John Sangermano Stow Conservation Trust Stewardship Committee 26-Aug-2020

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# **Update: CISMA SCT Leggett Parcel Invasives Project and Extension Request**

Hello,

Per your request, I have created a project summary status.

I am requesting an extension on the CISMA Grant. The extension in time will allow our consultant to finish work converting informal invasives mapping to GIS and Garmin format files. That is the only deliverable we need for an extension.

See attached file and reference table.

Regards,

John Sangermano, SCT Board Member

# Project: Creating an Invasives Control Plan for the SCT Leggett Woodland Parcel

This is an update of project work for the project we are doing.

# Spending:

- We have not spend any money to date. But we are in the process of getting informal working maps changed to be GIS maps and to get Garmin-compatible files.
  - The grant did not approve a weed wrench. We located two of these from a member. We repaired one, and have used both during volunteer work time.
  - We chose to create our own maps. We looked at different approaches but in the end chose a low tech approach. We refined awareness of where certain invasives were located and mapped them on a large scale map.
  - Our consultant will put this information into a GIS map, we have a sample provided.
  - The grant did not directly support and we chose to not create any printed material. So no printing costs. We found that volunteers who were interested, responded best to web links including photographs and videos.
- We have released the informal maps to be created to GIS and Garmin format. We are getting help from Ms Jenn Tuomala.

# Mapping:

- We felt that it was more important to just start with mapping where we located invasives. We chose a simple, Low-Medium-High Density rating.
  - We had considered a grid, and then creating a separate listing of invasives per 'grid box'. But we felt this was quite a bit of work and did not add value.
- We have 5 invasive maps for the parcel. We have been using the maps for stewardship work planning and execution.
- We have a Table of invasives, showing a rating for each area. This is attached.

#### Invasives:

- Initially we defined a set of invasives to map and monitor. The set is the expected top offenders.
  - Oriental Bittersweet, Garlic Mustard, Japanese Knotweed, MultiFlora Rose.
- After walks and as the inventory and property was inspected, we chose to add other invasives. Glossy Buckthorn made the list because we saw it to some degree in many areas the parcel. Burning Bush was located during a May invasives pulling work day.
  - o Glossy Buckthorn, Burning Bush, Japanese Barberry.
- When doing a full walk of the property not just on the trails areas we discovered
  a large size, medium density Japanese Knotweed patch. (I had not been sure of
  the parcel land boundaries, but once we located all the bounds, we saw that the
  Knotweed was on SCT land). This Knotweed patch put concern as to whether we
  could handle with just manual pulling/digging. This was difficult because of the
  hard task, and the remote location of this section of land.

Plan:

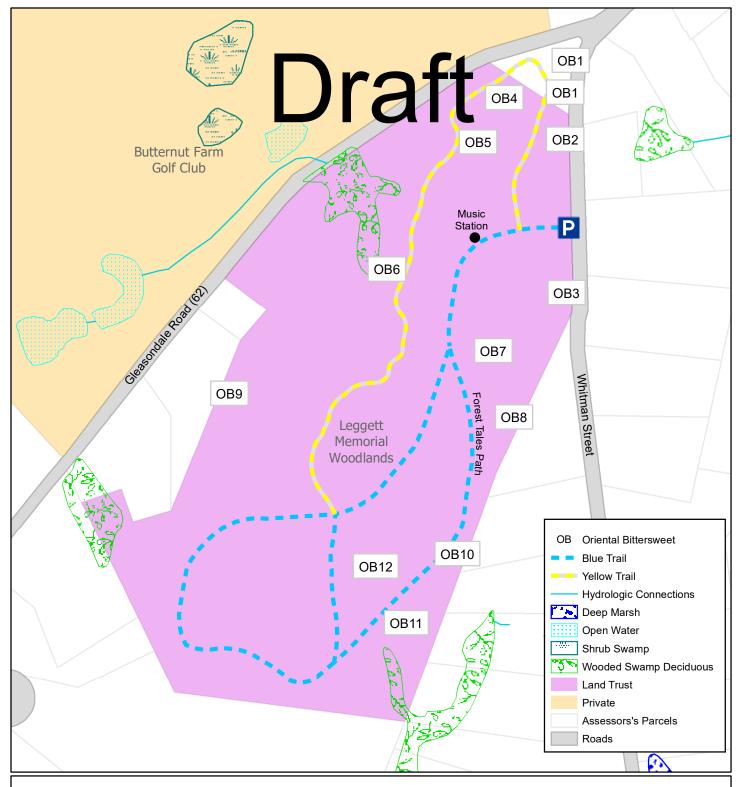
- I used a template from the US Forest Service for the plan. The template has overall objectives noted, and then separate sections on what approach to take.
  - 1. Identify the current set of invasive plants. Determine a level of infestation and presence. Map existing invasives: where are they located and in what density.
  - 2. Form a plan, by species, of a control/reduction strategy.
  - 3. Note special cases when invasives are located within the wetland buffer. These need Conservation Commission approval before work is done.
  - 4. Implement a series of removal/control work. Measure progress year-year. Create a best practices book on control. Use the history of earlier work as the basis for approach.
  - 5. Establish an inspection regimen, both to monitor known infestations growth and to look for new invasives. This would be a land steward responsibility.
  - 6. Train the Stew Crew: Provide training on how to identify certain invasives. Use actual work days to show and act on each invasive.
  - We have begun work on all the objectives areas in the plan except the creation of an ongoing Monitoring Program. The details for how we will do ongoing monitoring and how we will document is undecided.

