



Department of Forest Resources

Cover it up! Citizen Science Project



Hello, Citizen Scientists!

May 2020

Thank you for participating in Cover It Up! It's exciting to think that across the state, over 100 Cover It Up Citizen Scientists are testing using native plants to control buckthorn. Speaking of buckthorn, it's time to plant test seeds. Our next steps are outlined below:

1. Review contents:

Your padded envelope should contain these items. If anything is missing, please contact Abbie at coveritup@umn.edu or 612-708-6354 (cell).



Twelve envelopes



One disc



One lens

2. Plant test buckthorn seeds: Thanks for your patience waiting for test seeds. See reverse for details on how to carry out this final step to set up your site.

3. About buckthorn: Common buckthorn (*Rhamnus cathartica*) is a **restricted noxious weed** in Minnesota. To request a copy of the **Noxious Weed Permit** for your site, please email Abbie at coveritup@umn.edu. Do not sell, transport, or propagate except in adherence with Cover It Up instructions. If you store seeds before planting, keep them sealed in a Ziploc bag, in a dry, cool place, ideally in a fridge (not freezer).

4. What's this lens for? For now, simply keep it in a safe place. In the future, you will clip this fish-eye lens to a smartphone to photograph your site.

5. What's next? Over the summer, please cut buckthorn at your site every 4 to 6 weeks. A detailed how-to is enclosed, along with a grid for tracking your work.

That's it for the moment. If you have questions about the project or the steps, please contact me. I'm happy to help! coveritup@umn.edu

Abbie, Program Coordinator

Step “4”: Plant test buckthorn seeds

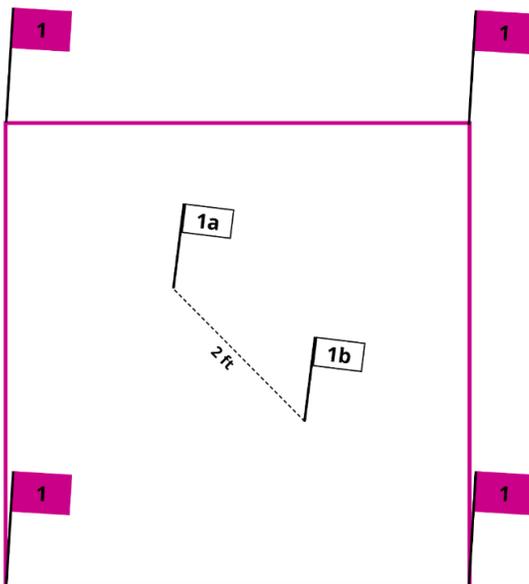
This step was originally planned to fit between “Step 3: Take photos and draw site map” and “Step 5: Plant seed mix.” However, we postponed this step and went ahead with steps 5 and 6. Now that we’re ready to carry out Step 4, **do your best** to minimize treading on the squares. We understand that some disturbance is inevitable.



Step 4 is also available in video format: bit.ly/ciubuckthorn

Overview

After all squares are established with pin flags, photos collected, and site map completed, you can place **WHITE** flags and plant the buckthorn test seeds. Buckthorn test seeds will be placed in a circle around each **WHITE** pin flag. Using these buckthorn test seedlings, we can track the germination and growth of buckthorn during the experiment. At the end of the project, you will remove all planted test buckthorn seedlings if they are still alive.



White flags

Get out the **WHITE** flags that came with your original supply box. Match pairs (labeled **#a** and **#b**) with the appropriately numbered square (1-6). Within each square (all 6 squares), place two **WHITE** pin flags in the center, about 2 feet apart. Pictured left is what this looks like for Square 1. Do your best to position the **WHITE** pin flags in relatively uniform growing conditions (for example, not directly next to a tree trunk). Insert **WHITE** flags into the soil, using your folding ruler to make sure “a” and “b” are 2 feet apart. You may update your site map but this is not required.

Plant test buckthorn seeds

At each **WHITE** pin flag, slide the 11 cm disc over the pin flag wire and set the disc in contact with soil surface as pictured to the right. You may need to gently move leaves, sticks, or other debris. Carefully open one buckthorn test seed packet. At each of the 6 marked locations around the circle, press a single seed into the soil, close to the edge of the disc. Press seeds 1/4 - 1/2 inch into the soil. No need to cover up the seeds with soil.

Each packet (total of 12) corresponds to a single **WHITE** pin flag (also total of 12). By planting 6 seeds at each **WHITE** flag, every square will have 12 seeds, and the entire site will have 72 seeds.

