Lewiston-Auburn Community Forest Board

(Auburn Community Forest Working Group of SNRB)

Minutes 6 15 25 Approved: 7 17 25

5:00 PM Auburn Public Works

Present: Noel Skelton, Jeremy Lavertu, Dave Griswold, Zoe Lidstrom, Steve Murch

Excused: Sam Boss

Absent:

Guests: Sean O'Connell

Call to Order: 6:07

- 5 15 25 minutes: Approved

-**Public Participation**: None-

1. **Maine Arbor Week Review**

a. State Event was held at the Viles Arboritum on Friday May 23. Noel and Zoe attended. Gov. Mills attended and spoke. Maine Tree Farmers of the Year and Tree Cities were recognized.

b. Displays were successful at both libraries.

c. Nursery event/work session with Audubon reps on 5 20. Donated trees were planted. Photos were taken for documentation.

d. Pulsifer Street Sycamore commemorative bowl and information was presented to the Auburn City Council and will be on display at Auburn Hall.

2. **Nursery Project update:** Road work is nearly completed. The windrow has been cleared, leaving 2 elm trees and stone wall, making the nursey visible from the road. Drainage improvements are under way. The new sign is ready to be placed. Several trees will be removed to facilitate work on the new fence in a few weeks. Trees to be removed (10) are targeted for before July 4th. We plan to meet at the nursery in July. Noel has planted trees donated by Fedco (Thanks Sam).

3**. Chestnuts Across Maine:** Dave reviewed his Tuesday discussion with Eva Butler, Maine TACF coordinator. TACF goals are to establish 10-15 native chestnuts in public places to engage

communities with chestnut restoration efforts. The community groves will preserve the native gene pool. After initial establishment, additional trees will be added if some trees are killed by blight, as expected. The goal is to have 7-15 year-old breeding trees established. Community support is critical to success. There will likely be opportunities for manual pollination to produce seed from the grove. Educational materials/curriculum is being developed to engage youth. The board endorsed the idea of trying to establish a project at Franklin Pasture in Lewiston this July and add a site in Auburn in 2026. Dave will e:mail Eva Butler and ask that she contact Steve, who will take the lead on the Franklin Pasture efforts. (Note: Eva responded favorably to our suggestion on 6 13. She will reach out to Steve).

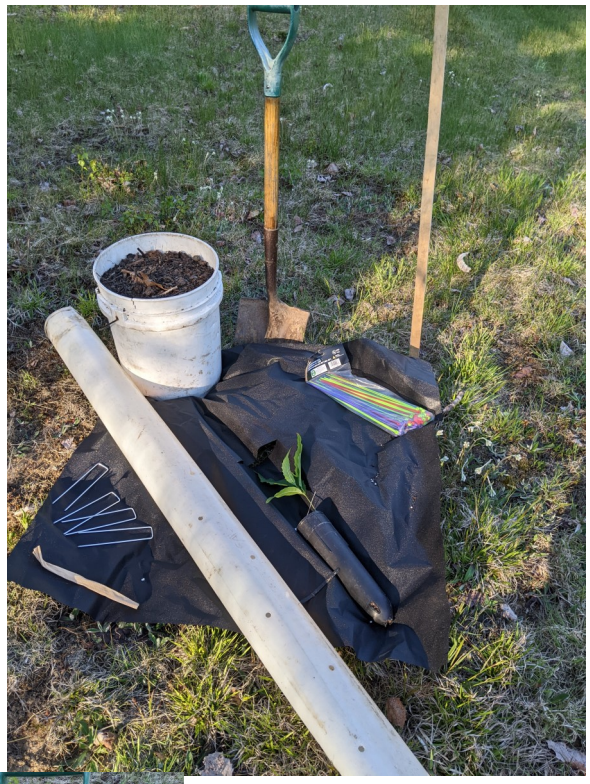
4. **Sycamore seedlings:** Jeremy reported that he has 15 seedlings from the Pulsifer St tree that are doing well, with multiple sets of leaves. There was discussion about how to bring them through the coming winter.

