

# Invasive plant control for foresters

1. How to include useful invasive plant information in FMPs
2. Suggesting priorities and goals
3. Considerations in control methods
4. Identification review

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# Dept. of Agriculture, Conservation and Forestry Maine Natural Areas Program



- Keep track of natural resources
- Facilitate informed decision-making
  - Invasive plant initiatives



*All photos courtesy of MNAP unless otherwise noted.*

# How to include useful invasive plant information in FMPs

## *Document, map, explain*

- Document locations of invasive plants, take notes on percent cover, density, areas infested
- Create maps, tables to show the situation
- Explain the threat to forest regeneration
- Take landowner to see the problem

# iMapInvasives free online mapping tool



***Search “Maine  
iMapInvasives”  
to request an  
account***

- Site assessment:  
*what, where, how much?*
- Landscape context:  
*what plants already  
infest the area?*
- iMap App or use a GPS +  
datasheet/notes
- Make maps from iMap
- Or, other mapping tools  
you already use?

# User manual available



The screenshot shows a web browser window with the URL [www.imapinvasives.org/user-manual](http://www.imapinvasives.org/user-manual). The page features a green header with the iMapInvasives logo and a "Login Now" button. Below the header is a navigation bar with links for "About iMap", "Who We Are", "Resources", "Action!", and "Contact Us". The main content area is titled "User Manual" and includes a paragraph: "Click [here](#) to download a completed PDF copy of the iMapInvasives User Manual." Below this is another paragraph: "Learn about the features that make up the iMapInvasives database and how to utilize them by exploring the categories below. If you have additional questions about iMapInvasives that are not answered here, please [contact us](#) with your query." The page is divided into four sections, each with a thumbnail image and a title: "Introduction to iMapInvasives" (with a leaf and insect icon), "Public Map" (with a map thumbnail), "User Map" (with a map thumbnail), and "Observation Record" (with a map thumbnail).

**Introduction to iMapInvasives**  
Learn about the iMapInvasives database and all that it has to offer.

**Public Map**  
Available to the public and registered users, this map shows distributions of featured species in each state.

**User Map**  
Available to registered users only, this map shows location-specific records and includes state-specific reference layers.

**Observation Record**  
A report of a specific species observed at one location on one date. Represented as a point on the map.

Internet search for iMapInvasives user manual

**Review example report for  
things you could include in a FMP**

**Suggesting priorities and goals**

# Ways to prioritize invasive plant work

## Plant species basis:

- New to property or new to area
- Unacceptable impacts

## Site basis:

- Outliers first
- Protect priority habitats
- Start upstream

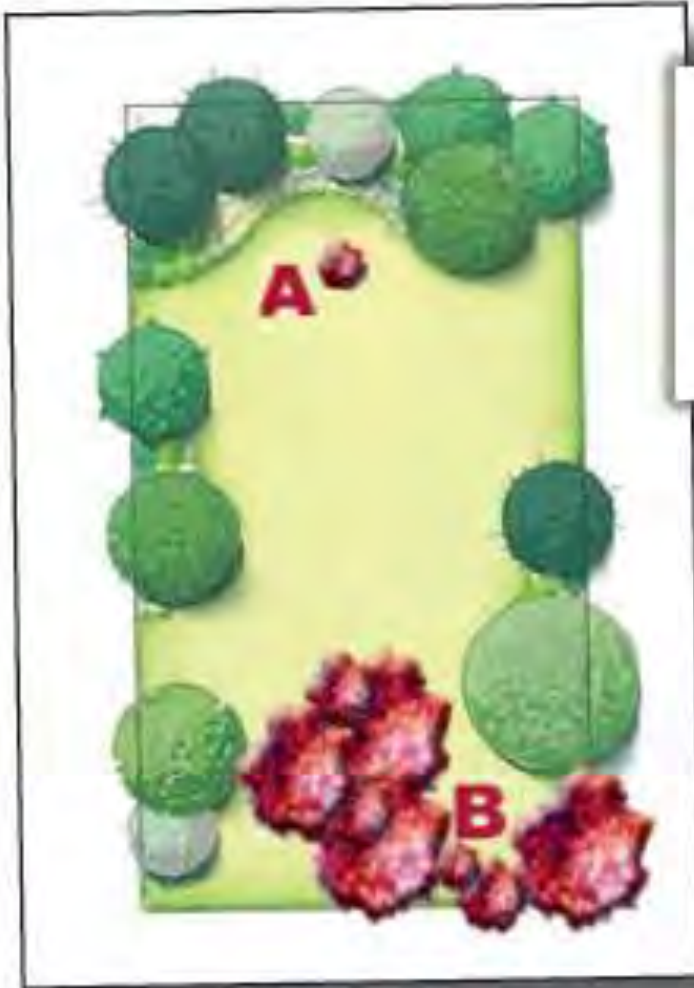


# Ways to prioritize invasive plant work

- Start upstream:  
manage population A  
before population B
- For riparian species  
dispersed by seeds or  
fragments



# Ways to prioritize invasive plant work



**Strategy: Start with Small Populations, or Deal With “Spot Fires” / **Outliers****

Starting with small populations is more likely to result in early success.

