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INVASIVE PLANTS

In Your Garden & Yard

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Today's webinar

- What are invasive plants (and why should you care?)
- Common invasive plants
- What you can do about invasive plants in your garden and yard



Wintercreeper

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What are invasive plants?

3

Defining invasive species

Federal definition (defined by Executive order 13112 and National Invasive Species Management Plan)

1. Non-native to the ecosystem under consideration
2. Whose introduction does or is likely to cause economic or environmental harm or harm to human health

Invasive Species Defined in a Policy Context: Recommendations from the Federal Invasive Species Advisory Committee

K. George Beck ^[1], Kenneth Zimmerman ^[2], Jeffrey D. Schardt ^[3], Jeffrey Stone ^[4], ...

DOI: <https://doi.org/10.1814/JFSM-08-005.1> Published online by Cambridge University Press: 20 January 2017

Extract

Preamble: Executive Order (EO) 13112—defines an invasive species as “an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.” In the Executive Summary of the National Invasive Species Management Plan (NISMP) the term invasive species is further clarified and defined as “a species that is non-native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.” To provide guidance for the development and implementation of the NISMP, the National Invasive Species Council (NISC) and the Invasive Species Advisory Committee (ISAC) adopted a set of principles outlined in Appendix 6 of the NISMP. Guiding Principle #1 provides additional context for defining the term invasive species and states: “many alien species are non-invasive and support human livelihoods or a preferred quality of life.”

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Native

- Has developed over thousands of years in a particular region or ecosystem

Should always be used with a geographic qualifier




Non-native



Alien Exotic

- Introduced (typically with human help intentionally or accidentally) to a new place or new type of habitat where it was not previously found

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What are invasive plants?

- Non-native
- Can take over
- A BIG problem

Purple loosestrife

Lesser celandine

Pretty but invasive

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Non-native Does Not Mean BAD

Photo credit: Howard F. Schwartz, Colorado State University, Bugwood.org

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Native does not mean DESIRABLE

Photo credit: Steven Katovich, Bugwood.org

Photo credit: Steve Dewey, Utah State University, Bugwood.org

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Native Does Not Mean WON'T TAKE OVER

Photo credit: John Ruter, University of Georgia, Bugwood.org

Photo credit: John Cardina, The Ohio State University, Bugwood.org

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Why are invasive plants a problem?

- Can take over your garden and yard
- Move into natural areas

Chinese wisteria

Photo credit: Chris Evans, University of Illinois, Bugwood.org

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Ecological and economic impacts...

- Direct and indirect
- Decrease biodiversity
- Change ecosystems
- May take advantage of changing conditions & climate

Vinca

Photo credit: Nancy Loewenstein, Auburn University, Bugwood.org

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Characteristics of invasive species?

- High reproduction
- Fast dispersal
- Fast growing
- Tolerate a range of habitats/ foods
- Few natural predators
- Change environment to their benefit

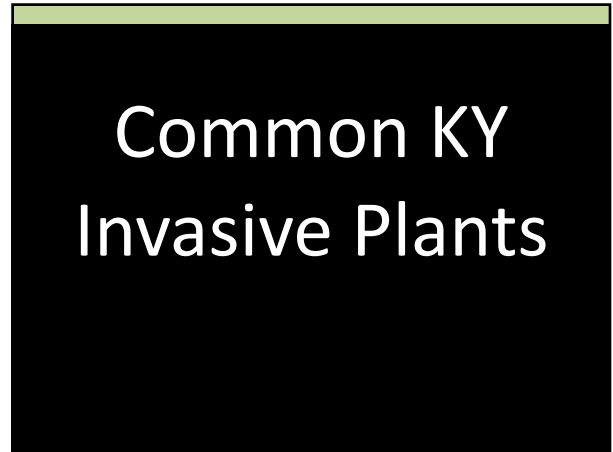
Autumn olive

Photo credit: Pennsylvania Department of Conservation and Natural Resources - Forestry, Bugwood.org