New Business: None

Next Meeting: July 17 at the nursery

Adjourn: 7:15

Planting a Chestnut seedling



Materials supplied by Maine TACF:

Chestnut seedling in tube with aluminum tree label
5-foot tree tube and welded wire exclosures
5-foot hardwood grade stakes
zip ties
weed mats
landscape staples
bird net (for tree tubes)

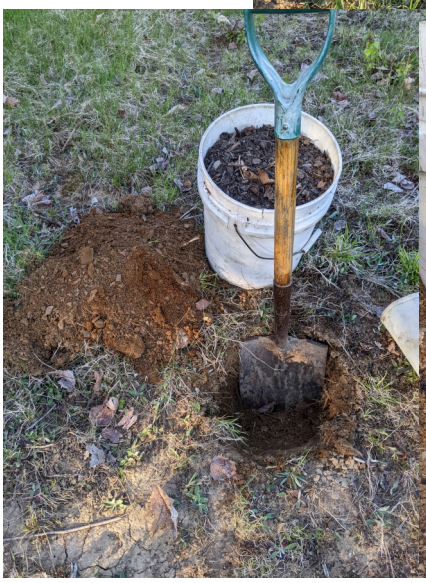
Materials provided by tree planters

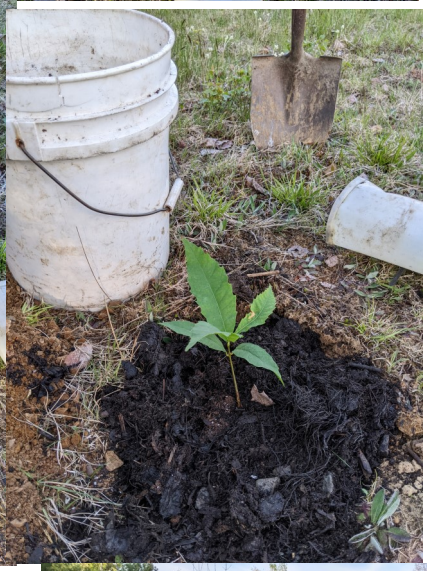
shovel, regular or tree shovel
bucket with a gallon or so of compost or fertile soil
sufficent water
small sledge or hammer to hammer in grade stake

TACF Resources for planting chestnuts – TACF has many helpful resources about how to plant, grow, and care for American chestnuts:

- TACF Introduction to Growing Chestnuts https://www.youtube.com/watch?v=BGPhrkJYSv4
- TACF website https://tacf.org/growing-chestnuts/
- TACF Chestnut Chat (April 19, 2023) – How to Grow American Chestnuts https://www.youtube.com/watch?v=BGPhrkJYSv4

Steps in planting a chestnut seedling



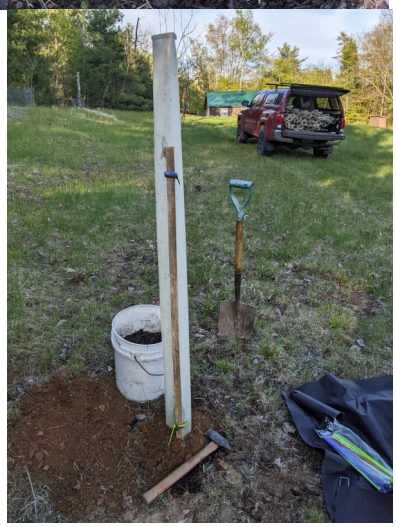


1) Locate a suitable site –

Soil - American chestnuts require acidic, well -drained soils (sandy or loam, not wet or clay). Oaks, beech, or white pine nearby indicates that soils are likely suitable for American chestnuts.

Sunlight – chestnut seedlings grow more vigorously and quickly in full to half-day of sunlight. Plant them in an open field, edge of the forest, or under a large gap in the forest canopy where they will receive plenty of sunlight.

2) Dig a small hole about a foot or more deep and no more than a shovel-width in diameter. Remove sod, roots, and rocks.

