### Wild Things Workshop for Stewards and Monitors February 7, 2010

Notes by JoAnn Monge and Jeff Weiss

## **Session IV:**

### Herbiciding and Invasives

Resource Experts:

Dave Hodge, Turning Leaf Conservation

John Nelson, Illinois Nature Preserves Commission

Rick Manner, Steward, Bluff Spring Fen

## Which published lists of problem species and recommended treatments do people most rely on?

Rick herbicides at a local level using spray bottle and foam roller. Need to do it well and correctly.

Stewards are doing much of the experimenting of what is the most effective and selective on the specific weedy plants most of us have.

High quality areas: make sure you only hit your target species. By selecting time, season, or application manner the herbicide targets only certain species and limits collateral damage.

Drips and footsteps. Don't drip on non-target areas. Hit only your target. Cloth paint brush. Rick prefers a roller

Garlon on top of cut stems and down sides is most effective for shrubs and trees.

Back pack sprayer will have some overspray. Do your best to limit this (according to Dave Hodge). Hit the bad plants, and the good plants will fill in. Be careful but make sure to hit the invasives, even in the highest quality areas. If you do not treat the area at all in order to avoid killing good plants, all you will have in the end are the invasive plants.

One application technique is to use an old cotton sock on the end of a wand. Dip on the stem.

Encourage volunteers who show up regularly to take the herbicide training course and become a licensed herbicider. This will increase value as a volunteer by a factor of 10. Last page of test has conversion factors needed for the test.

Wayne Grove- Steve Hill has noticed stump herbiciding seems to go into the roots and affects the area. Especially in the non-dormant times. Dave Hodge doesn't see that. Could it be the mixture, or drift? To get the plant, use a stream, not a spray.

Is there a magic time in winter for applying?

Roundup needs to be applied within 1 hour of cutting. Cannot be used for basal bark herbiciding. Garlon can be applied later and is effective basal bark herbiciding.

Chemical girdling is effective. Don't have to cut the tree down.

If the stem is smaller than your thumb, use a brush or roller. Two weeks later can see which plants died. In a dense hedge a spray bottle may be easier. Come back to get the ones you miss. Can use Garlon on a tree up to 18 inches in diameter. Gets to be a point where you have a gathering point for birds. Birds may contribute seeds that you don't want. Garlon is effective on thin bark trees like maples, buckthorns.

If tree saps out (sap is rising) you may see a ring of death. The sap can push the herbicide out and away from the tree. Need to halt in spring if sap is washing herbicide down sides of cut stems.

Honeysuckle: not as much success. Increase the concentration. Go back in the spring when the plant is leafing out, do a foliar spray with roundup. Roundup using 50% solution is effective in winter.

If you cut and immediately herbicide then roundup works. (Need to be in that one hour window.) May not be the best choice for a group workday.

If the area will be a wetland in spring, use Rodeo in winter.

There is a difference between Garlon 3A (water soluble) and Garlon 4 (oil soluble). Dave Hodge uses Basal Bark Oil as a carrier. Use Garlon 4 in winter and spring. READ the LABEL. In summer, it will volatilize when temps are in the upper 80's and 90's. More expensive to use because it is mixed with oil.

Garlon 3A will freeze in winter. Use Garlon 3A in spring, summer and fall.

Round up and Rodeo. Similar product but rodeo is more expensive to use because the surfactant is removed.

There are generics out there for the Brand name products. Need to make sure they have the same active ingredient and concentration.

Steve Packard has success using a Dabber sponge. He waits for the herbicide to soak in and repeats three times.

Time the spring burn in the wetland so reed canary grass can be the first to grow. Then can selectively herbicide it.

Spray garlic mustard after ephemerals are done.

A fall burn may cause the reed canary grass to re-grow in the fall, and then it is the only plant growing and can more easily be targeted. Use Roundup if not in water or Rodeo in wetlands. Use Poast in April and May on a cloudy day. It breaks down in sun, so may be iffy.

Roundup kills everything. Try using Poast in spring. Even if it doesn't kill the reed canary grass, it will be suppressed and the natives can grow.