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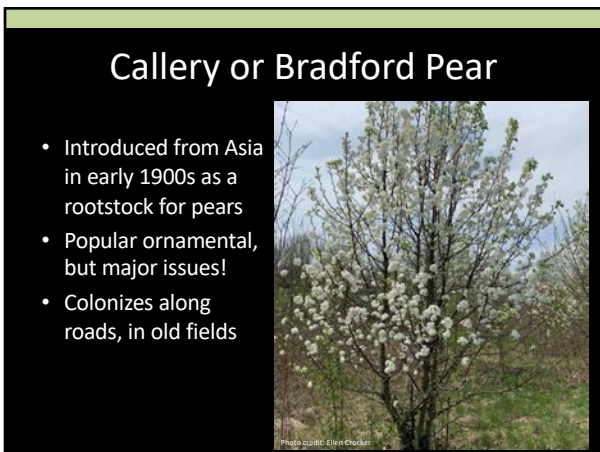
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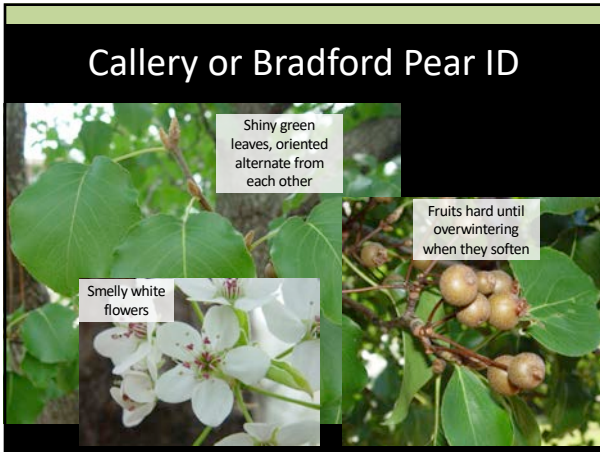
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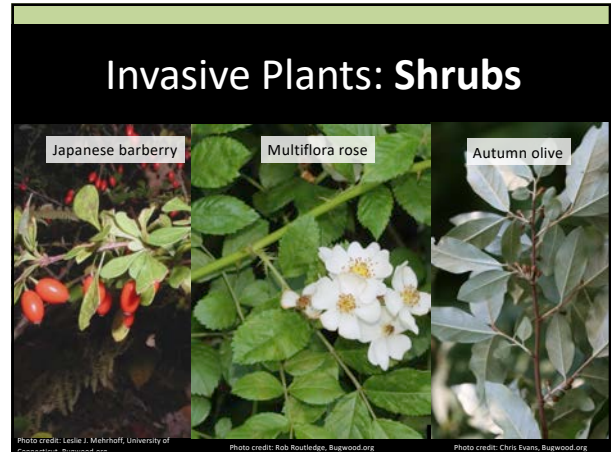
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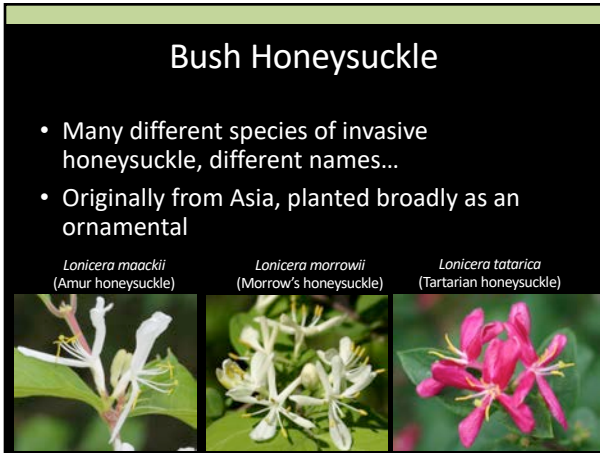
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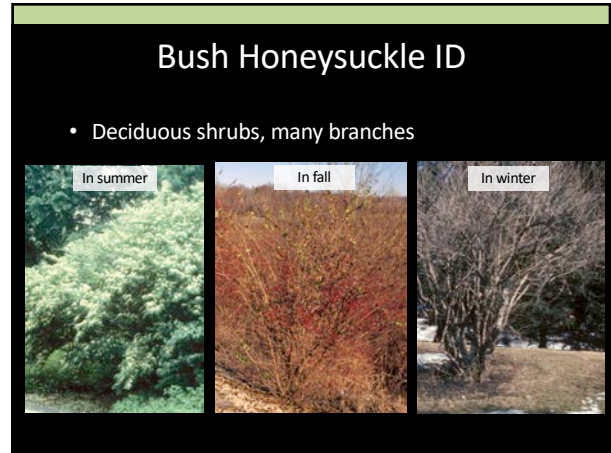
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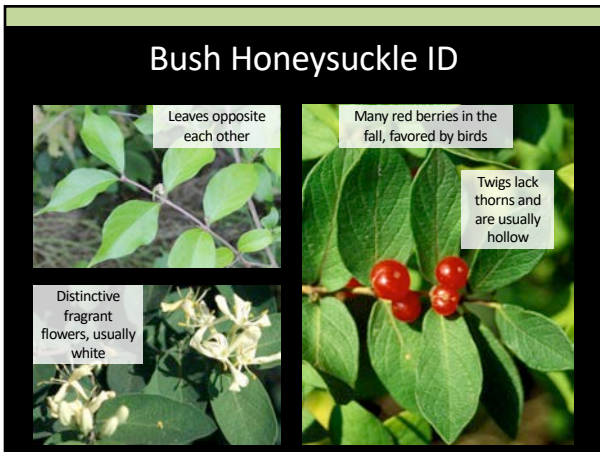
