BEST MANAGEMENT PRACTICES

Bernie Williams WDNR, Brad Herrick and Judy Kingsbury UW Arboretum

INVASIVE SPECIES

Wisconsin Best Management Practices

The GOAL is to limit the introduction and spread of invasive terrestrial plants, insects and diseases.

- Voluntary
- Flexible standards
- Process of continual learning and adapting
- Online BMP training in the works…stay tuned



Prevention

- Wind
  - Prevent seed set
- Water
  - Prevent seed set
- Animals
  - Prevent seed set (burrs, scat, etc)
  - Dioecious- focus on females
- Humans
  - Focus of BMPs
  - Firewood

Four Parallel BMP Tracks

BMPs apply to everyone!

- Forestry
  - Loggers, landowners and foresters
- Recreational Users
  - Campers, hikers, ATV riders, horse riders, bicyclists, land managers, etc
- Urban Forestry
  - Urban foresters, arborists, nurseries, landscapers, etc
- Rights-of-Ways
  - DOT, county/township road managers, utilities, etc

BMPs

- **Major themes**
  - **Planning- need to know what is there**
  - **Education**
  - **Cleaning**
  - **Avoidance**
  - **Minimize disturbance**
  - **Use clean materials**

THE KEY TO IT ALL

PLANNING!

Planning and Avoidance

Site preparation creates bare soil and high light environment conducive to invasive establish-ment and spread.

Consider the likely response of invasive species or target species when prescribing activities that result in soil disturbance or increased sunlight.

Prior to implementing management activities, scout for and locate invasive species infestations, consistent with the scale and intensity of operations.

Knowing which invasive species are present, and their location, is the first piece of information needed to evaluate threats.

Clean your equipment

Clean yourself!

