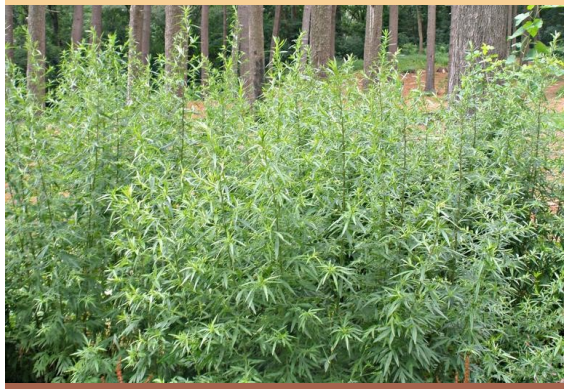
Species to Solarize

- Mugwort (Pictured)
- Buckthorn
- Knotweed (any species)
- Phragmites
- St. John's Wort

Solarization is a good candidate for small patches of densly growing, herbaceous perennials. It can conceivably work on a wide range of species though it has not been well documented. If you have a success story that you'd like to share, please contact the PRISM!



Contact Us!

Capital-Mohawk PRISM

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How to Solarize Invasive Plants

Capital-Mohawk PRISM

Solarization Basics

- Solarization is a management technique that involves depriving a plant of sunlight while also using heat to 'cook' the invasive you are trying to remove.
- There are a two techniques one can try depending on the species, either **area solarization** (of a specific section of land) or **stump solarization** (of a specific individual), but both rely on the same basic processes. Heat and darkness are the key factors.
- This technique can be used as an alternative when chemical or manual removal is unfeasible or unwise.
- A few species that make good solarization candidates are Phragmites, Japanese Knotweed, and Buckthorn due to the difficulty involved in manual removal.

Set-Up and Supplies

One advantage of solarization is the cost. Supplies are cheap and set up is cheap. The disadvantage is that it requires time and patience. Sometimes this process takes years. It is best to try it on a smaller patch of invasive plants where there are no native desirable species.

What you will need:

- Plastic covering (bags or sheeting)
- Weights
- A mowing or cutting device

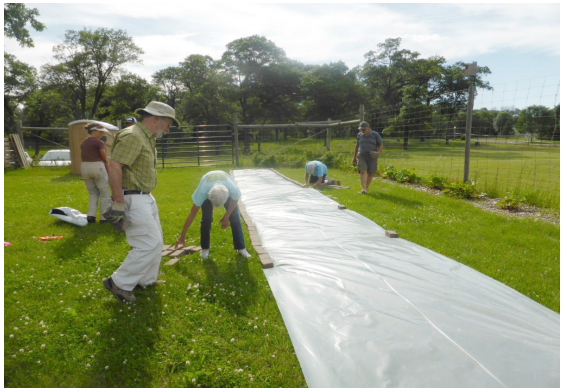
First, cut the plant as low as possible. This will prompt the stress you are trying to put it through. Rake the area and irrigate it if possible. Then, cover the area with either a solid sheet of plastic that you will then weigh down. In the case of shrubs, cover the freshly cut stump with a bag.

If you are trying to solarize a plant with a rhizome, be sure that you have the full extent of the population covered as these plants share nutrients through root connections.

After you are sure that the plant in question is securely covered, all you need to do is wait it out, checking back every now and then to make sure that the population is still securely covered. This technique works quickest in areas of high sunlight, as the heat is what will kill the plant.

Resources

- Buckthorn solarization: www.buckthornbaggie.com
- A success story: http://pcmg.ucanr.org/files/166283.pdf
- What do I do with the debris?: https://extension.unh.edu/resources/files/resource000988_rep1720.pdf
- Cut and Cover Video: https://www.youtube.com/watch?v=qirBYf-SArQ



A successful ,weighed down. solarization set up. (University of Arizona Cooperative Extension)