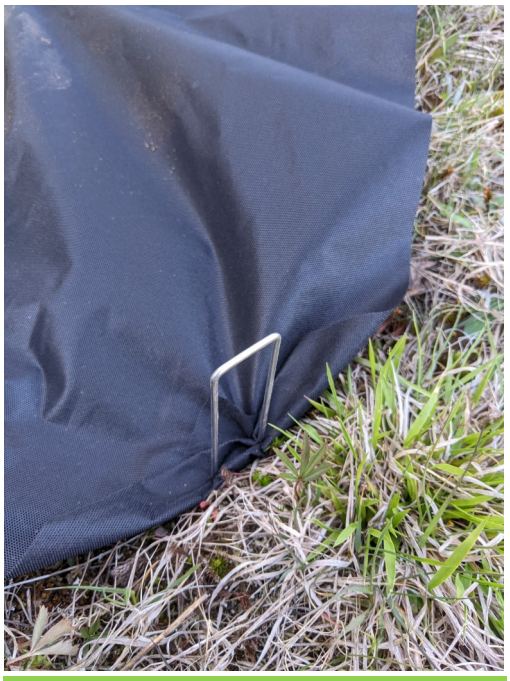


3) Remove the nut from the seedling by twisting it until in breaks. The nut can be a temptation for chipmunks who will pull the seedling out the ground to get the nut.

4) Remove the American chestnut seedling from the plastic cell by supporting the seedling with your hand, turning the pot upside down, and tapping. Mix compost or fertile soil 50:50 with the native soil and fill in around the roots of the seedling. You can also include some forest soil from under oak trees to provide the ideal mycorrhizae. Support the seedling so that the base of the stem matches the surrounding ground level. Gently firm the soil mix around the roots of the seedling until the hole is filled.

The seedling must be protected from deer, who love to eat the buds of the chestnuts in the winter. There are two ways to protect the seedlings - tree tubes or rolled steel wire fencing. We would like CAM participants to experiment with each to determine which method works best for you. Seedlings grow quickly in tree tubes and may even poke out the top and above the height of deer browse in a single growing season. However, this

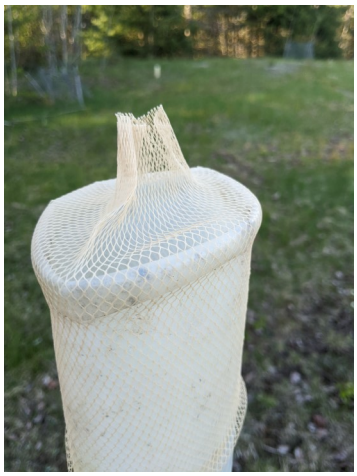
creates a spindly stem and the tree must remain in the tube for a few years until it gets one- to two-inches in diameter. Seedlings grow more slowly in wire exclosures but grow more side branches and leaves, which results in a more robust stem. We want to hear from you on which method produces the most robust tree in five to ten years.



Fold over the corner of the weed mat. Push the landscape staple through the fold. This doubles the area for the staple to hold down the weed mat.

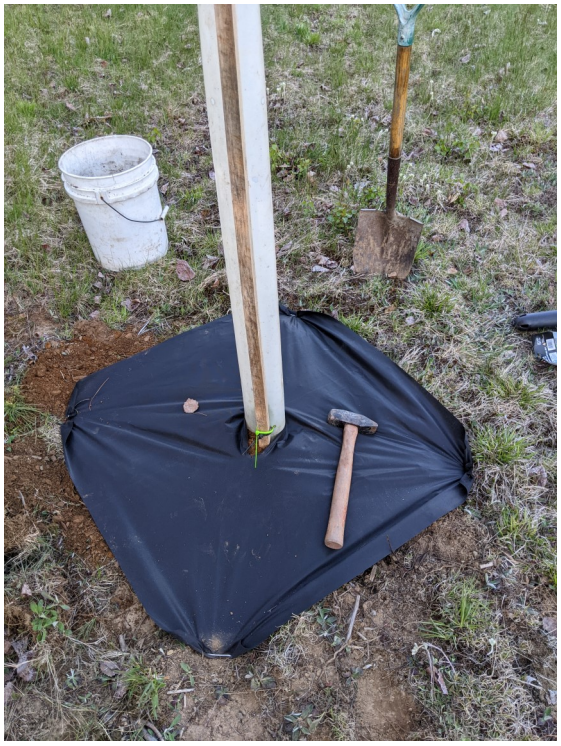
Tree tube

5) After planting ,center the tree tube around the seedling. Gently work the seedling's leaves into the tube. The bottom of the tube has just two holes, the top has many holes. Have someone hold the tube while you use a sledge hammer to pound a 5-foot grade stake into the ground next to the seedling (be careful not to damage the seedling's roots). Work the tube an inch or two into the loose soil to deter voles and mice. Secure the tube to the grade stake with a zip tie at the two holes at the bottom of the tube. Find a pair of holes to secure the tube to the top of the grade stake using a zip tie. Put any loose dirt (but not sod) around the base of the tree tube to further deter mice and voles.