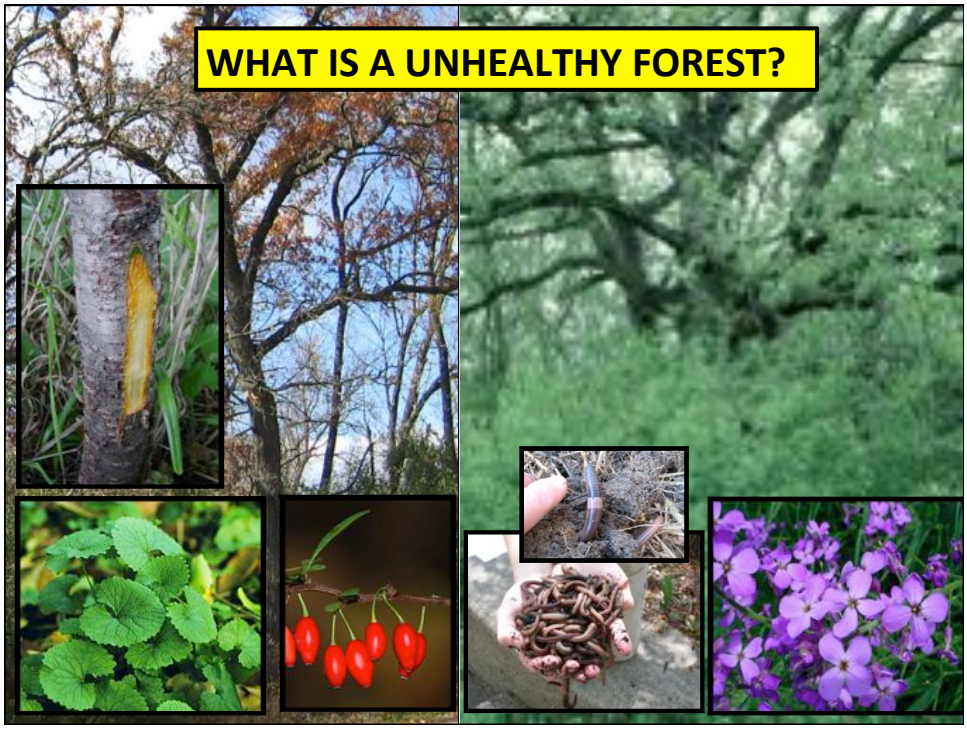
BE ON THE LOOK OUT

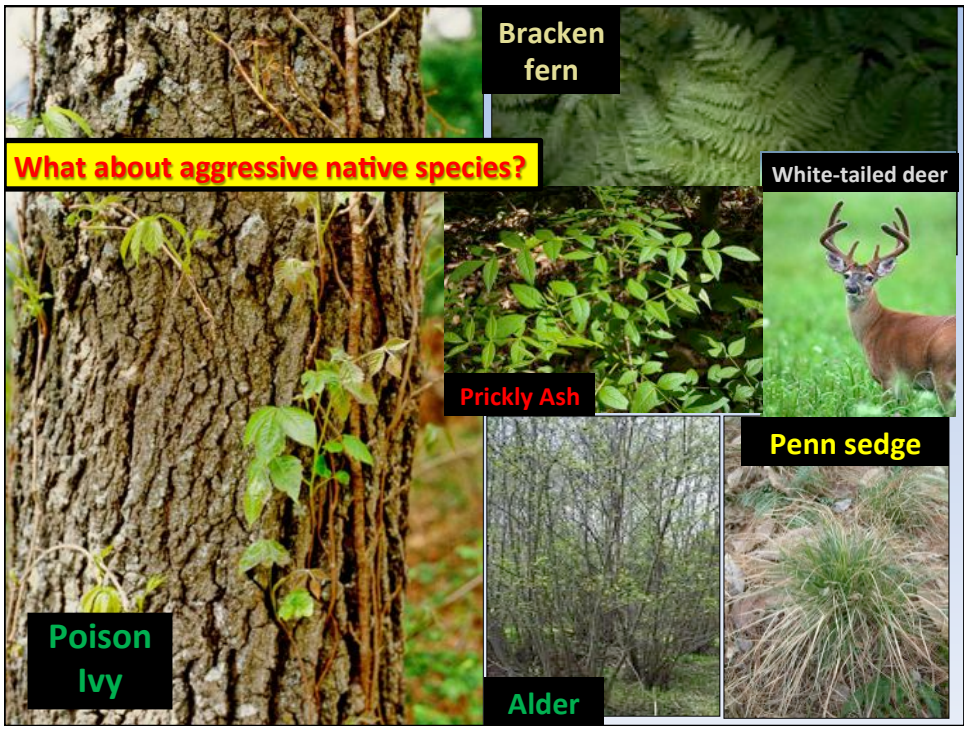
You are NEVER free from the threat of INVASIVE SPECIES!