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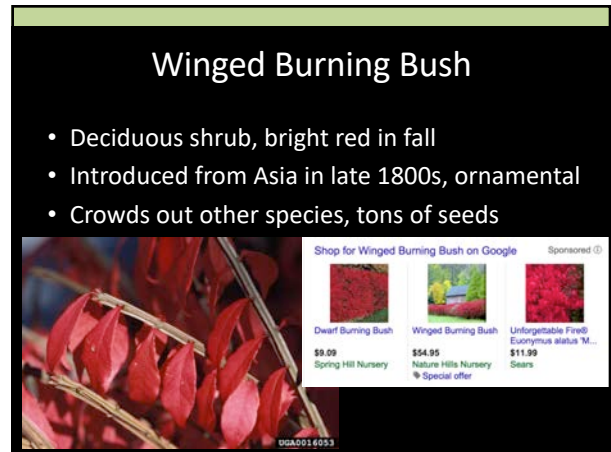
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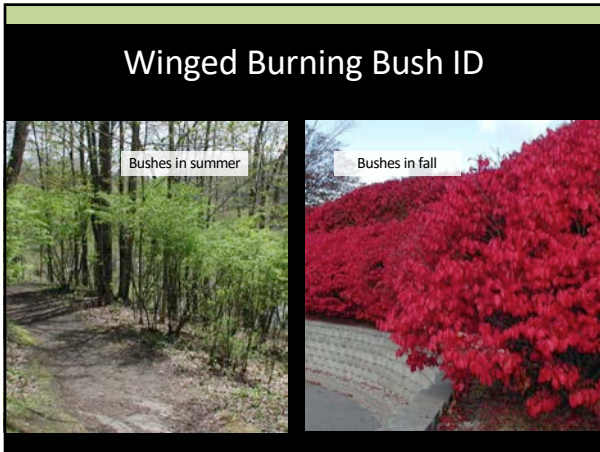
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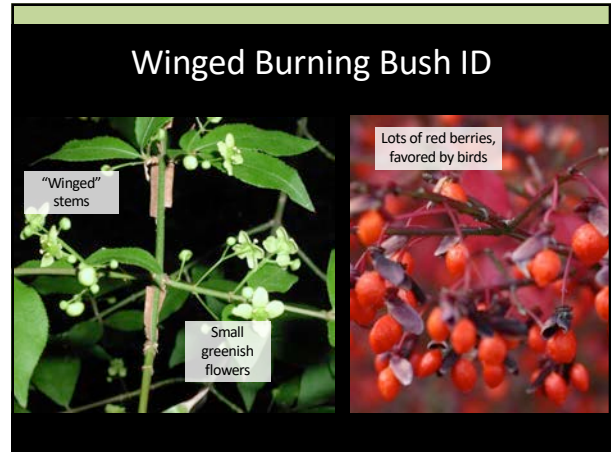
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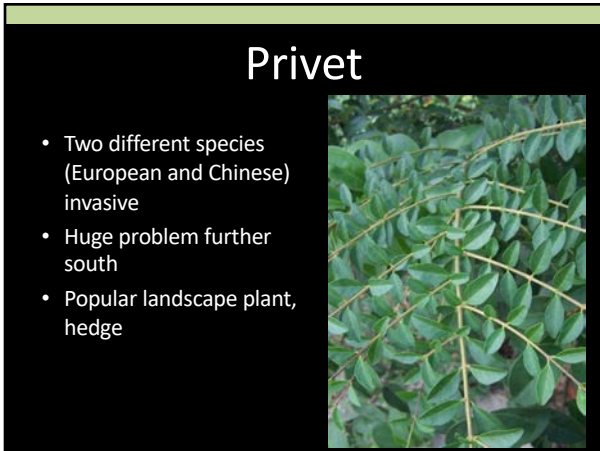
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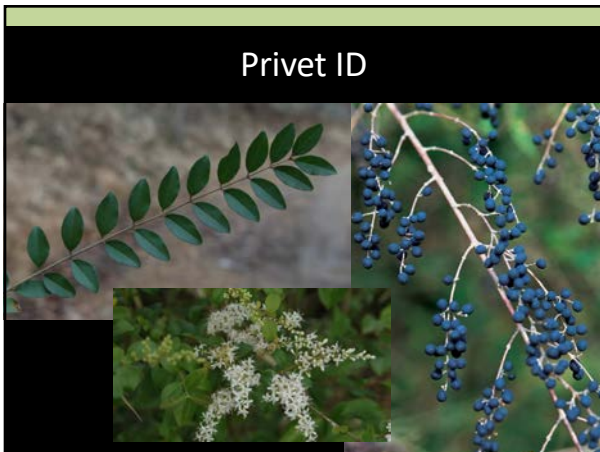
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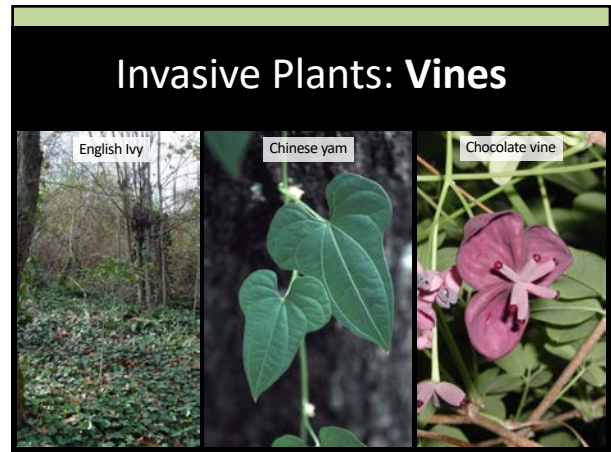
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Wintercreeper