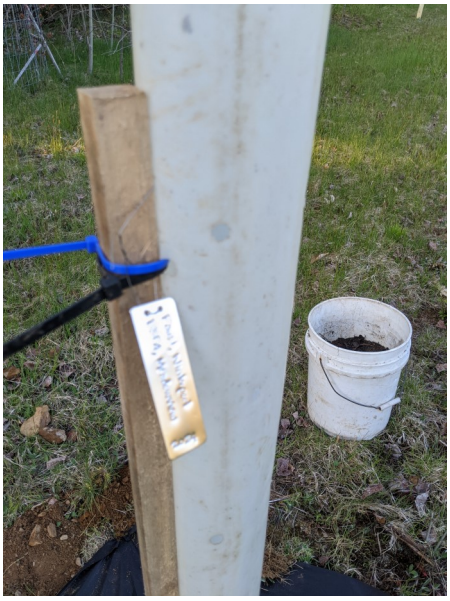


6) Water the seedling with about 2 quarts of water.

It is important to reduce root competition from surrounding sod or herbaceous growth. You may accomplish this with weed mats or organic mulch.



7) **Weed mat**. Place the Vispor weed mat over the tree tube and grade stake using the hole in the middle. **It is important to place the weed mat with the shiny, smooth side up and the dull-colored rough side down.** Water flows one way through the weed mat. If you put it on upside down the tree will not get water. Secure the weed mat at the four corners with a landscape staple. Fold the weed mat at the corner so that the staple goes through at least two layers of weed mat. Use your sledge or hammer to pound in the landscape staple or secure them by pushing them fully into the ground with your shoes. Rocks or loose sod can be laid upside down (root side up) on the weed mat to help keep it close to the ground.

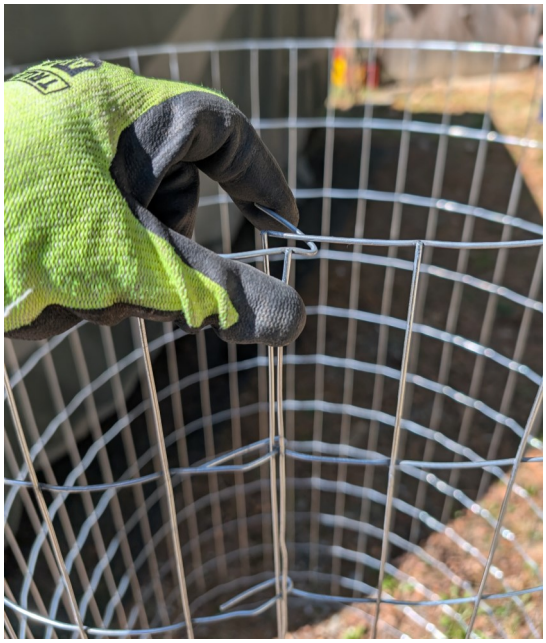


Alternately, you may use organic mulch. One successful method is to take a large piece of cardboard and cut it to approximately 2 feet by 2 feet. Cut a 3 to 4-inch hole in the middle. Place the hole over the seedling and cover the cardboard with wood chips. Place rocks or pieces of wood on the cardboard to smother the turf below..

8) Secure the aluminum tree tag to the grade stake or zip tie. This will identify the origin of the tree until the tree tube is removed. Then hang the tag loosely from a branch on the tree.

9) Spread the bird net like a sock and slip it over the top of the tube. Secure a bird net to the top of the tree tube leaving just a short 1-inch peak. This prevents bluebirds and other songbirds from tumbling into the tube and becoming trapped. It also keeps bees and wasps from making nests inside the tube.