### Work to the plan in 2020:

- We followed the plan as we did work with the land steward and with the SCT volunteer 'Stew Crew' team.
  - Garlic Mustard pulling. This was actually year 4 for this work.
  - Japanese Knotweed digging/cutting. This was year 2 for this work. This was work at two locations of low density plants. We did not work the large denser area.
  - MultiFlora Rose. We chose to just cut these. It was important to cut these down for practical reasons. Many of the large canes were along the walking trails.
  - Oriental Bittersweet was only partially worked. Two areas had pulling work done. But we are uncertain whether to move to herbicides to treat.
  - o Some Burning Bush shrubs were dug up and pulled.
- The SCT board has under discussion a policy change to allow Herbicide use. The board is also looking at whether Herbicides can be applied by volunteers or whether to hire external consultants.

### • Training:

- Stew Crew volunteers were trained as part of work days. For example, when we pulled Garlic Mustard, links to identification web resources were sent out in advance. Awareness is reinforced when we do actual work on site. We have done Garlic Mustard, Japanese Knotweed, Burning Bush, Japanese Barberry, Oriental Bittersweet work all with the Stew Crew (not just at the Leggett Woodlands Parcel).
- The volunteer stewards for each SCT parcel, including the Leggett Parcel, were linked to webinars from the UMass Extension site. Three attended the online Japanese Knotweed session.
- John Sangermano started a Weed Science class with UMass Extension but after the first class the live classes were stopped.
- John Sangermano took a 3-day Pesticide License Prep Class online. He is signed up to take the MA Pesticide Applicator License Exam.



# **Invasive Plant Map - Oriental Bittersweet**

# **Leggett Woodland**

Source: Locations of trails, features, and invasive plant species from georeferenced map provided by Stow Conservation Trust. MassGIS Data: Protected and Recreational OpenSpace; MassDEP Wetlands (2005); Standardized Assessors' Parcels (Stow).



0 500 1,000 Feet

This map is for planning purposes only, with specific points subject to verification on the ground. It is not to be used by itself for legal boundary definition.

<u>Invasive</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	2022	_ Work Notes
Garlic Mustard					
GM1	М	М			Annual work 2017-2020
GM2	L	L			Annual work 2017-2020
Japanese					
Knotweed		_			
KW1	M	L			Digging/Cutting 2019-2020
KW2	М	M			Digging/Cutting 2019-2020
KW3	-	Н			newly located in 2020
					Problem Area
Oriental					
Bittersweet					
OB1	Н	Н			Problem Area
OB2	''	Ľ			1 TODIOTI ATOU
OB3	М	M			
OB3	L	L			
OB4 OB5		L			
OBS OB6	_	L			
OB6 OB7	L	_			
	L	L			Mode in 2040
OB8	L	L			Work in 2019
OB9	М	M			
OB10	Н	Н			W. I
OB11	M	M			Work in 2020
OB12	L	L			
MultiFlora Rose					
MF1	М	М			Cutting 2020
MF2	L	L			Cutting 2020
MF3	_	_			C. Him a 2010 2020
MF4	M M	M M			Cutting 2019-2020
IVIF4	IVI	IVI			Cutting 2019-2020
Burning Bush					
BB1	L	L			Work in 2020
	_	_			VVOIN III 2020
Japanese Barberry					
JB1	L	L			
	_				
Glossy Buckthorn					
GB1	-	М			
GB2	-	М			
GB3	-	М			
GB4	-	М			
GB5	-	М			