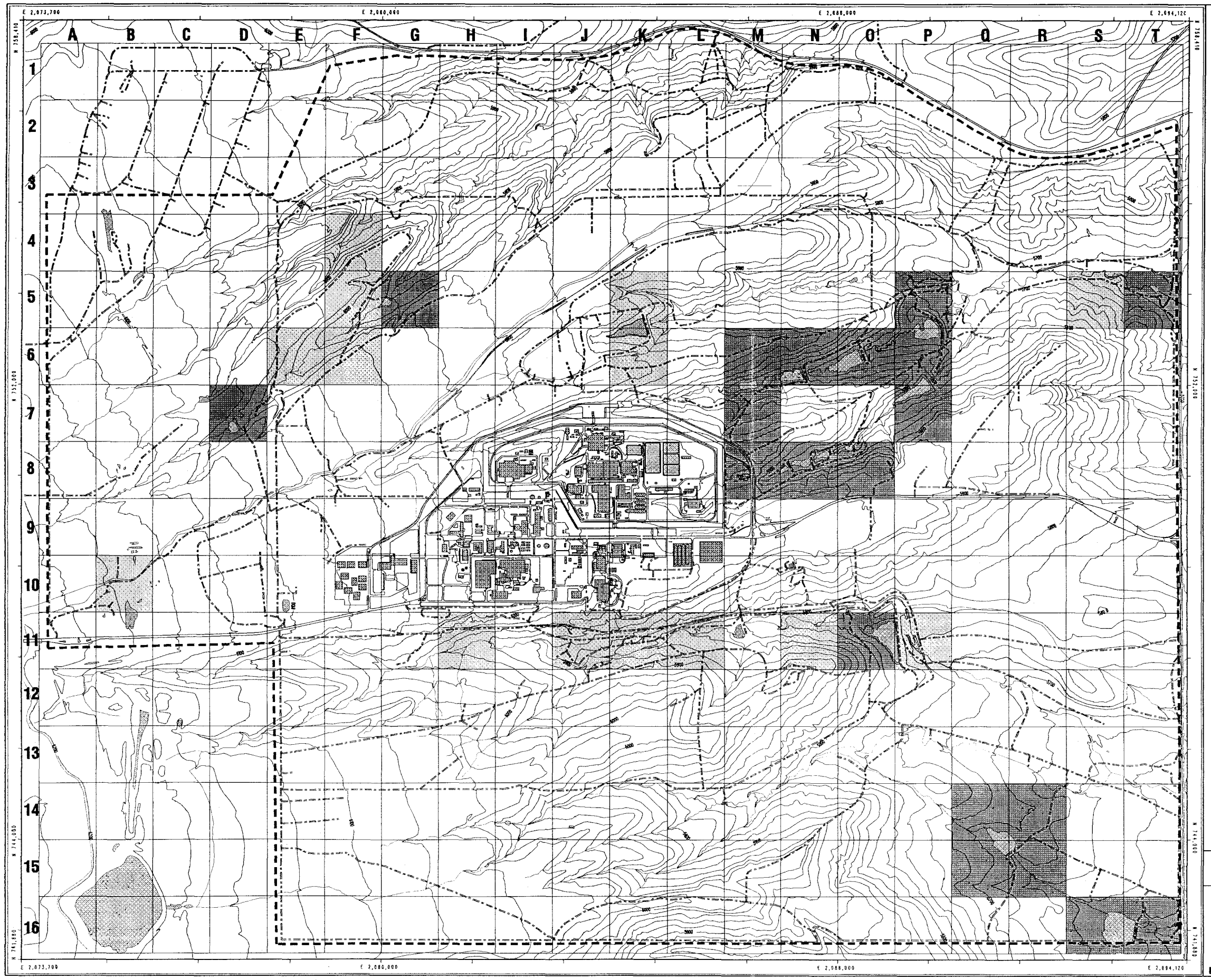
MAP ID: fig3-10

May 06, 1996

/gis1/data/rfp-map-area/eco/habitat/fig3-10.aml

46

46



Waterfowl Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-11

EXPLANATION

Waterfowl Use Areas All Species

- Frequent
- Heavy

Note: Remainder of Site is used casually or as fly-over area.