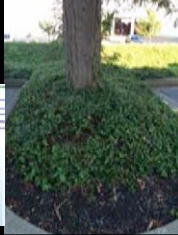
- Evergreen shrub/ vine/ carpet
- Introduced from Asia in early 1900s, ornamental and erosion control
- Covers forest floor, crowding out other species and preventing seed regeneration

Wintercreeper

Qty	Description	Price
1	Wintercreeper - Purple 0.5 20	\$
1	Wintercreeper - Purple 0.5 20	\$
1	Wintercreeper - Purple 0.5 20	\$
1	Wintercreeper - Purple 0.5 20	\$

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Shipping Details:




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Wintercreeper ID




Carpeting forest floor




As a vine, growing up tree

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Wintercreeper ID



Flowers



Fruit

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Japanese honeysuckle

- Fragrant flowers (start white, fade to yellow)
- Black fruit
- Grows over other plants and structures



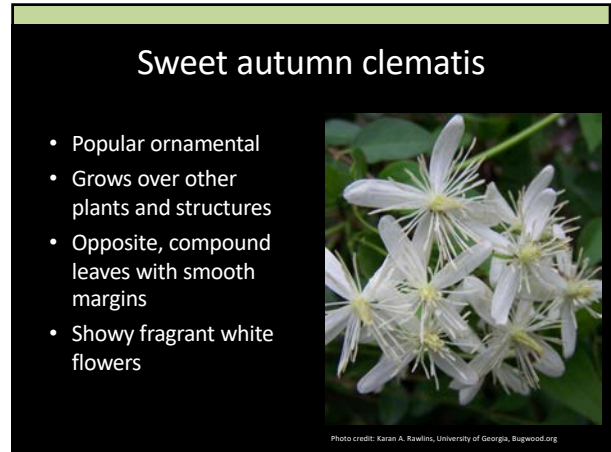
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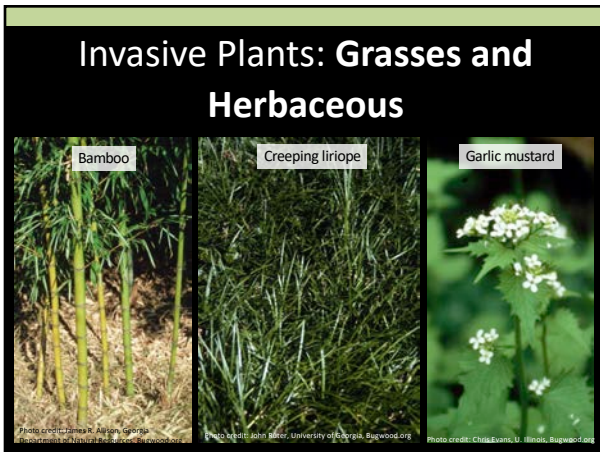
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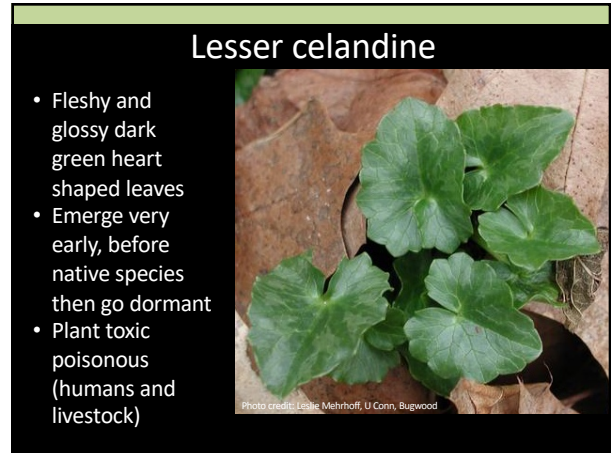
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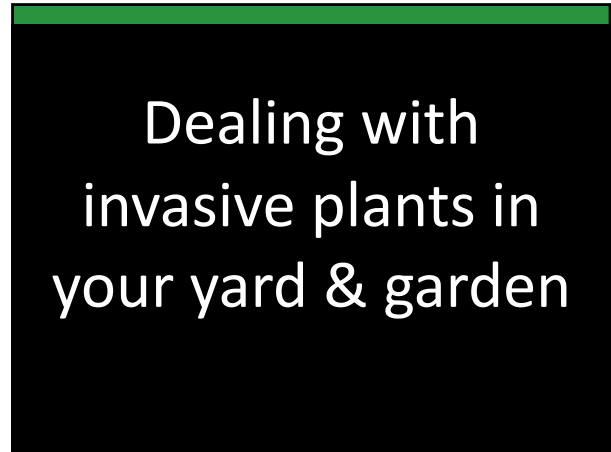
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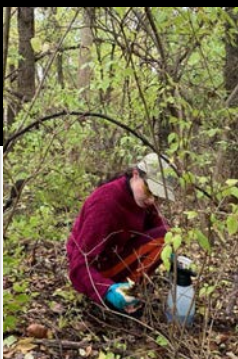
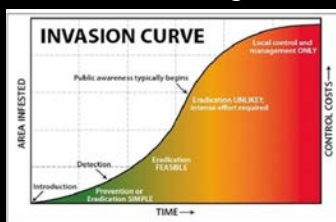
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What can we do to stop invasives?

- Prevent their arrival
- Remove
- Contain and mitigate





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Which plants are a problem?

Get familiar with most common invasives in your area

