COL StewU 2015

This document contains a summary of the information presented at the third session and provides links to suitable material for review and further learning.

Homework for Session 4, April 25th

Review all invasive plant species for quiz on the 25th.
Refer to attached sheet for Photo-Monitoring Field Homework

Interconnectedness of Nature and Ecology

Turtle World – an allegory about humans and our relationship to the earth
https://www.youtube.com/watch?v=JHRYe6ldzJI

http://www.bullfrogfilms.com/catalog/turwo.html

Invasive Plants:

Midwest Invasive Species Information Network Training Modules
http://www.misin.msu.edu/training/

Glossy buckthorn (*Frangula alnus, Rhamnus frangula*)
http://www.michigan.gov/documents/dnr/Glossy_Buckthorn_389118_7.pdf
http://www.dnr.state.mn.us/invasives/terrestrialplants/woody/buckthorn/id.html

Common buckthorn (*Rhamnus cathartica*)
http://www.michigan.gov/documents/dnr/Common_Buckthorn_389115_7.pdf
http://www.illinoiswildflowers.info/trees/plants/cm_buckthorn.htm
http://www.dnr.state.mn.us/invasives/terrestrialplants/woody/buckthorn/id.html

Japanese knotweed (*Reynoutria japonica, Fallopia japonica, Polygonum cuspidatum*)
https://www.michigan.gov/documents/dnr/knotweed_BCP_372280_7.pdf
http://www.dnr.state.mn.us/invasives/terrestrialplants/herbaceous/japaneseknotweed.html
http://www.illinoiswildflowers.info/weeds/plants/jp_knotweed.htm

Purple loosestrife (*Lythrum salicaria*)
http://nas.er.usgs.gov/queries/greatlakes/FactSheet.aspx?SpeciesID=239&Potential=N&Type=0
http://www.illinoiswildflowers.info/weeds/plants/pp_loosestrife.htm
http://www.dnr.state.mn.us/invasives/aquaticplants/purpleloosestrife/index.html
http://www.miseagrant.umich.edu/downloads/ais/fs-97-501_purple_loosestrife.pdf

Report Invasive Species in MI
http://www.misin.msu.edu/Report/

MI Invasive Plants Field Guide from Michigan Natural Features Inventory
http://mnfi.anr.msu.edu/invasive-species/InvasivePlantsFieldGuide.pdf

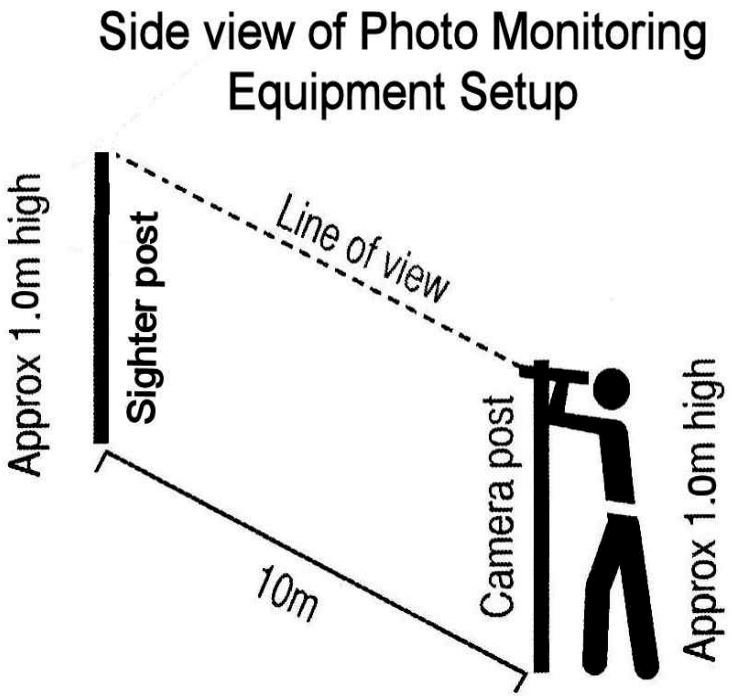
MI Prohibited & Restricted Plant Species
http://www.michigan.gov/mdard/0,4610,7-125-1569_16993-11250--,00.html

Photo-Monitoring for Property Management

Why?
Photo-monitoring is an easy, inexpensive method to keep track of changes of a property over time.

What?
Document management actions, invasive species control, other restoration efforts, seasonal change, changes in landscape features.

How?
Choose a photo focal point and a camera point. Document points with posts & GPS coordinates and document photos with location, coordinates, date/time, and compass heading. (A view of the skyline or other permanent feature may also be used for reference.)

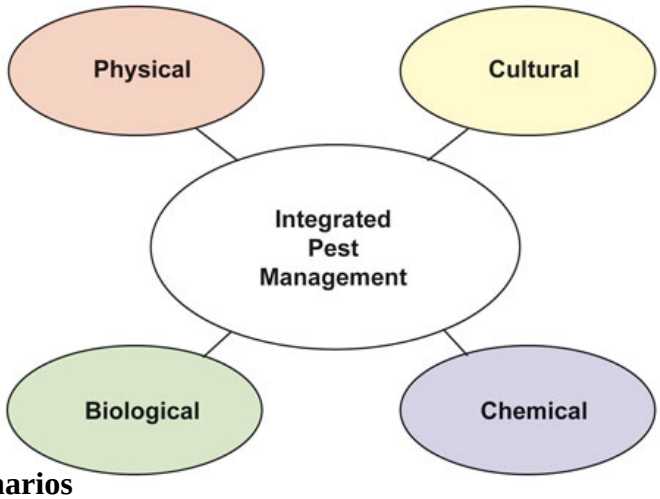


Using crowd-sourcing for photo documentation.
http://monitorchange.org/

Intergrated Vegetative Management (IVM)

Review of IVM Process:
Set Goal(s). Evaluate/Inspect Site and Pests. Set Threshold for Action. Select Best Control Methods. Implement Control Methods. Monitor and Review Results. Revise Plan As Necessary.

Types of Control:



IVM Strategy & Scenarios

1. You have recently purchased a property. In the spring you observe that in one corner along the road there is an area of garlic mustard. The garlic mustard also reaches into the adjacent woodland area. What factors would you take into consideration in deciding how to deal with the situation? What additional information would you want before making a decision about controlling the plants? What is your IVM strategy?

- Set a goal and threshold for IVM strategy: Eradication of all garlic mustard? Keeping a large area at bay and stop from spreading?
- Consider multiple factors to determine most effective and appropriate method of control: Time of year/plant development, size and density of population, other native species affected?
- Implement best method of control: For a small patch or in around native species, hand-pulling 2nd year plants in late spring before flowering with continued control in subsequent years. For large patches with few natives: mowing or selective herbicide application.
- Monitor control methods (photo-monitoring?) and re-evaluate goals & strategy as necessary.

2. Your friend has a property with a small pond. They have observed that last summer there were several "weedy" rose bushes growing near the edge of the pond. Your friend said they had pink flowers last summer. They would like to remove them. What factors would you take into consideration in deciding how to deal with the situation? What additional information would you want before making a decision about controlling the plants? What is your IVM strategy?

- Confirm identity of the pest: A wild rose bush with pink flowers may likely be native swamp rose (*Rosa palustris*).
- Determine goal and threshold for IVM strategy: Advise friend that the rose is a high-quality native species. Determine if removal is necessary, as other methods may contain and improve the "weedy" appearance.
- Implement best method of control: Prune roses regularly to contain and improve aesthetic appearance. If widespread along pond, selectively remove (possibly transplant?) rose bush to thin population.
- Monitor control methods and re-evaluate as necessary.