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr. EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

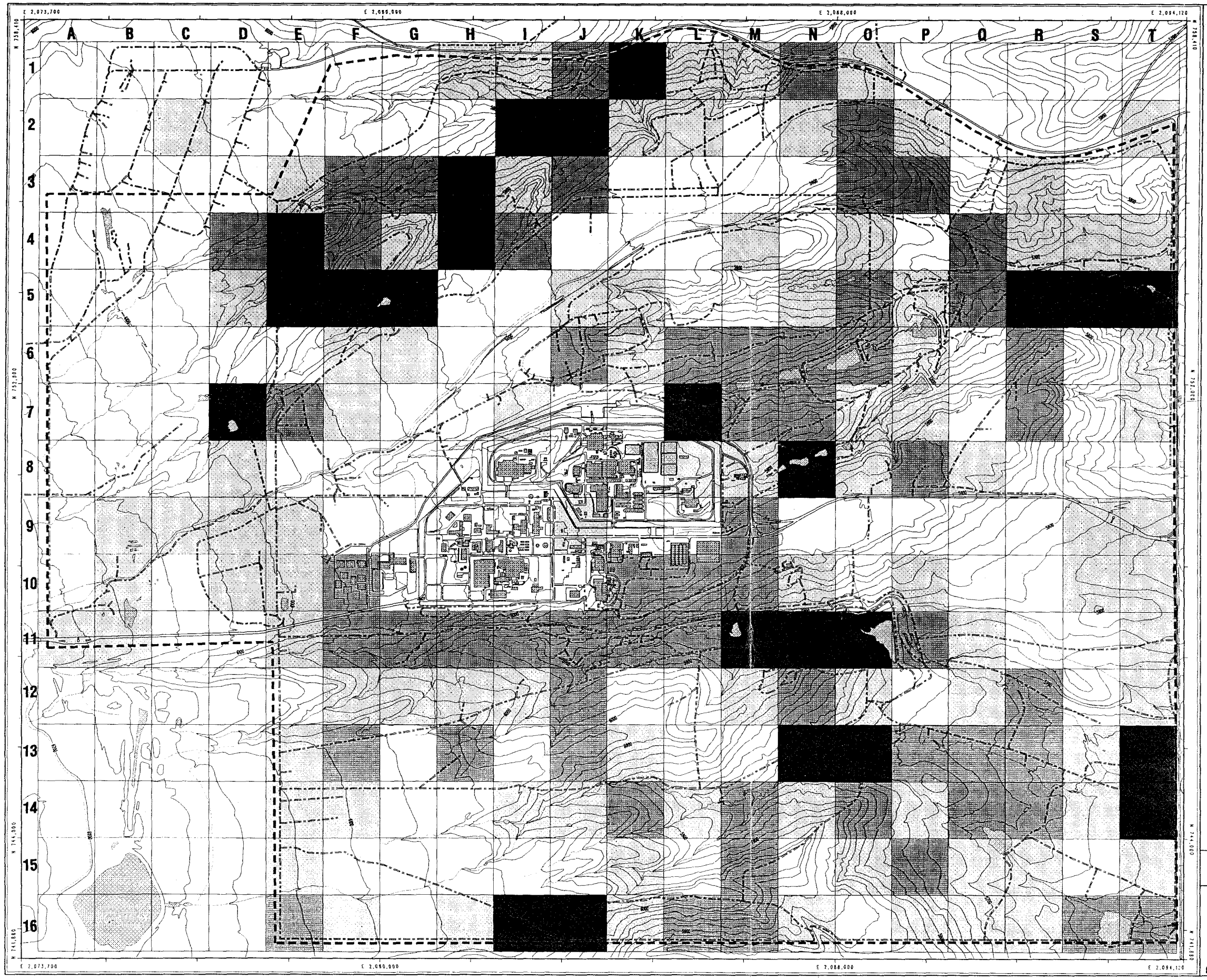
MAP ID: fig3-11

April 22, 1996

/gis/data/rfp-map-ms/eco/habitat/fig3-0.aml

46

46



Raptor Spring-Summer (March through August) Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-12

EXPLANATION

Raptor Use Areas (All Raptor Species)

