

Andy Duncan email – 4/5/2022 – Forest Stewardship Plan

Good morning Bill,

Thanks for meeting with me yesterday at your property. I think we discussed a good path going forward for future management of the property. Some of the highlights of our walk and discussion are as follows:

1. Japanese Stiltgrass control in the immediate parking area where the fill was added: This invasive grass is a problem in the forest ecosystem and is spreading across the Northeast U.S. I deal with it more than any other invasive in my work as a forester. Once it's established in the woods on the forest floor, it's a 3 year challenge to get rid of. If it gets established in wet areas near streams and ponds, it's nearly impossible to get rid of. The big key to managing it is to use selective chemicals to kill it before it goes to seed in late August or September. Following that treatment, planting the site with a native lawn grass to occupy the site and compete with residual Stiltgrass is key. We can control it with chemical or you can use a string trimmer this summer to cut it off as low to the ground as possible. You may have to use the trimmer a couple times as it can sprout back slowly. The advantage with the trimmer is that no chemical is used, and therefore no brown spot is visible with dead plants. Once it's killed, raking the soil surface to expose soil, seeding with a lawn mix, and mulching with straw is a good method to get grass going. Be sure to water it in dry periods. This method (trimmer) may be your best option given the small area of Stiltgrass. June and July are good months to attack it.
2. Hemlock treatments: The main hemlock insects at PLP are both Hemlock Woolly Adelgid and Elongate Hemlock Scale, both invasive, and both causing damage or loss of vigor. In some cases, especially with heavily shaded trees or those without much water, trees are dying from these insects. The best we can do on individual properties is to treat trees with insecticide in spring to control current insects and keep them at bay for 5 years. I can help with this. Yesterday I noted my charge was \$50/tree. Last year I did this treatment for that price on trees 10" diameter and larger. Trees less than 10" were \$25/tree. We will hold to that same price this year. Any tree less than 2" diameter likely won't benefit from the treatment given overhead shading, so those would not be treated. Any trees where the foliage is lacking enough in the canopy where I feel the treatment won't work, we won't treat. This is typically trees with 75% or greater canopy loss. Should I hit acreage limitations in any given acre with the insecticide, I will stop and we can treat remaining stems the following year. If interested this year, the spray period is late April into May.
3. Hazard trees near buildings: I flagged with red two stems that should be removed. All others appear mostly healthy and present mostly low risk for damage. That's not to say damage won't occur from healthy trees. Severe wind storms and thunderstorms in spring and summer create problems for trees, causing breakage and toppling under heavy sheer events. Red Maple trees are the common species near the home. They are not the strongest of trees (compared to Oak), and can snap in heavy wind events, especially if they have rot pockets in the center or large cracked limbs. The three stems nearest the cabin are of the most concern, especially the one with fungus. This one is a moderate risk. Cabling the other two may provide long term security, but cabling the one with fungus may not work if the interior wood structure is decaying from fungus. This tree should be closely monitored for advancing fungus to other parts of the

stem. If this occurs, I recommend removing it. A few Cherry trees near the driveway have Black Knot fungus, causing weak points in the main stems. Heavy winds can cause breakage of stems, usually occurring at these points. While the risk to hitting the cabin from these Cherry trees is low, it's a good idea to not park vehicles near them if bad winds or storms are predicted.

4. General Forest Health: The primary concerns to your forest health are insects and disease (on hemlock in particular, and Black Knot on Cherry), invasive ferns occupying the forest floor and reducing the capacity of the forest to regenerate itself with native trees and shrubs, and deer impact on seedlings. The double edged sword of deer and invasive plants affects most landowners in PA. Deer browse down most seedlings of palatable taste and nutrition and leave behind plants they don't want like ferns, blueberry, beech brush, and spruce. Over time, your forest floor will tend to dominate towards these plants and not much else. If a bad plant like Japanese Stiltgrass or Mile A Minute moves in, it can move fast and smother other vegetation, and deer won't work to control the invasives. Fortunately, you don't have the bad ones in the woods, though fern is not a real good option either. To encourage tree, shrub, and small plant diversity, culling deer through hunting is one option. Another is fencing portions of the property, especially near to the above canopies of trees like Cherry, Maple, Hemlock, White Pine, etc. With established fencing, these trees can drop seed and grow into seedlings, once the fern is under control. Removing the Beech Brush trees is your decision. You don't have enough to warrant them from preventing (via shade) the growth of other plants at this point. It's possible that some of the specimens are actually beech seedlings that will turn into mature trees down the road. A key for determining this is locating any specimens that are 50 feet or more from a standing larger beech. If so, it's likely a true seedling, and one that can be saved. Regarding trail work to the lake, try not to sever roots larger than 3" diameter. Where possible, place gravel between roots for a walking path that will allow for less root cutting.

Moving forward, I'll set aside a day in June to come over once the growing season is in full swing to do an accurate field assessment of forest conditions similar to what Dick Cary did 20 years ago. In addition, I can handle the Stiltgrass at that particular time. The Stewardship Plan would be prepared by the end of 2022. We can also entertain Hemlock treatments this year or look to 2023, whichever you decide.

Thanks again Bill!

Andrew

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