

Treeways

2021 - 3

Our Learning Curve Controlling Buckthorn and other Invasives

Authored by our new neighbor, Emily Wu

We moved to Sunfish Lake in the fall of 2020, but a year and a half before our house was completed, we noticed the absence of small native understory tree species and the dominant presence of primarily two species – common (European) and glossy buckthorn. So, in the summer and fall of 2019 we started clearing buckthorn from our woodland. We learned a few things and fast – like when you remove one invasive species, there always seems to be another ready to take over such as garlic mustard or burdock. We hope that by sharing, we can contribute to an invasive plant conversation you might already be having.

Our long-term landscape goal is to have a naturalistic microecosystem that supports invertebrates, birds, wildlife, and native, plus non-aggressive non-native, perennials. There are larger questions out there – “what is natural?” and “native versus non-native?” and “invasive versus aggressive?” – that we’ll leave alone for now, but as a first step in our journey, removing invasive, non-native plants is an easy place to start. Aside from being free exercise and great stress relief, it is contributing to some other plans we have. Eventually we’d love to create interesting walking paths, a home vegetable garden, possibly grow some fruit trees, maybe keep a beehive...

But back to the buckthorn. Each year so far, we have decided which area of the woodland from which we will remove it. The first year was the area adjacent to the driveway and we learned that we couldn’t do it all in one year. This past year we worked the area beside the driveway entrance and Salem Church Road. In 2021 we are planning to tackle the area where the woodland runs along Salem Church Road. We will be getting rid of the berry-producing mother trees and we hope that increasing the sunlight that can hit the road will possibly lessen icy conditions in winter. If anyone happens to see us out there, we will probably look unhappy and dirty, but just know, it’s the buckthorn, not you.

A finger-width buckthorn is a contender for hand-pulling, done easiest while the soil is moist. For buckthorns with an inch or two-wide trunk we’ve used pointed shovels to lever up the root systems, but have decided that this disturbs the soil too much and that we’d rather go to the third method – cut down the buckthorn as close to ground as possible and paint the cut trunk with herbicide using a foam brush or a narrow paint roller. We use a small electric chainsaw and handsaw. For the herbicide, we’ve used a brush killer brand named Fertilome, where the main ingredient is 8.8% triclopyr and so far, nothing we have cut and painted has resprouted. Ideas are welcome on how to best pile and manage the buckthorn once cut. For me, the worst part of cutting down buckthorn is chopping it up. We’ve just made small stacks of it, safely distanced.

We think of managing invasive species as a process rather than an event. We know that although we have removed all the buckthorn from the designated areas mentioned above, there are still small saplings to be pulled and unspouted seeds in the soil that will be viable for up to 5-7 years. Unfortunately, now in those areas, we’ve seen an explosion in garlic mustard and burdock growth.

Mowing is not an option for us due to the slope and woods, and not wanting to use a broad-leaf herbicide, we have tried to hand-pull as much of those before their seeds mature and fall.

To hopefully outcompete these invasive plants, we are beginning to fill in bare areas with native species including – ostrich fern (*matteuccia struthiopteris*), sweet joe pye weed (*eutrochium purpureum*), ironweed (*vernonia fasciculata*), woodland phlox (*phlox divaricata*), pagoda dogwood (*cornus alternifolia*), gray dogwood (*cornus racemosa*), juneberries (*amelanchier*), hazelnut (*corylus americana*), magnolia (varieties), crab apple (*malus* varieties), and more. For many of these, friendly neighbors have given us divisions (thank you!) and for most the others, we purchased them from the City's Arbor Day sale. The plants are smaller than if you were to go to a nursery, but are more cost-effective, especially in large quantities.

We learned that we needed to protect many of our new plants from animal damage. In our area, if we do not protect the plants, they are eaten within the week. We experimented with deer-spray, but due to needed reapplications, have found physical barriers to be the best solution for us. We now use 5-ft high welded wire cages for our young trees and shrubs. We make our own cages by purchasing rolls of wire and cutting them to size. I'll eventually be happy to share with our hoofed friends, but only once the plants are big enough to tolerate their browsing.

This is our general plan to remove buckthorn, reduce invasive species, and to continually add more native trees, shrubs and forbs to the woods. Recommendations for trees and other woody shrubs to compete with invasive species may be found on the City website and the City Forester is available for a no-cost consultation. COVID-19 precautions are taken during consultations. If you'd like to contact me regarding this article you can e-mail me, Emily Wu, at em.n.wu1234@gmail.com, and you would like to share your experience with neighbors in a future Treeways article, contact the City Forester at jim@LStreets.com.