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

N

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

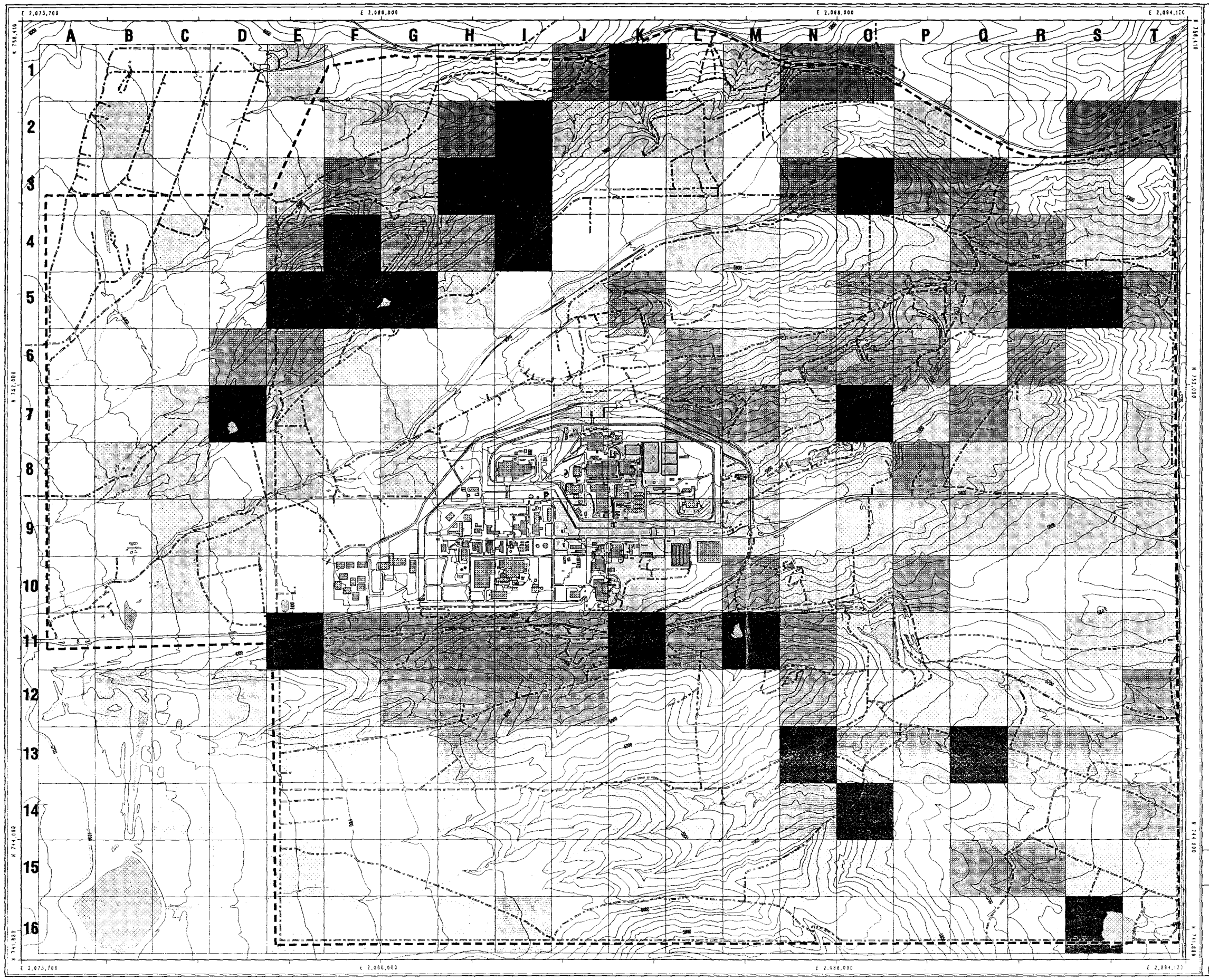
U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-12 May 06, 1996

56



Raptor Use Fall-Winter (September through February) Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-13

EXPLANATION

Raptor Use Areas (all species)

