



Mapping *Galerucella* Beetle Damage

Objective: To assist the Massachusetts Coastal Zone Management Wetland Restoration Program to assess distribution and abundance the *Galerucella* beetles

Background: *Galerucella* beetles have been released in Essex and Middlesex Counties for more than 10 years. Beetles move on to patches of purple loosestrife when they have consumed most of the loosestrife where they have been released. They have been known to move up to 10 miles from release points.

If we know that beetles are already there, we will not need to spend any effort releasing them. Your help mapping will contribute to our understanding of the effectiveness of the biological control project and can save money and time.

Procedure: Observe patches of Purple Loosestrife looking for beetle damage or beetle eggs, larva, or adults. Use the Purple Loosestrife Beetle Identification card to help you. Record observations and location at which observations were made by submitting data using either:

- Data sheets and map with location marked
- Online data submission and mapping found linked to WRP website (preferred)

Materials:

Purple Loosestrife Beetle Identification Card (Found at)
http://www.mass.gov/czm/wrp/projects_pages/loosestrife_beetle_monitor.htm

To request that a laminated Beetle Identification Card be sent to you, email beth.suedmeyer@state.ma.us.

Data Sheets (in the excel file in this folder)
Pencils
Clip boards
Maps or GPS Unit (optional)

To help map *Galerucella* beetles and damage on purple loosestrife and report observations go to this website:

http://www.mass.gov/czm/wrp/projects_pages/loosestrife.htm and follow the instructions for reporting observations of beetles and damage.

Be careful. Zoom in closely to your site. Avoid dragging other spots away from their mapped location.

Comment [BS1]: Remove this from this sheet, but I will add it to my instruction sheet found at the link above. If the protocol changes this note will not apply.

INVASIVE WEED MAPPING FORM

Species (common, *Latin*) name: Purple Loosestrife (*Lythrum salicaria*)

Observation date:

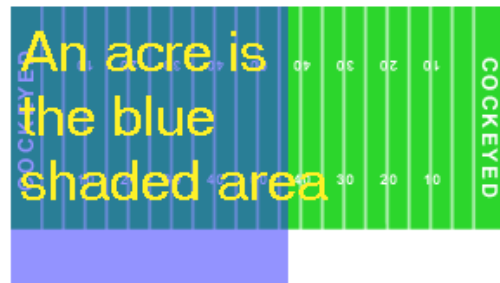
Observation time(s):

Observation team members:

American football field
360 ft long x 160 ft wide
57600 ft or 1.32 acres

Contact email address(es):

Contact telephone number(s):



Area searched:

Town -

Map section -

Main road(s) -

Description of area search (e.g. west of Newbury Road to east of High Street):

Surrounding land use:

Landowner(s) contacted:

Name

Property Address

Telephone

Was the area thoroughly searched?

___yes

___no

___uncertain

If uncertain, explain:

Comments:

DATA FOR EACH PURPLE LOOSESTRIFE PATCH FOUND

page ____ of ____

1. Assign a unique ID# for the patch, starting with your initials. Label photos with ID if taken.
2. Description of location: Town, road intersection/other landmarks; GPS coordinates if available
3. Any evidence of beetles/beetle damage? **Yes/no**. Please note NA if you did not check.
Describe: Beetles/larva/eggs present, holes in leaves, windowpane pattern in leaves.
4. Estimate patch size: **A**= A few square yards,
B= Less than an acre, but more than a few square yards, **C**= More than an acre (football field)
5. Estimated % cover of wetland infested with purple loosestrife.
A = <25%, B = 25-50%, C = 50-75% or D = 75-100%
6. Any other invasives present (Phragmites, Perennial Pepperweed, Japanese Knotweed, etc.)
7. Percent confidence that the patch is purple loosestrife?

| 1 Patch ID | 2. Location Description: Town, Road intersection/ GPS Coordinates | 3. Evidence of Beetles/ damage? | 4. Patch Size | 5. Density | 6. Other invasives | 7. ID % Confidence |
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