



Engaging Volunteers

IN INVASIVE SPECIES EARLY DETECTION AND MANAGEMENT

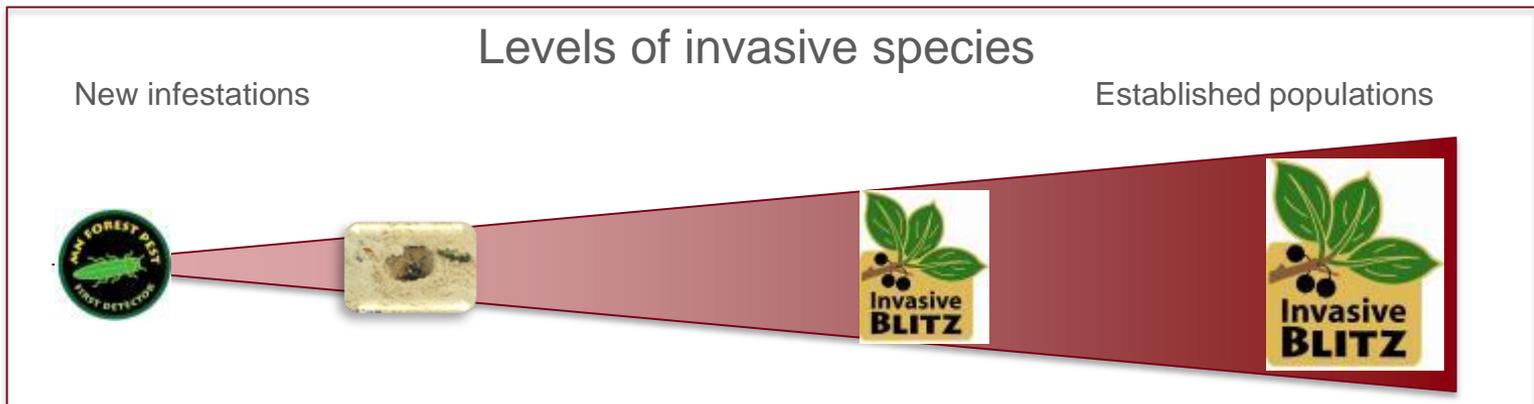


OUTLINE

- **Programs** - Forest Pest First Detector, Invasive Blitz & Wasp Watchers
- **Tools** – Online resources & Materials
- **Impacts**

PROGRAM TIMETABLE

Terrestrial Invasive Species Volunteer Programs in UMN Extension						
2008	2009	2010	2011	2012	2013	2014
 Forest Pest First Detector						
EAB only	EAB + additional insects		EAB+ insects + OB		OB surveys	Ash survey
				 Invasive Blitz		
					 Wasp Watchers	



FOREST PEST FIRST DETECTOR



- First Detection of pests in State & County
- Educate public
- Partners



SAMPLE INVASIVE SPECIES



TCD



ALB



OB



BMSB



GM



EAB

INVASIVE BLITZ



MINNESOTA



WASP WATCHERS



Legislative-Citizen Commission on
Minnesota Resources

ONLINE TOOLS

The screenshot shows the 'My Minnesota Woods' website. On the left is a navigation menu with categories like 'Agronomy', 'Legal and Financial', and 'Woodland Care'. The main content area is titled 'Wasp Watchers' and features a photograph of a Smokey Winged Beetle Bandit Wasp. Below the photo, there is a list of instructions for volunteers, including visiting pre-identified sites, monitoring for wasps, and reporting findings. A 'LOW RISK' status banner is also visible.

Cerceris fumipennis site check for presence/absence

* Required

Smokey Winged Beetle Bandit Wasp (*Cerceris fumipennis*)



Site Name *

Date *
Date and time site visit occurred
mm/dd/yyyy --:--:--
Example: 03/05/2013 11:30 AM

Amount of Time Spent *
Number of minutes spent searching for cerceris--include travel time to site

Street Address *
address or cross street of site location

Town *

County *

Latitude
decimal degrees

Longitude
decimal degrees

Cerceris fumipennis wasp found? *

- Cerceris fumipennis nests found and wasp observed
- Cerceris fumipennis wasp observed, but no nests found



EDDMapS *First Detector*
Early Detection & Distribution Mapping System

Report Sightings Distribution Maps Species Information



Partners



EDDMapS *First Detector*

Early Detection & Distribution Mapping System

About | Partners | Contact

Report Sightings Distribution Maps Species Information Tools My EDDMapS

sign out

Report an Invasive Species Occurrence

Species

Pest:

Infestation

Observation Date: (?)

Habitat: (?)

