Best Practices and Resources for Managing Invasive Plants

Bittersweet, knotweed, phragmites,
Oh My!

- **Benefits of Invasive Species Management Projects**
- **Planning Considerations**
- **Tips for Project Success**

Why Manage Invasive Species?

- **Habitat improvement – wildlife/plant community, rare species, biodiversity, and more**

- **Preservation for future generations – scenery, watershed, biodiversity, special habitat**

- **Projects can engage and empower volunteers, conservation organizations**

Methods & Techniques

- **Manually / mechanically**
  - Hand pulling
  - Weed wrench
  - Mowing
  - Grub out
  - Girdling
- **Burning**
- **Herbicide * Only by Licensed Applicator**
  - Foliar
  - Injection
  - Cut and wipe/drip

  ✓**Species Specific**
  ✓**Site Specific**

AmeriCorps Cape Cod

Tactical Elements of
Invasive Species Management

– how to wage war with invasives

- **Know your enemy –** plant ID; effective methods of control

- **Know your surroundings** – plant inventory, soils, wetlands, rare species habitat, access

- **Know your goal –** (eg) What's the plant community you are restoring? Will it be meadow or forest? Eradicate or control?

- **Consult with experts –** government agencies; NGOs; consultants

- **Consult with your local Conservation Agent** – do you need a permit?

Develop a *Written* Plan

- **Goal & Objectives**
- **Timeline**
  - Seasonal tasks
  - 3 to 5 year plan <u>minimum</u>
- **Work Protocol**
  - Identify treatment based on species and site considerations
  - Equipment access, debris removal
  - Erosion control
- **Restorative Planting Plan / Revegetation Plan**
  - Ecologically Appropriate Species
  - Sourcing of plants; straight native species; local ecotype
  - Care & maintenance to insure survival
- **Monitoring**
  - Photographs
  - Plant health
  - Prescribe additional tasks
  - Document success!
- **Follow Up Maintenance**
  - Mowing
  - Spot treatments/hand-pulling
  - Re-seeding/replanting

Budget

- **Survey /Re–vegetation Plan**
- **Labor –** Volunteers / AmeriCorps / Contractor
- **Consultant**
- **Debris Removal**
- **Permitting**
- **Restorative Plantings & Care**
- **Monitoring**
- **Future Maintenance**

Commonly Encountered Invasive Plant Species
and
How to Kill Them

Asiatic Bittersweet (*Celastrus orbiculatus*)

Autumn Olive *(Elaeagnus umbellata)*

Japanese Knotweed *(Fallopia japonica)*

Summer

Winter

Privet *(Ligustrum sp.)*

12/01/2009

Multiflora Rose *(Rosa multiflora)*

Shrub Honeysuckle *(Lonicera sp.)*

Garlic Mustard *(Alliaria petiolata)*

05/03/2012

Dame's Rocket (*Hesperis matronalis*)

05/31/2012

Common Reed *(Phragmites australis)*

Black Locust (*Robinia pseudoacacia*)

Exploring Land Trust Solutions to Invasive Species

- Focus on Habitat Restoration: natural landscape

- Why are we managing- PR? To save plant/ animal habitat? For someone's view? What are the benefits?

- Means
  - Staff/ Volunteer Engagement
  - Contractor
  - Neighbor Collaboration

Site Evaluation

- Compare with past photos
- Extent of Invasives
- What is the natural habitat?
- What is the degree of labor?

Prioritizing

- Should focus be on large, overgrown parcels or those easily remedied with staff and volunteers?
- Visibility and Walkability
- Access to volunteers/ interns/ AmeriCorps
- Funding!
- Time- To supervise, to review reports, to research best practices, to collaborate with local officials
- Herbicides, safety, and liability

Visibility/ Walkability

AmeriCorps / Staff / Volunteers

Or, alternative…

Collaborating with neighbors

- Contracts
  - Process:
    - Formally adopt abutter requests
    - Compose a contract outline
    - Invite members to help fund projects

Contract Specifics

- Remedy Pre-existing encroachments

- Use Authorized contractor

- Require Prepayment for each Phase of Project, bill paid by CCF

- Require 5 years of management

- If violations, work may be terminated at abutters costs

- Indemnify CCF

- **PAYMENTS ARE NOT CONSIDERED 'DONATIONS'**

Example: Mill Pond

Example: Oyster River

Example: Oyster River

Lessons Learned

- Donation versus payment
- Beholden to neighbors' interest (SCENIC VISTA!)
- Focus on Restoration
- This process is still in infancy