- Average
- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

600 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

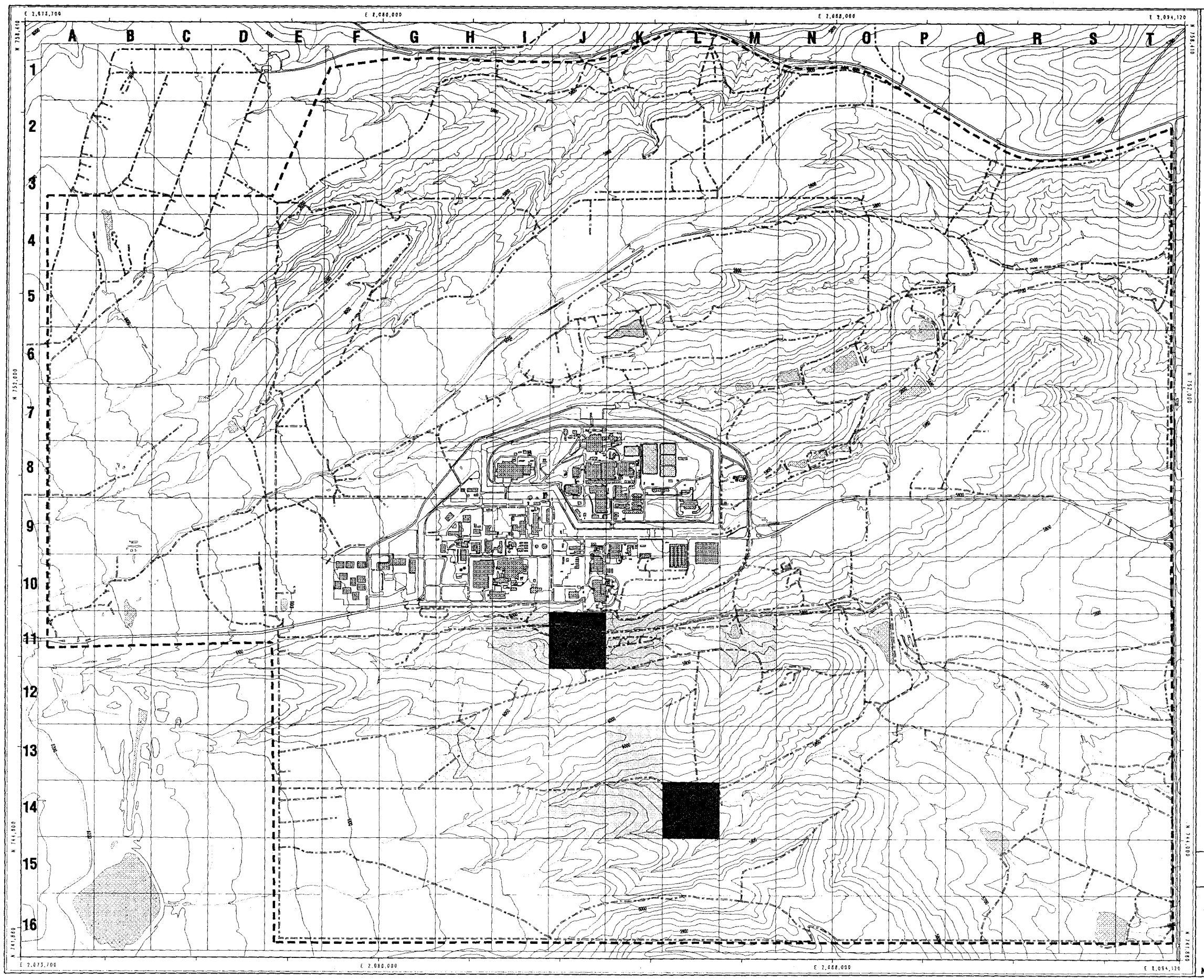
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-13

April 22, 1996

/gis/data/rfp-map-amls/eco/habitat/fig3-13.aml

57



58

Ring-necked Pheasant (Upland Gamebirds) Use Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 3-14

