

# DEVELOPING PLANS TO MANAGE INVASIVE PLANTS ON YOUR LAND



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# APPROACH TO MANAGING INVASIVE PLANTS

**Step 1:** Plant identification

**Step 2:** Distribution of population

**Step 3:** Select appropriate control tactic(s)

**Step 4:** Apply control method(s)

**Step 5:** Monitor and adapt management





# MANY CONTROL TACTICS

- Manipulation of the environment
- Physical/mechanical management
- Prescribed fire
- Biological control
- Herbicide





# PARTICIPANTS GET A REPORT THAT PRIORITIZES PLANTS AND SUMMARIZES CONTROL METHODS

## Invasive plants observed on property

The table below lists invasive plant species observed on the property. The species are listed in order of suggested management priority:

- **High:** few plants present (possible to eradicate before infestation grows) and/or species is a high priority species (prohibited in state or high consequence species)
- **Medium:** Larger infestations that will take more effort to control on property; also includes species that have high impact
- **Lower:** Largest infestations on property (will take significant effort to control on property) and/or species with lower impact
- **Monitor:** species that were not observed on the property but which are known to be nearby and could infest property. Keep an eye out for new infestations of these species.

The area impacted refers to the general area infested by the species, including area not occupied by the species of interest.

Mgmt. priority	Species	Number of points	Number of polygons	Approx. area impacted (acres)	Abundance
High	Autumn olive ( <i>Elaeagnus umbellata</i> )	1	0	-	Few individual plants
High	Biennial thistle ( <i>Cirsium sp./ Carduus sp.</i> )	3	0	0.2	Scattered plants
High	Canada thistle ( <i>Cirsium arvense</i> )	3	0	-	Scattered plants
Medium	Reed canary grass ( <i>Phalaris arundinacea</i> )	4	0	1.5	Scattered dense patches
Medium	Purple crown vetch ( <i>Securigera varia</i> )	5	1	0.5	Scattered dense patches
Lower	Bush honeysuckles ( <i>Lonicera sp.</i> )	20	0	2.8	Scattered plants
Lower	Japanese barberry ( <i>Berberis thunbergii</i> )	1	12	3.5	Scattered plants
Monitor	Multiflora rose ( <i>Rosa multiflora</i> )	-	-	-	Absent, but present nearby
Monitor	European buckthorn ( <i>Rhamnus cathartica</i> )	-	-	-	Absent, but present nearby

## Management options

Managing invasive species is a long-term commitment, so it is necessary to prioritize management activities based on the density of plants (highest density/largest population of plants generally has lower priority) and your land management objectives. If populations are too large to control the entire population in one year, develop a coordinated approach that starts at the edge of the population and works inward as time permits.

Below are general recommendations for managing invasive plants on your land. Click the fact sheet links (where available) to access more detailed recommendations.

**ORIENTAL BITTERSWEET** ([fact sheet](#)) is a woody, perennial, climbing vine. Stems may reach 6" in diameter and vine may grow up to 60' long, depending on tree canopy. It invades a variety of sunny and shaded habitats and can strangle or topple the vegetation (shrubs, trees) on which it grows. Easily spread to new areas by birds.

Control strategies for small populations: If left uncontrolled, individual plants can severely damage shrubs and trees and fruits can be easily spread to new locations. Control individual plants before fruiting to prevent spread to new areas. Individual plants can be effectively controlled by pulling/digging plants and via herbicide application. When manually removing plants, remove roots to prevent resprouting. If fruit is present, avoid movement of material off site unless material can be transported without spreading seed to other locations. Cut stump herbicide treatment is an effective control technique. Foliar herbicide application when species is fully leafed out and actively growing is also effective but difficult to apply without contacting nearby plants.

**JAPANESE BARBERRY** ([fact sheet](#)) is a round, dense, spiny shrub, typically 2 – 3' tall, though it may grow up to 6' tall and 6' wide. Branches are reddish-brown and deeply grooved, with a single sharp spine at each node. The wood beneath the bark is bright yellow. Barberry forms dense thickets as its branches root freely when they touch the ground. The thickets shade out other plants and uncontrolled thickets are associated with increased populations of blacklegged (deer) ticks and Lyme disease.

If left uncontrolled, individual plants can spread quickly to form dense thickets, and fruits are easily spread by birds to new locations. Individual plants should be controlled when small and before fruiting, to prevent spread by birds to new locations. Hand pulling/digging is effective as long as root crown is removed. If fruit is present, avoid movement of material off site unless material can be transported without spreading seed to other locations. Hand removal can be difficult due to the spiny nature of barberry; basal bark, cut stump and foliar herbicide treatments are also effective for controlling barberry. Foliar herbicide applications are most effective when the plant is fully leafed out and actively growing, while other treatments can be applied year-round.