**Could use multipronged approach: eradicate outliers, suppress “source population”**

# Ways to prioritize invasive plant work

- **Priority habitats**
  - high-quality or rare wildlife habitats
  - most valuable timber stands
  - riparian corridors & wetland networks
  - areas first/next to be harvested



# Suggest, precise, realistic goals

- **Eradicate:** get rid of for good, with low chance of re-infestation
  - **Contain:** keep in existing footprint; do not allow to expand
  - **Exclude:** keep clean areas clean
  - **Suppress:** restrict ability to grow and produce seeds, reduce density
- 
- **Reduce extent**
  - **Decrease density**
  - **Allow trees to grow normally**
  - **Prevent seed production**



**And, goals may  
change over time!**  
*--adaptive management*

**See Jenney report for example of  
prioritization**

# **Considerations in control methods**

# Control methods

- Manual
- Mechanical
- Herbicide
- Biocontrols
- ***Combinations***



**There are no one-size fits all  
control methods**

*Good methods are site specific  
and goal-dependent*



# Considerations in choice of control methods

- 1. What species?**
- 2. Where?**
- 3. How bad is the infestation?**
- 4. What is the specific goal?**
- 5. Desired timeframe to achieve goal?**
- 6. Seed bank or local source of propagules?**
- 7. Biological and social context of site?**
- 8. Pesticide registry**
- 9. Landowner/client preferences?**
- 10. Cost**

# Integrated Pest Management

- Control of small infestations requires least use of time, products, equipment
- Some plants respond well to manual control
- Consider a combination of treatment types
- Some goals can be achieved without herbicides



# Website for invasive plant ID & control info.













The screenshot shows the website for the Maine Department of Agriculture, Conservation and Forestry. The header includes the Maine.gov logo, navigation links for Agencies, Online Services, and Help, and a search bar. The main navigation menu lists various departments and programs. The breadcrumb trail indicates the current location: DACE Home → Bureaus & Programs → Maine Natural Areas Program → Communities, Plants, and Animals → Invasive Plants → Photo Gallery.

## Maine Natural Areas Program

### Invasive Plant Photo Gallery

[View Gallery by Scientific Name](#)

Thumbnail photos of some of Maine's invasive plant species. Fact sheets, more photos, links to identification videos, and links to videos about control measures available at each species' page. For a complete list, see our [Maine Invasive Plant Fact Sheets in list view](#).

			
<a href="#">Asian Bittersweet</a>	<a href="#">Autumn Olive</a>	<a href="#">Black Swallowwort</a>	<a href="#">Burning Bush</a>
			
<a href="#">Common Buckthorn</a>	<a href="#">Common Reed</a>	<a href="#">Gallic Mustard</a>	<a href="#">Glossy Buckthorn</a>
			
<a href="#">Japanese Barberry</a>	<a href="#">Japanese Honeyuckle</a>	<a href="#">Japanese Knotweed</a>	<a href="#">Multiflora Rose</a>

Search for “Invasive Plant Photo Gallery Maine”

(Also have fact sheets for many additional species)

# Identification review

**Handout**

**Prizes!**



***THANK YOU! .... QUESTIONS?***

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# Percent Cover Class Choices

*from iMapInvasives*

- <5%
- 6-25%
- 26-50%
- 51-75%
- 76-100%

# Cost estimates for various invasive plant control methods

*from FY 2018 NRCS EQIP practice standards*

*Brush Management; Herbaceous Weed Mngmt.*

- <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/?cid=nrcseprd1328241> look for the EQIP PDF
- See pages 8-9, Practice codes #s 314 brush mngmt., most likely for forestry sites, or 315 herbaceous weed mngmt. HU is Historically Underserved producers (special category)
- My understanding from talking with NRCS staff is that these are supposed to be estimates of 75% of actual cost. So add 1/3 of these to get actual.
- #s range from <\$100/acre using hand tools to >\$1000/acre difficult chemical.

# Multiflora rose key ID mark: *Fringed stipules on leaf petioles*

Photo by Maine Natural Areas Program

Multiflora Rose (*Rosa multiflora*)



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