EXPLANATION

Pheasant Use Areas

- Average
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

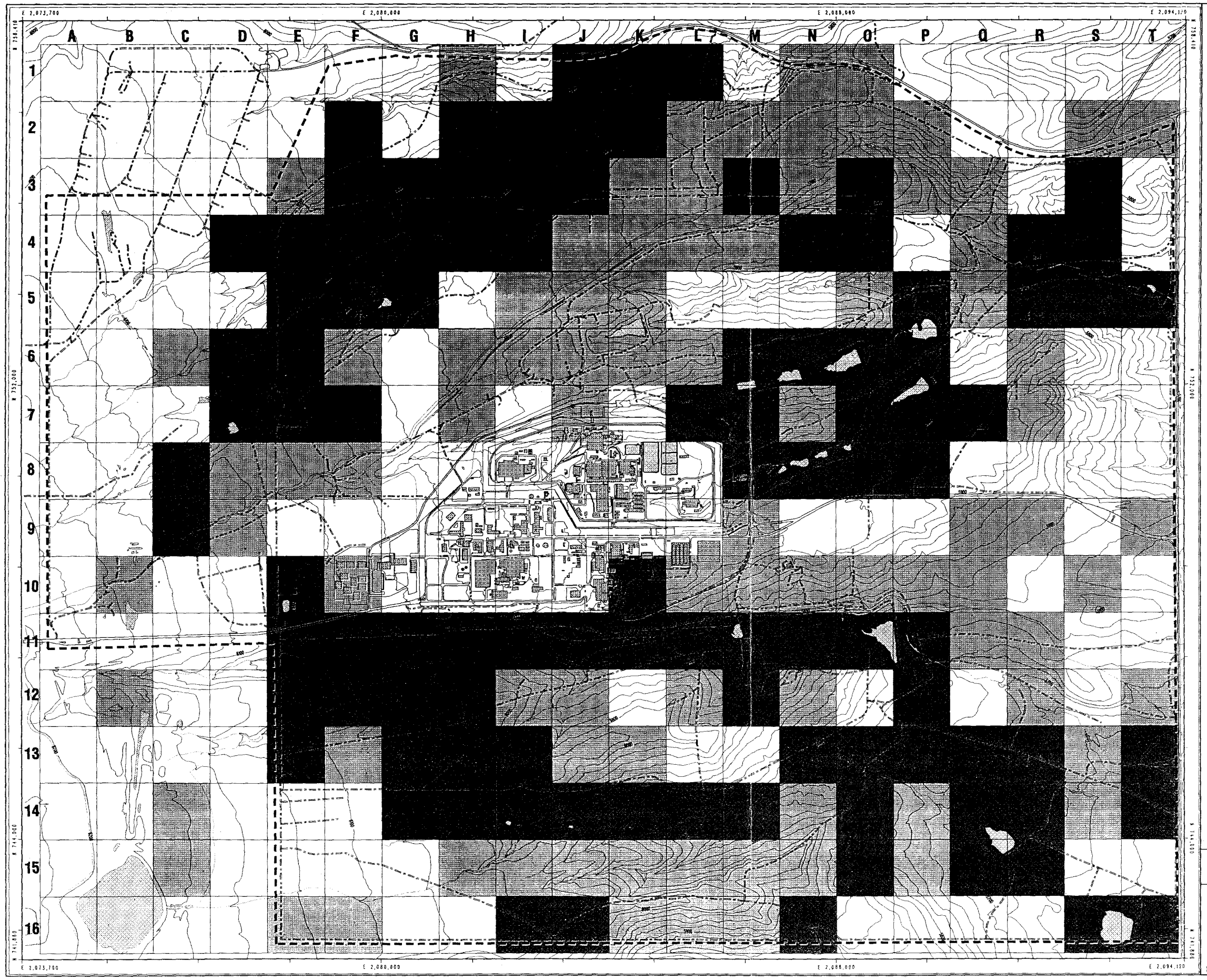
RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig3-14

May 06, 1996

/gis1/data/rfp-map-amls/eco/habitat/fig3-14.aml

58



RFETS Most Frequently Wildlife Habitat Areas Based on Combined Monitoring Data from 1993, 1994, and 1995

Figure 4-1

EXPLANATION

Wildlife Use Areas

- Elevated
- Heavy

Standard Map Features

- Buildings or other structures
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences
- Contours (20' Intervals)
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE:
Buildings, roads, and fences provided by Facilities Engr., EG&G Rocky Flats, Inc. - 1991.
Hydrology provided by USGS - (date unknown)
Grid and animal use areas provided by Marcia Murdock, RMRS-Ecology, 1996.

Scale = 1 : 21330
1 inch represents approximately 1778 feet

500 0 1000 2000ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

RMRS Rocky Mountain Remediation Services, L.L.C.
Geographic Information Systems Group
Rocky Flats Environmental Technology Site
P.O. Box 464
Golden, CO 80402-0464

MAP ID: fig4-1

May 06, 1996

/gis1/data/rfp-map-amls/eco/habitat/fig4-1.aml