Rolled wire fencing



10) Plant the seedling and install a ground mat by repeating steps 1 - 4, 5 and 6 above.

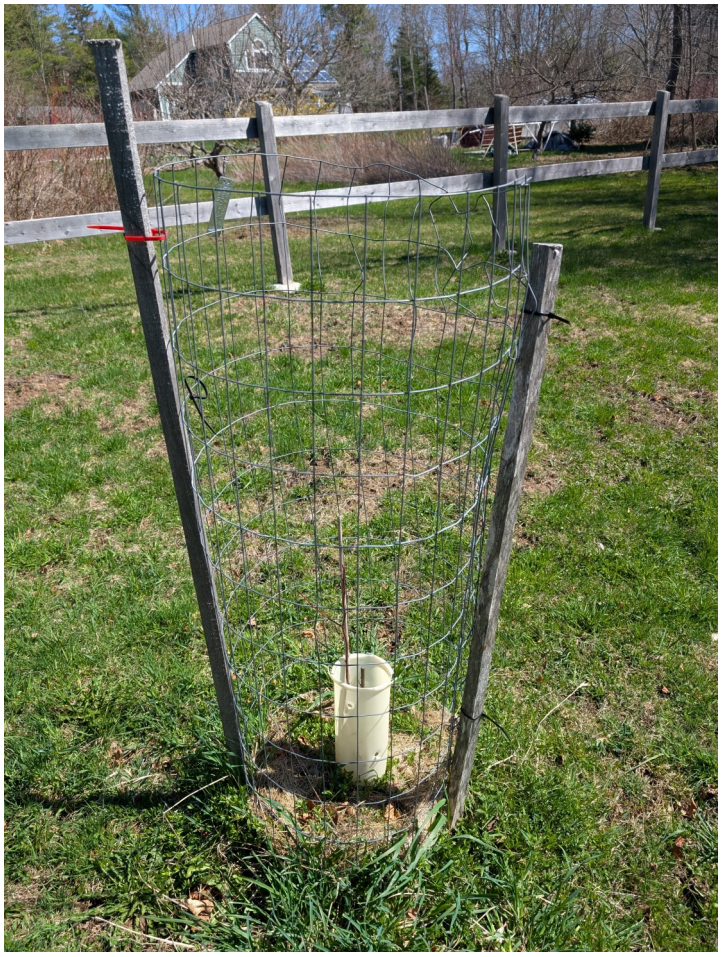
11) Install a short tree tube and push it two or three inches into the ground around the seedling to prevent voles and mice from girdling the young seedling. Place two bamboo stakes into the tube to hold it in place.

12) Complete the assembly of a wire cylinder by bending over the loose ends of wire along the cut edge with the uncut edge (see photo). Be careful the wire loose ends are sharp. Wear gloves.

13) Center the wire exclosure over the seedling and ground mat. Pound in two grade stakes - one on either side of the mat. Use zip ties to attach the grade stake to the wire mesh at 2 or 3 locations.

14) Secure the aluminum tree tag to the wire cylinder.

15) In 2 or 3 years, the terminal bud of the growing tree will reach the 4-foot height of the wire cylinder. Move the wire cylinder a foot or two higher on the grade stakes to protect the terminal bud until the tree is at least 7 or 8 feet tall and above the height that deer can browse the terminal bud. Remove the wire exclosure (and reuse it for other chestnut trees) while the tree is still young. If left on for too long, the lateral branches will grow through the fencing making it very difficult to remove.



Maintenance

1) Water once a week in late summer for the first two years, especially if there is a drought.

2) You can fertilize lightly with Miracle Grow once in June and once in July, but no later in the summer. Don't over-fertilize. **More fertilizer is <u>not</u> better. It will kill the tree.**

3) Check trees periodically to be sure the tree tubes are upright and bird nets secure. High winds associated with thunderstorms can tilt the tree tubes.

4) The weed mat should suppress most vegetation, but you can also hand weed around the base of the tree tube if needed. Roots of sod and other plants compete with the young chestnut seedling.