Life Stage(s) Adult(s) Egg(s) Larva(e) Nymph(s) Cocoon(s)/Pupa(e) Damage Unknown
Observed:

Location

State:

County:

Latitude:

Longitude: Private

Location Description:



Internet Portal: Uni... Imported EABFirstDetectorsTr... ec.europa.eu/enviro... ca...

resourWoods



My Minnesota Woods

- Agroforestry
- Legal and Financial
- Woodland Forest Products
- Urban Natural Resources
- Woodland Care

Search MyMinnesotaWoods:

- Stewardship Plan Preparers
- First Detector
- Monthly Email Update: Archives
- Upcoming Events
- Extension Forestry Team

University of Minnesota

Oak wilt risk status
LOW RISK
CLICK FOR INFORMATION
Add oak wilt status to your site

Woodland Stewardship book:



Minnesota Forest Pest First Detector

News:

- We've created a **First Detector** group. A welcome to join at no cost. The group is a First Detectors, post questions and come to Minnesota First Detector news.
- Use **EDDMaps** to report sightings online connected device.

Forest Pest First Detector workshops

Spring 2014 workshops scheduled

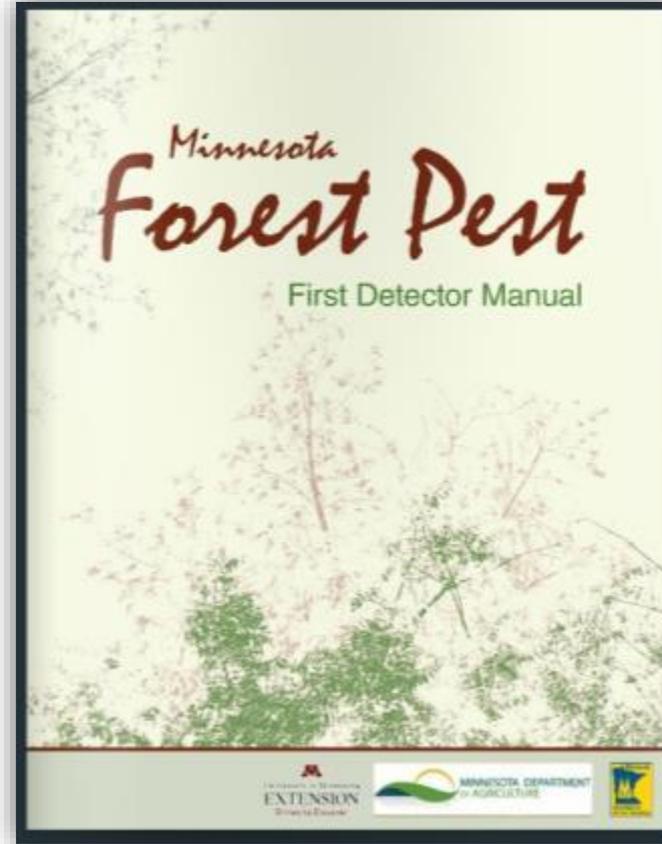
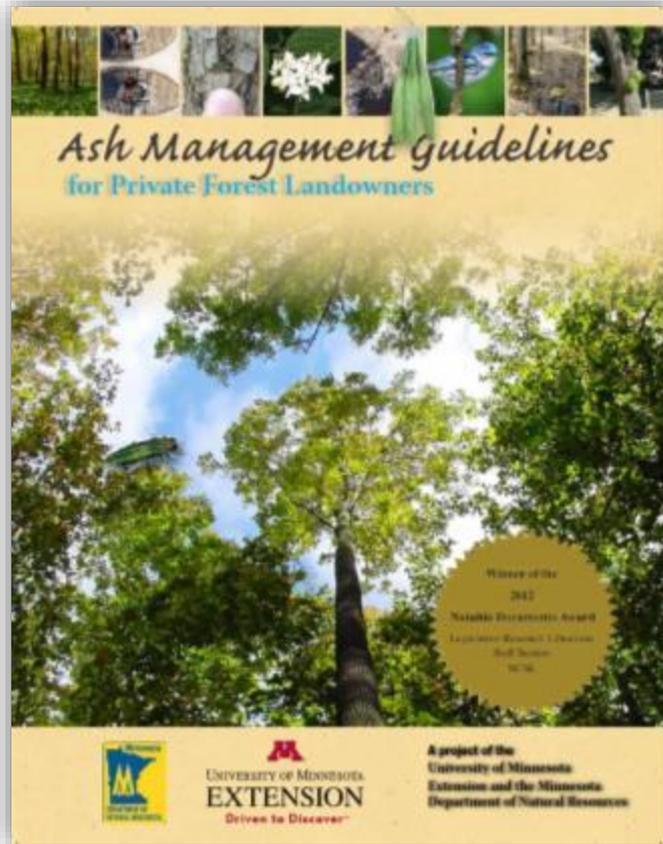
We've scheduled six First Detector workshops around Minnesota for spring 2014. These are all on our [calendar of events](#).

