The trip was almost cancelled as people were calling to cancel as it was cold out. However a group of hardy souls met at the top of the hill to take a peek at Japanese Barberry (*Berberis thunbergii*) in the pasture across from the reclaimed Yoder Quarry. The barberry seem to be scattered in pasture for a long way along the ridge to the east. **Megan Mickelson** It was 1° F with a stiff breeze so we quickly motored down the hill for a look at Richard Meyer's barberry patch. For any doubters in Wisconsin about how bad a barberry infestation can get I suggest they take the time to do a drive by of the woods on the east side of Holiday Road coming down from County A a couple of miles south of Tomah

After a brief Q&A and some pictures of the site we drove to the Ranger station and sat around the conference table and brain stormed Barberry and specifically options for Richard to consider.

At the Field trip: **Megan Mickelson**- DNR Forester and Chair of MCISWG, **Chris Semann**- DNR Regional Team Supervisor, **Sean Davison-** DNR Forester, **Chad Zeigler**-Monroe Co. Forester, **Matt Bauer**-Forestry Specialist, Landowners **Skip Frazee**, **Chris Barlow** and **Richard Meyer**.

Here are some of the main points on Barberry

It was brought in as an ornamental and still is sold for landscaping. NR-40 has listed several of the worst offending cultivars which are slowly being eliminated from Nursery production. There are some cultivars that may be just as bad but weren't tested and are still unregulated. There are new ones being developed that are much less likely to produce viable seeds.

Here is a link to the current Wisconsin rule on Barberry which includes the list of "Restricted" cultivars.

http://dnr.wi.gov/topic/Invasives/fact/JapaneseBarberry.html

In the Handout* that Megan **Mickelson** distributed there are some native plants recommended for use in landscaping instead of barberry, all good choices but most are pretty big and don't fill the same niche as the popular dwarf varieties; smaller alternatives are dwarf cultivars of Ninebark and Aronia. The MIPN Landscape alternatives app has a few more "native" suggestions including Fothergilla which, although hardy here, is native to the southern U.S. The app also lists some 'exotic', noninvasive ornamentals could be used such as Alpine currant, Boxwood, Cotoneaster and Weigela, cultivars. https://apps.bugwood.org/apps/landscape-alt/

When asked about the history of the site, Richard **Meyer** bought it in 92 and it had just been logged. There was a discussion about the possibility of the infestation coming in on the equipment but it was more likely flown in by birds from town or a nearby landscape. The woods were pastured until fairly recently. Chad **Zeigler** commented that a lot of times when you stop pasturing an area the invasives explode. We did also see Multiflora Rose at the site which behaves the same way.

Richard has been foliar spraying Glyphosate (Roundup is one brand) at 2oz per acre in the summer for 3 or 4 years. Chad **Zeigler** would recommend maybe 3-4 oz. but cautioned that there are differences between Ag. Glyphosate and retail. Always read the label -you may not need as much concentrate per gallon of carrier.

We discussed the addition of Surfactants (eg. Liberate) to make the herbicide more effective. There was also discussion about hard water and the use of water softening agents. Glyphosate has a tendency to be tied up with Calcium and other minerals in hard water (same goes for muddy water) and be less effective. Some surfactants are designed to eliminate the problem; McCoy adds Choice Weather master to the water before adding the glyphosate concentrate and other labeled product. Dan **Rasmussen** uses water hauled from the water softener in his house.

Armstrong pointed out that Garlon (Triclopyr) based mixes would not kill grasses. That could be a foliar application but McCoy lops Japanese barberry low with a brush cutter or chain saw then treats each individual stem with a Garlon/ bark oil mix which will use much less herbicide per acre although labor intensive.

We discussed mowing and the use of Forestry type mowers with a Fecon head. Expensive but there are contractors with them. You would then be able to spray the regrowth.

Prescribed burn was discussed, it would be hard to get it to work because there isn't much fuel under the barberry. Here is what MIPN says:

Spring burns can kill germinating seedlings and suppress above ground growth of established plants, depending on fire intensity. After fire, established plants will quickly resprout and reinvade areas. Cutting barberry in spring, followed by a summer burn is the most effective burning regime. Burns must be repeated annually for 2-5 years to suppress established populations. A hand-held propane torch can be effective for treating seedlings or barberry plants that are less than 4" in diameter.

https://mipncontroldatabase.wisc.edu/search?name=Berberis_thunbergii&habitat=7

This data base is useful for other invasive species management too, ranking mechanical, cultural and chemical treatments for the novice or pro.

Management using goats was also discussed someone thought Barberry was about the last thing goats would eat, but it might be an option with the right animal density and fencing, but not in MFL where it is considered 'active pasturing' and not allowed.

• Here is a link to the Barberry Hand out

http://dnr.wi.gov/topic/invasives/documents/japanese_barberry_brochure.pdf