5) Watch for insect pests (Japanese beetles?) and consult with ME TACF on remedies. Young seedlings are resilient, even after losing their main stem to girdling by a meadow vole. After three or four years the root systems is developed well enough to recover after losing its main stem by growing root sprouts. So don't give up on a tree damaged by mice. It will likely recover!

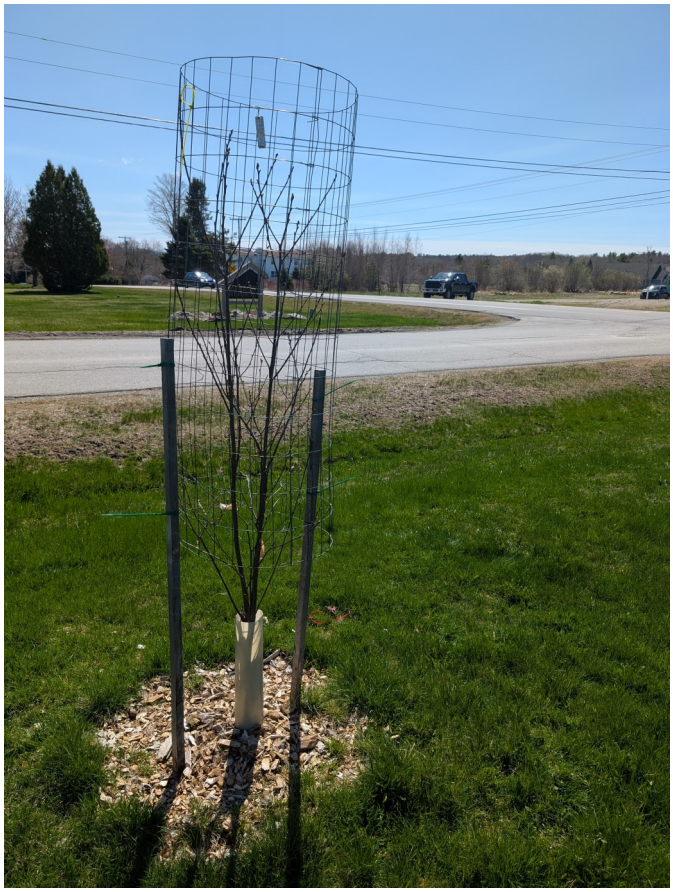
6) The seedlings will grow quickly in the tree tubes reaching for the light at the top of the tube. Sometimes they grow to the top of the tube by their first summer. <u>Remove the bird net when the terminal bud gets near the top of the tube</u>. Leave the tree tubes on the trees <u>for several years</u> until the tree is about 2 or 3 inches in diameter. It can be carefully removed by cutting along the perforation that runs the length of the tube. The tube helps prevent bucks rubbing their antlers on the trees.

7) Avoid pruning the chestnut trees. Any wound is a potential avenue for the chestnut blight fungus to enter the tree. If you have to prune, do so in mid-winter and immediately cover the wound with TreeKote or similar tree grafting sealer. Clean the saw blade in a Clorox solution between pruning branches to avoid transferring blight or other disease.

8) Usually, young trees are free of blight until the bark begins to crack and fissure at about age 15. But many trees in Maine grow well into their 20s and even longer with no blight infection. It is possible to treat a blight infection on a small tree by a technique called mud packing https://tacf.org/wp-content/uploads/2020/12/Mud-Packing_Fall-2019-Chestnut.pdf

9) Voles or mice may seek shelter under the weed mats or even in the tree tubes in the winter. They can be destructive and girdle the tree by chewing the bark. It is hard to detect their presence unless you remove the weed mat or even the tree tube – something that you should avoid. If they are a problem, they can be deterred by placing sharp gravel around the base of the tree. Mowing or weed whacking around trees removes cover for voles. Encourage hawks, owls, and foxes.

10) Make a map of your planting to document the tree locations and record the sources of the trees (from the aluminum tree tags). Provide a copy of the map to Maine TACF and keep a copy for your records.



Once the tree reaches the top of the 4-foot exclosure, slide the exclosure up on the grade stakes to protect the terminal bud for another winter or two. The exclosure may be removed when the seedling reaches 7 or 8 feet tall. and above the height of potential deer browsing. Recycle the exclosure and plant another chestnut tree!