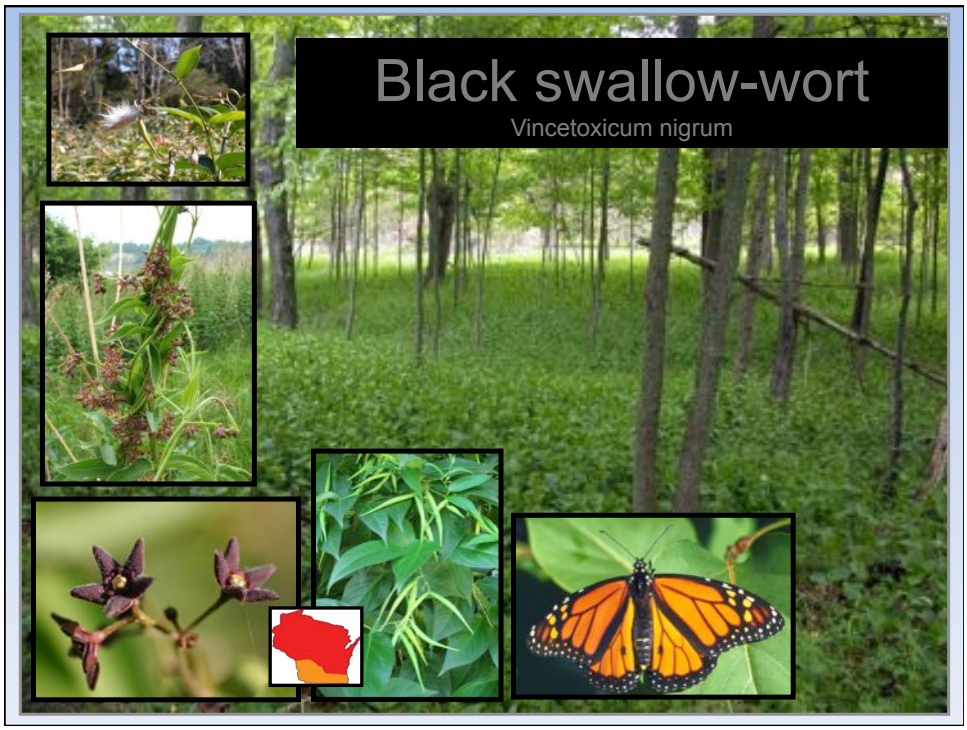
IDENTIFICATION = PREVENTION

For long term impacts and cost.

WHAT IS A HEALTHY FOREST?


WHAT IS A UNHEALTHY FOREST?


Bracken fern
What about aggressive native species?
White-tailed deer
Prickly Ash
Penn sedge
Poison Ivy
Alder


Black swallow-wort
Vincetoxicum nigrum

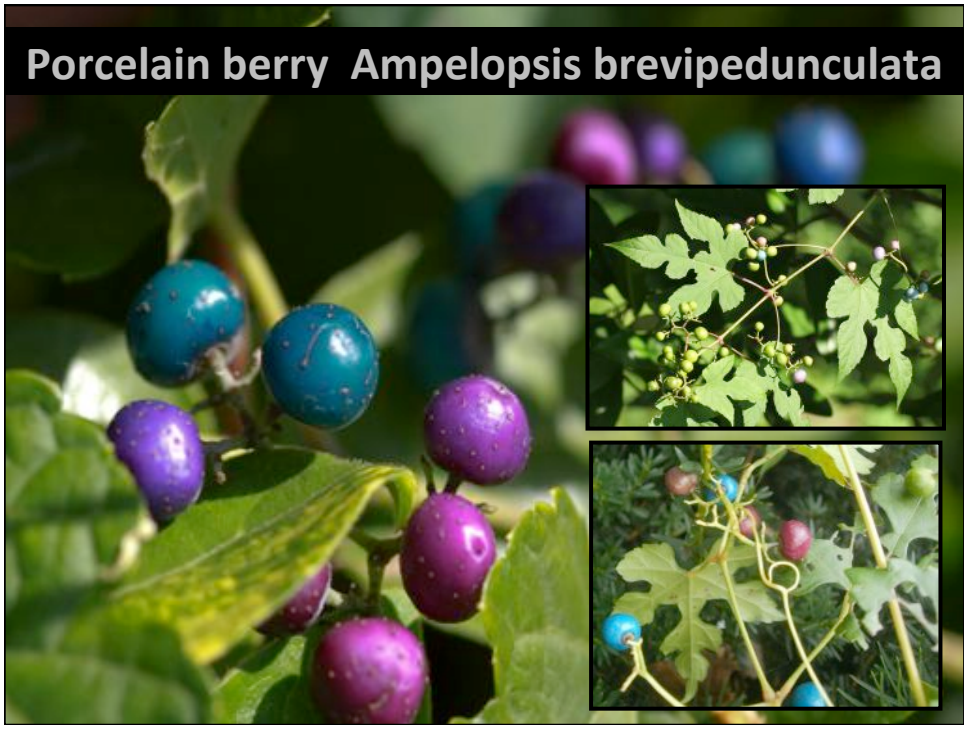
Japanese barberry
Berberis thunbergii

Barberry is shade tolerant, drought resistant, and adaptable to a variety of open and wooded habitats, wetlands and disturbed areas. It prefers to grow in full sun to part shade but will flower and fruit even in heavy shade.