Please read this [2014 Forest Pest First Detectors Information brochure \(PDF\)](#) BEFORE you register for a workshop by clicking below on the workshop you wish to attend. Pre-registration required.

Each workshop has been approved for:

- International Society of Arborists CEU's:
 - Certified Arborist: 4.5
 - Municipal Specialist: 4.5
 - BCMA - Science: 4
 - BCMA - Management: 0.5

MANUALS & GUIDES



TOOLS



- Project planning tools:
 - Management Matrix
 - Prioritizing Invasive Plant Control

Species	Timing				Class of Invasives		
	Winter	Spring	Summer	Fall	Cut stump	Basal Bark Application	Foliar spray (before leaf-out or after)
Blackberry	cut and treat stump		cut and treat stump	cut and treat stump	20-25% glyphosate or 12.5% triclopyr		Can work for all sizes but is a must for plants larger than 6" in diameter
Basal Bark Treatment	treat stem		treat stem	treat stem - best time		12.5% triclopyr with penetrating oil	Works well for stems less than 6" in diameter. Can treat only one side for stems less than 2" in diameter.
Foliar Spray			spray foliage	spray foliage		14% glyphosate or 1% triclopyr with water, surfactant required	Best to avoid native vegetation, best to do in fall after natives have dropped their leaves but increase when foliage
Burn*		burn to kill seedlings in fire-adapted communities. May require frequent burns					burn to deplete seedbank, seedlings will need repeated burns
Pull*		cut and pull small stems when soil is moist					
Nonrenewable	cut and treat stump - best time when using herbicide		cut and treat stump	cut and treat stump	20% glyphosate or 12.5% triclopyr		cut stems can regrow so its important to hang them in trees to allow them to die out
Cut & Treat Basal Bark Treatment	treat stem		treat stem	treat stem		12.5% triclopyr with penetrating oil	Using penetrating oil is the most effective
Foliar Spray		spray foliage - best time	spray foliage	spray foliage		MethoLone-methyl plus surfactant or 14% glyphosate	Less effective than other methods
Burn*	burn in spring to deplete seed bank seedlings						Will need to repeat burn to be effective. MethoLone-methyl plus surfactant or 14% glyphosate
Pull*		cut and pull small stems when soil is moist					
Mulch/soil cover							
Cut & Treat Basal Treatment		cut and treat stump			10% glyphosate	12.5% triclopyr with penetrating oil	
Basal Treatment		treat stem					
Foliar Spray			July-Aug spray foliage with heptamine			1% heptamine in water	heptamine spray results won't be seen until following summer; must cover soil but not clipping
Burn*	burn in spring						will need follow-up treatment to address resprouting and establishment of new plants
Pull*		cut and pull small stems					must get all of the roots or it will sprout
General							
Herbicide							
Cut & Treat Basal Treatment	cut and treat stem			cut and treat stem	10% glyphosate or 12.5% triclopyr		should wait until after fallow have stopped their leaves or in early spring before emergence of spring ephemerals
Basal Treatment				after hard frost			
Foliar Spray				after hard frost		2,4-D or triclopyr	cut stems should still sprout after first hard frost in the fall
Pull*		cut and pull small stems					can pull or dig out small infestations



MATERIALS



- Artificial specimens



- Take home items



TOOLS FOR ENGAGEMENT



Which exit hole was created by EAB?

A. 1
 ✓ B. 2
 C. I don't know

Option	Percentage
A	8%
B	92%
C	0%



Survey questions:

- Property size: The total area of the property is 25 acres.
- Land ownership: The work site you have in mind is a boat camp; you are affiliated with...
- Known invasives present: You know for sure your property has a *Buckhorn* infestation.
- Level of infestation: Your second invasive species has a low level of infestation.
- Known Invasives present: You know for sure your property has an infestation of honeylocust.
- Level of infestation: Your first invasive species has a moderate level of infestation.