McHenry County is experimenting with a 2% or lower rate of Poast for killing the mature plants. They want to start at lower concentrations and increase the concentrations if needed to get the desired kill rate.

# What are the best recommendations for the best herbicide and application rate near high quality areas?

There are guidelines on the Illinois Nature Preserves Commission web site. Most plants of concern are listed there and up to date. Covers mechanical and chemical control. The dates of last update are listed. Hopefully will get to a point that fire is enough to control weeds.

Have two levels of thinking on how to manage your site. Every site has a higher quality and degraded areas. Use a wide range of approaches. One of the best resources is to talk with other stewards.

Can be selective by time and/or method. Widen the window of time for attack. Instead of waiting for the Garlic Mustard to flower you can spray it in winter if it is 50's outside.

In the winter the plants take up less of the poison.

Rick uses a higher active concentration so that he does not have to use as much liquid. This helps to avoid drip. Want the poison to go to the roots.

#### What's the best management for tall goldenrod or other problem invaders?

For goldenrod, mow or cut the first week of August. Any earlier or later is a waste of time. The consensus is to cut to about knee high. This is enough to weaken the goldenrod so other perennial plants can start to grow. The flower head is cut too early to set seed.

Normally, Transline is used at. 5% to treat thistles, teasel and crown vetch. However, 2 to 5% Transline to control goldenrod in higher quality areas. Will kill some composites but sedges and grasses are not affected. This strategy is for large scale. When working a 40 acre field of goldenrod you don't have the luxury of mowing.

Plan to protect and work the high quality area first. Look at the weeds in that area. Then look at the next best areas. However, if there is a new invasive on the site anywhere, get rid of it soon, when it is only 10 plants and not 10,000.

Target the area between two high quality areas. Make one large area of high quality. Be careful. It is the gem and the seed source.

Concentrate on invasives that will not go away on their own. Remove bad actors first.

Many invasive species may hold a small pocket and not be a problem for many years on your site. Then, may come a year where it explodes. Remove early before the explosion happens. If other stewards indicate they have a problem with a plant, you will too. Locate where the weed is coming from. Can you remove the source? Do you need to talk to the neighbor to get the plant removed?

Had thistle all over the site. Two burns and it was gone. Another site, burned every two years, thistle still there. What works at one site may or may not work for you.

Natives may have a flush, e.g. white snakeroot. Should ignore. Talk to other stewards to see if the population will decrease on its own

#### Other herbicides to use:

Krenite for oriental bittersweet. It is a bud inhibitor. Use a foliar application. Cannot burn the next year. Plant must go through the bud stage again to kill the plant. Need the entire growing season to see effects. Plant will not leaf out. It is not a systemic so need to spray the entire plant.

The label is legal document. Some off label applications. Some species not on label, or any label. There is a lag if the plant is not an agricultural problem. Label will state types of plants they target. Sometimes, species that are supposed to be affected may respond, example: lily of valley (a monocot) to Garlon. Keep a binder with the chemical labels.

Transline: good on thistles, birds-foot treefoil, tree vetch, teasel. The next day you can see them dead. If you spray in the morning by the afternoon may see the plant falling over.

Nature Conservancy also has a list of how to control plants.

Call the chemical companies. They know their stuff and are helpful. The number is on the bottle. The representatives may also recommend some other product to be more effective.

Phragmites: Use Habitat or Aquamaster. Aquamaster has a narrow window for spraying. With Habitat, will see the results next year. Phragmites has long underground runners about 40 to 50 feet long. The herbicide travels effectively through the roots. Optimum time was throughout the growing season. Spraying the herbicides will affect other plants growing with it. Hand wicking is selective. Place a cotton glove over your chemical protection glove. Wet the cotton glove with the herbicide and wipe the leaf. BASF is the manufacturer of Habitat.

Vinca minor, periwinkle a small problem in a couple of sites. Fire does not affect it. Wanted to know what would work. No one knew the answer.

Problem with herbicide?

Garlon 3A with eyes. Make sure you read the label and follow safety rules.

Work the highest quality areas first. Don't take school groups to the highest quality areas, where you would have to worry about the negative impacts of a large group.