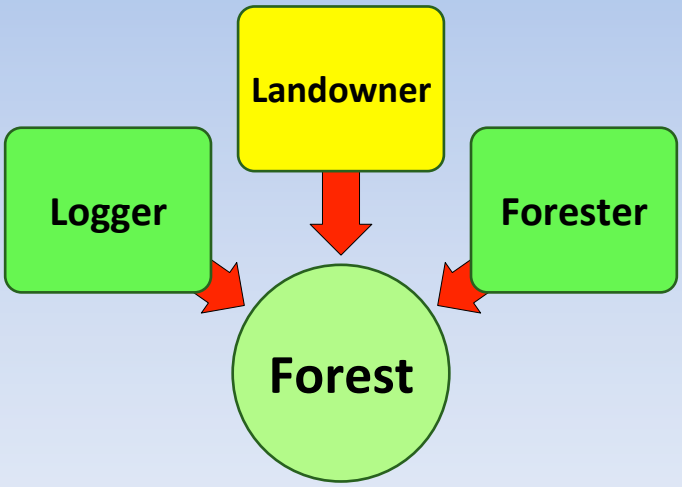
[4] Restrict straight species and the cultivars: Tara; Crimson Velvet; Sparkle; 'Anderson' Lustre Green; Marshall Upright; Erecta; 'Bailgreen'; Jade Carousel; Red Rocket; 'Monomb' Cherry Bomb; Painter's Palette; Inermis; Wild type/parent species; var. atropurpurea; 'Bailone' Ruby Carousel; Pow Wow; JN Redleaf; Gold Ring; Rose Glow; Kelleris; Kobold' 'JN Variegated' Stardust; 'Bailsel' Golden Carousel; B. koreana x B. thunbergii hybrid; Silver Mile; Antares

Burning bush *Euonymus alatus*

Porcelain berry Ampelopsis brevipedunculata



One Common Interest



START THE CONVERSATION!

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Goal: Minimize and control the spread of invasive species

When possible, keep out of areas infested with invasive species, especially areas with newly arrived pests.

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General BMP's
- Can be applied to a variety of species, tasks, and locations

Customized BMP's
- Specific to one species or type of organism
- May vary depending on location, task, and level of current infestation even for the same species or organism.

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Boot Brushes

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Equipment

Clean vehicles and equipment before and after leaving work sites.

Includes: gardening tools, hand/chainsaws, mowers, wood chipper, trailers, etc.

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Boot/Shoe Covers

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Understand plant phenology and plan invasive species removal to minimize spreading seeds and fruits.

Garlic Mustard

Common Buckthorn

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Example: Invasive Earthworm

- Jumping worm (*Amynthas* spp.) was found at the Arboretum in 2013.
- Jumping worms can damage forest understory and facilitate the spread of other invasive species.
- Impacts our nursery operation, land management and plant sale.

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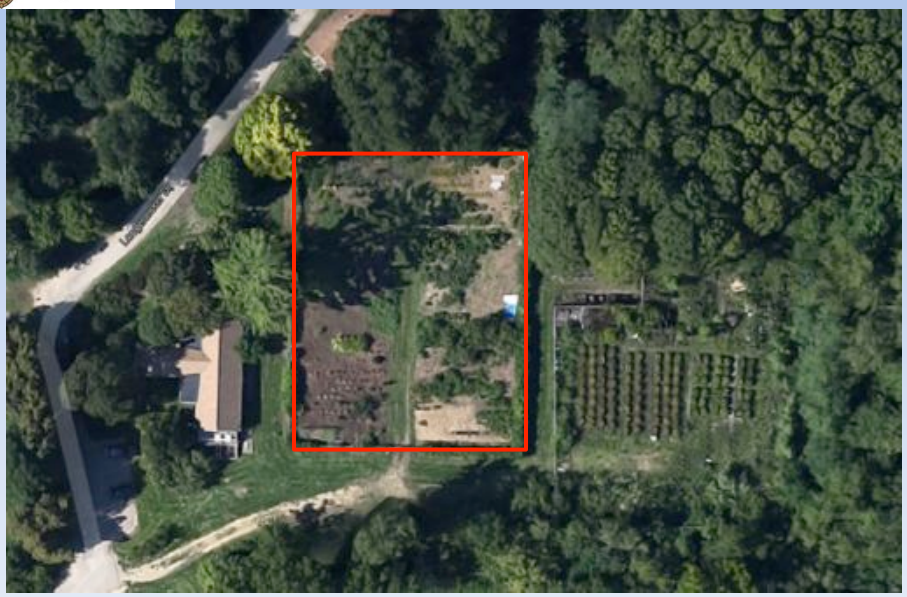

