Invasive species management projects for land trusts: Stories of success

Matt Spinner Land Stewardship Director Buzzards Bay Coalition spinner@savebuzzardsbay.org

Who we are:

- Protect Bay resources and uses of the Bay
- Conservation
- Outreach & community engagement
- Policy advocacy
- Research

Since 1987 BBC has:

- Helped protect over 6,500 ac
- Holds Conservation Restrictions over 1,800 ac
- Owns and manages over 400 ac in 3 river reserves
- Has over 8,000 members





Invasive spp. control projects with high chances for success have several similar elements:

- Closed systems
- Neighbor support/alternate funding sources
- Work performed by skilled ground crews (contractors/or in-house staff)
- Monitoring and maintenance

BBC's Phragmites Restoration projects

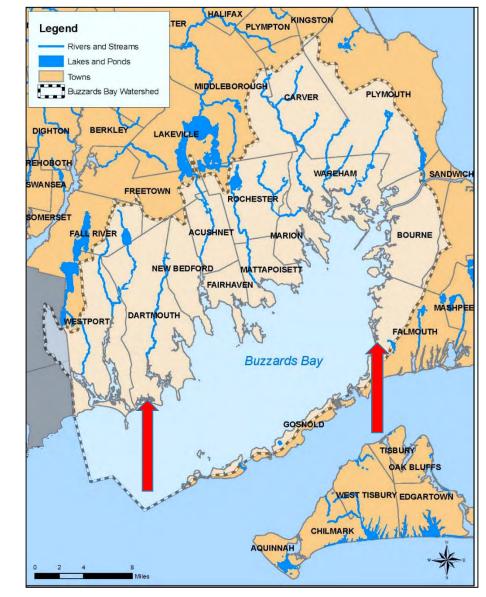
3 ponds selected

Two in Falmouth

- Gunning Point Pond
- Flume Pond

One in Dartmouth

Salters Pond



Phragmites Restoration Project Background

Proposed removal of 11.5 acres of invasive Common Reed (Phragmites australis)

Habitats impaired

- Emergent marsh fringing the ponds (small area at each not yet invaded)
- Beach/Dune
- Shrub swamp
- Threatened Species
 - Tern foraging habitat at all 3 ponds Roseate, Common, Arctic and Least
 - State-threatened plant saltpond grass
 - State-special concern species box turtle

• Aesthetic impairment

How and why did BBC get involved?



Tern Foraging Habitat

Federally-listed Endangered Species Roseate tern

State-listed Special Concern Species Common tern Arctic tern Least tern

Flume Pond

Largest landowner: The 300 Committee

Coalition holds a Conservation Restriction over the conservation property



Gunning Point Pond

Largest landowner: Salt Pond Areas Bird Sanctuaries





State-threatened plant:

Saltpond Grass (Leptochloa fusca spp. fascicularis)

Closed Systems/attainable project scale

- Phrag. management is a daunting task
- Can quickly become costly
- Needs repeated treatments and aftercare
- Closed systems allowed for success
- Perimeters of infestation could be identified
- Size and scope of project was attainable with the available personnel and funding
- Existing native marsh plants would re establish



Neighbor Support

- Funding
- T3C & bird sanctuary owned properties
- Supportive neighbors
- PR with written updates

Work performed by skilled contractor: 3 year targeted approach



Ongoing monitoring and management



- Provided by BBC in perpetuity
- Easily control invasive re-sprout during annual monitoring visits
- Simple hand wicking treatment technique

Super Storm Sandy Recovery with The Greenwich Land Trust

- Local town land trust in SW Connecticut
- Conserve 750+ ac in fee and easement
- Oct. 2012 GLT lost over 700 trees
- Many needed to be dealt with for public safety, trail access, aesthetics, etc.



Emergency Forest Restoration Program

- EFRP administered through FSA and CT Forest Service
- 75% cost matching up to predetermined amounts
- 3 elements
 - 1.) Heavy debris removal
 - 2.) Invasive control
 - 3.) Native replant
- Small projects (1-3 acres of heavy blowdown)
- The storm cleanup would be happening anyways but with some financial assistance from gov't. able to tackle eventual invasive problem



Element #1:

Heavy Debris Removal

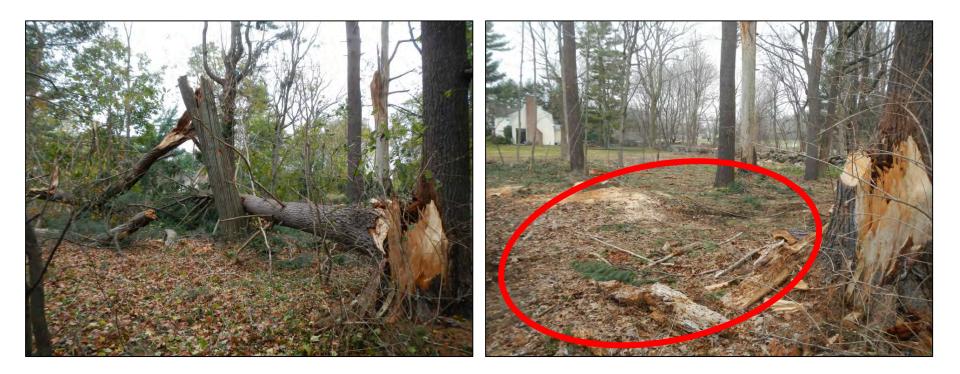
200+ trees physically moved or removed from sites



Heavy Debris Removal

Before

After



Element #2: Invasive Control



Invasive Control





- Utilized skilled labor
- Specialized tools
- Well trained volunteers





Element #3:

Native replant

- Bare root seedlings
- Containerized plants
- Tree shelters
- Staff time



Monitoring and management

- GLT to perform in perpetuity
- Easily control invasive re-sprout during annual monitoring





The take home

- Try to focus on projects that give you highest chances for success!
- How?
 - Smaller or closed ecological systems
 - Garner neighbor support/alternate funding opportunities
 - Utilize skilled contractors/trained volunteers
 - Insure ongoing monitoring and maintenance
 - Invasives usually don't go away and stay away!