# YOU WILL NEED TO DECIDE WHICH PRACTICES ARE APPROPRIATE FOR YOUR LAND

- Use land management goals as a guide to assist in making this decision
  - Ask experts to help if you have questions!!!!
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# STEP 4: APPLY CONTROL METHOD(S)

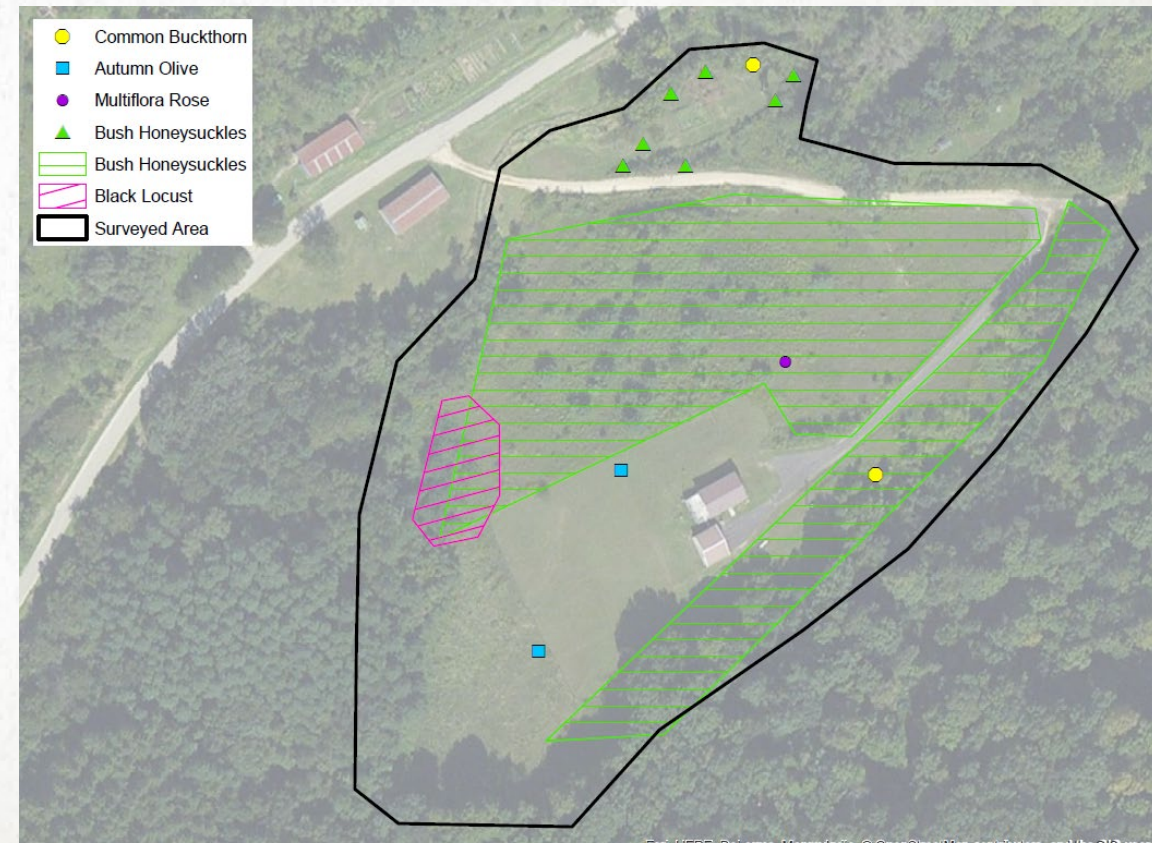
- Follow the directions provided
  - Pay close attention to details
    - **What timing** is needed to conduct to maximize control?
    - Can I minimize non-target impacts if I apply at a different timing?
    - What restrictions are associated with the method(s)?





# STEP 4: APPLY CONTROL METHOD(S)

- What if I have too much to treat in a year?
  - Be strategic
  - Year 1
    - Treat leading new infestations
  - Year 2
    - treat escapes
    - treat further into population





# STEP 5: MONITOR AND ADAPT MANAGEMENT

- Periodically assess success
- What to assess
  - Level of control
  - Injury to non-target plants
- Alter management to current conditions to optimize effort/success





# SUMMARY

- Develop a plan to manage
    - Identification, mapping, selecting and applying control methods, monitoring success and adapting as needed
      - Lots of resources and people available to help
  - Don't be afraid to ask questions or consult experts!
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