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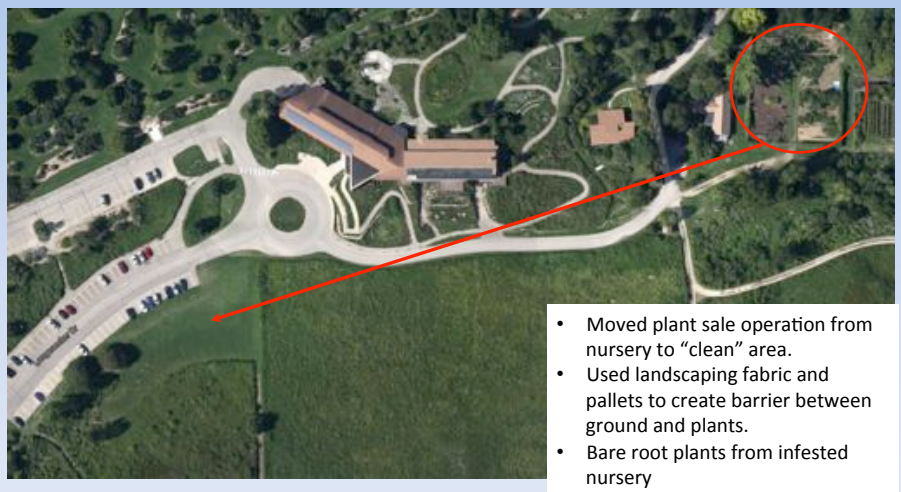

- Moved plant sale operation from nursery to "clean" area.
- Used landscaping fabric and pallets to create barrier between ground and plants.
- Bare root plants from infested nursery
- Education

Engaging Volunteers in Invasive Species Management:

Best Practices for Organizations

Judy Kingsbury, UW-Arboretum

What I will cover:

-Organizational Readiness

-Recruitment

-Screening

-Training

-Supervision

-Recognition

Organizational Readiness

- Planning
- Needs Assessment
- Job Design

Planning –part one

Wild hyacinth, *Camassia scilloides*

- Mission – What do you do and why?
- Parameters – Laws and Policies

Planning – part two

See any risks here?

- Procedures – How to do things well
- Risk Assessment

Needs Assessment

- Work you know needs doing
- New Ideas – do purposeful networking to get ideas from others
- Capacity of your organization

A volunteer team leader - getting the job done!

Job Design

- Base volunteer jobs on real organizational need and capacity
- Consider need for supervision
- Think about motivations
- Create job descriptions

Ready? Set? RECRUIT!

- Skills needed?
- What commitment are you asking?
- Where might you find interested people?
- Local recruiting resources

Screening & Placement

- The more responsible the position, the greater the need for screening.
- It is okay to say “No.”
- Try to match the right people to the job open.
- Some jobs are perfect for almost anyone.

Orientation and Training

- Make sure each volunteer knows key facts
- Match training to duties
- Offer refreshers
- Consider pre- and post-tests to check training effectiveness

Teaching garlic mustard and dame's rocket identification

Supervision

Good supervisors:

- Prepare
- Communicate
- Orient & train
- Understand
- Offer & request feedback
- Are fair
- Show respect

Good supervisors point and wear ties, too!

Recognition!

- Match the recognition to the volunteer
- Seek opportunities for community recognition in your area
- Recognition is a continuous process

Remember

- Create and maintain good relationships
- Prepare, Act, Evaluate, Communicate, Repeat
- Say thank you

Questions?

Thank you