



State of Ohio Environmental Protection Agency

Southwest District Office

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March 19, 2001

Mr. Johnny Reising
USDOE FEMP
P.O. Box 538705
Cincinnati, OH 45253-8705

3559

RE: Comments - American Chestnut 2000 Annual Report

Dear Mr. Reising,

Ohio EPA has reviewed DOE's February 23, 2001 submittal, "Transmittal of the Restoration of American Chestnut Tree Project 2000 Annual Report." Attached are Ohio EPA's comments on the document.

If you have any questions, please contact me at (937) 285-6466.

Sincerely,

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

- cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Mark Shupe, HSI GeoTrans
Francie Hodge, Tetra Tech EM Inc.
Ruth Vandergrift, ODH
Bill Kurey, USFWS

RESTORATION OF THE AMERICAN CHESTNUT
2000 ANNUAL REPORT

3559

- 1) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg #: NA Line #: NA Code: C
Original Comment #:
Comment: A number of deviations to the original approved work plan have occurred over the past two years without sufficient documentation of the changes. The report should be revised to clearly define what has been planted in detail within the project area. This should include a table of data described below and a figure showing planting locations. Additionally, it is obvious the researchers need to review the original work plan to see how vegetation maintenance and herbivory control were supposed to be carried out.

- 2) Commenting Organization: Ohio EPA Commentor: DSW
Section #: General Pg #: NA Line #: NA Code: C
Original Comment #:
Comment: In general, the report is poorly written. There are grammatical and word usage errors, and in general appears to be facile.

- 3) Commenting Organization: Ohio EPA Commentor: DSW/OFFO
Section #: Pedigree of plantings Pg #: 1 Line #: NA Code: C
Original Comment #:
Comment: Each report should include information about the make up of the hybrids (e.g. OPCL 53 7/8ths pure American Chestnut) and include both scientific and common names of the trees. (e.g. American Chestnut, *Castanea dentata*). A table listing vendor, identification code, purity, scientific and common name, seed/seedling, number planted, location and date planted should be included.

- 4) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Planting time and methods Pg #: 1 Line #: NA Code: C
Original Comment #:
Comment: The statement is made that "Though planting in the fall can risk freeze killing of the seeds, no difference in the germination of survival was discerned between the two plantings. Therefore, the remainder of the report will be concerned with the types themselves, not the time of planting." It seems premature to lump all the plants together at this early stage and prudent to keep the Fall and Spring plantings distinct so that growth and later survival comparisons can be made between the two groups.

- 5) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Planting time and methods Pg #: 1 Line #: NA Code: C
Original Comment #:
Comment: The text states that "6-8 inches of mulch was used to cover" the seeds and seedlings in the fall, then removed in the spring. The text isn't clear on whether new mulch was reapplied in the spring. Please clarify.

- 6) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Planting time and methods; Recommendations and 2001 plans, Pg #: 1 Line #: NA Code: E
Original Comment #:
Comment: The word "detour" is used where it is assumed "deter" is intended.
- 7) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Germination and survival Pg #: 1 Line #: NA Code: C
Original Comment #:
Comment: The statement is made that "Due to the tall grass and other herbaceous plants in the plot (ranging up to six feet in height), sixteen percent of seeds and seedlings could not be located." The original work plan called for the seedlings to be measured monthly during the growing season and "Competing weeds will be removed mechanically, chemically and/or by hand to maximize opportunities for survival. Weeding will be needed for several years, until seedlings overtop competing weeds. Seedlings will also be protected from deer and small mammals through the use of repellent sprays and/or fencing." It appears as though the control of competing weeds was not carried out as originally planned and as a result the seedlings could not be located. It is recommended that the control of herbaceous vegetation be carried out as originally planned, better marking of seeds and seedlings occur, and appropriate control for herbivory applied.
- 8) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Germination and survival Pg #: 1 Line #: NA Code: E
Original Comment #:
Comment: It appears as though the last two sentences are meant to be a single sentence. The last sentence has no verb. Perhaps it was intended to read "...was seventy-five percent with hybrid type..."
- 9) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Germination and survival Pg #: 1 Line #: NA Code: C
Original Comment #:
Comment: The fence installed was not the same as described in the original statement of work. The fence originally was described as follows "Fencing will consist of six-foot high woven wire 'poultry fence,' with two strands of wire installed above. For increased visibility, ribbons will be attached to the wire strands. Miami University has demonstrated success with this type of fencing in the past." The fencing used was what is typically referred to as deer fence. We noticed it broken into by deer and it appeared to have been that way for some time. Frequent inspection, improved fencing, and wire cages around smaller seedlings seem warranted.
- 10) Commenting Organization: Ohio EPA Commentor: DSW
Section #: Recommendations and 2001 plans Pg #: 2 Line #: NA Code: C
Original Comment #:

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Comment: We have never been in favor of inoculating the seedlings with the pathogen. We feel that introduction of the fungus to the area is not prudent and that establishing the chestnuts is paramount to infecting the young trees as a test.

- 11) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Recommendations and 2001 plans Pg #: 2 Line #: NA Code: C
 Original Comment #:
 Comment: What kind of "fabric mat" is going to be effective in controlling the described weed problems? Landscape fabric is most effective where no existing perennial vegetation exists. The vegetation described would seem to be perennial vegetation which will simply push the matting up. This is typical of seeding fabric and often results in significant maintenance problems that will likely impact the seedlings.
- 12) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Recommendations and 2001 plans Pg #: 2 Line #: NA Code: C
 Original Comment #:
 Comment: Will the seedlings become more or less restricted by competition as the seedlings gain height.
- 13) Commenting Organization: Ohio EPA Commentor: DSW
 Section #: Recommendations and 2001 plans Pg #: 2 Line #: NA Code: C
 Original Comment #:
 Comment: Control of the herbaceous vegetation should have been occurring already. This should not be delayed contingent upon deer fencing as getting that installed on site could take a prohibitively long time and weeds could become well established again. Weed control should begin immediately. Frequent visits with other controls (maintaining existing controls, wire cages, repellent applications) should continue until the fence is installed.
- 14) Commenting Organization: Ohio EPA Commentor: OFFO
 Section #: Recommendations and 2001 plans Pg #: 2 Line #: NA Code: C
 Original Comment #:
 Comment: The restoration of the American Chestnut project would also benefit significantly from a Fernald deer management plan.