TECHNOLOGY



FIRST FINDS

Public Value =
\$80,000/year



TCD



ALB



OB



BMSB

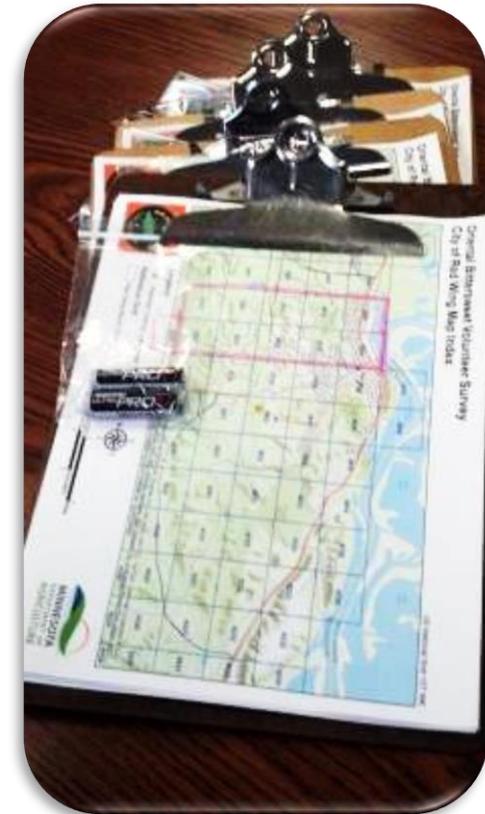


GM



EAB

SURVEYS



INVASIVE BLITZ



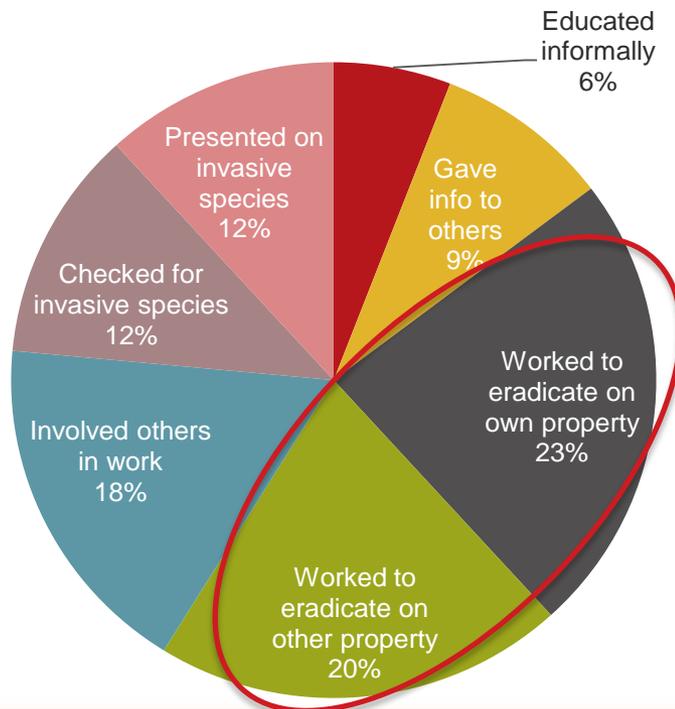
Photos from UMN Extension, Andrea Lorek Strauss

ONE YEAR LATER

- 86% doing something!

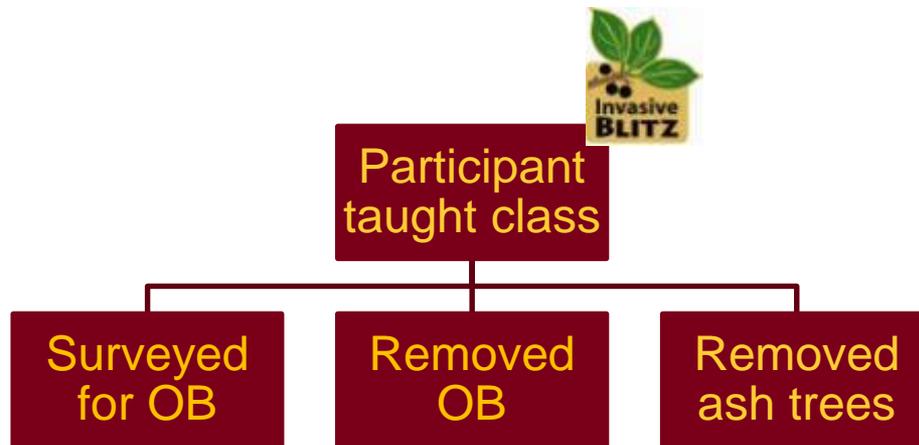


IB Participant Activity 1 Year Later



ONE YEAR LATER

- 375 hours = 30.25 hours/respondent
- **Public value = over \$9,000**
- Acres impacted = 30+



Influenced 20 Homeowners:
Managed for EAB
Managed for OB



Thank you!

Angela Gupta, agupta@umn.edu

These projects have been supported in partnership with the Minnesota Department of Natural Resources, the Minnesota Department of Agriculture, the Minnesota Department of Transportation, the University of Minnesota and UMN Extension. Through the years funding has been provided by the Renewable Resource Extension Act, Forest Stewardship, the Legislative-Citizens Commission on Minnesota Natural Resources and others.

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