Just because they are not "invasive" in your garden, doesn't mean they can still be invasive in natural areas



Great expertise available to help in local invasive plant councils and native plant societies

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How to remove invasive plants?

Mechanical removal

- Ex. Mowing, pulling, grazing

Herbicide

Combination

- Ex. "cut-stump," "hack and squirt"

Others...

- Solarization, burning, steam...

Which approach should you take? Depends on...

- Species of plant
- Size of plant
- Size/ severity of infestation
- Area affected
- Your preferences

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Other things to keep in mind...

Don't remove when fruiting, will spread seeds

Keep in plant life cycle/ growth form

Minimize damage to your other plants

- Herbicides toxic to plants you want to keep
- Mechanical removal equipment can compact soil
- Removal can cause disturbances that invasives can exploit

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Planning for the future

Continued monitoring and removal

- Prevent re-establishment
- Invasive seeds in soil will be popping up for years to come
- New invasives will arrive from other areas



Japanese chaff flower

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Useful resources

Visit:

tinyurl.com/KYInvasivePlants


for all these resources!




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Useful technology...

- Find and identify invasive species
- Report (and see) locations of invasive species



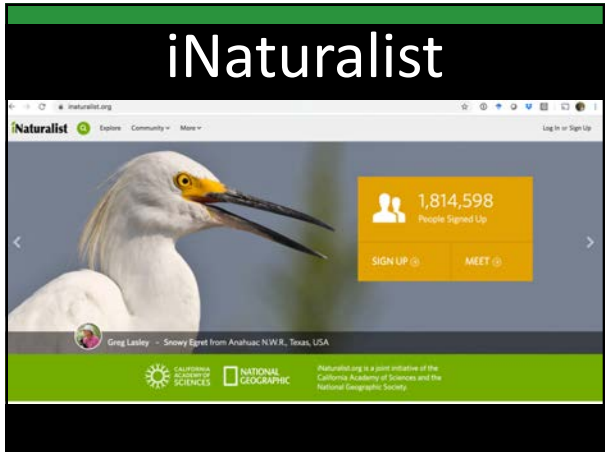




Japanese chaff flower
Achyranthes japonica (Miq.) Nakai

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iNaturalist



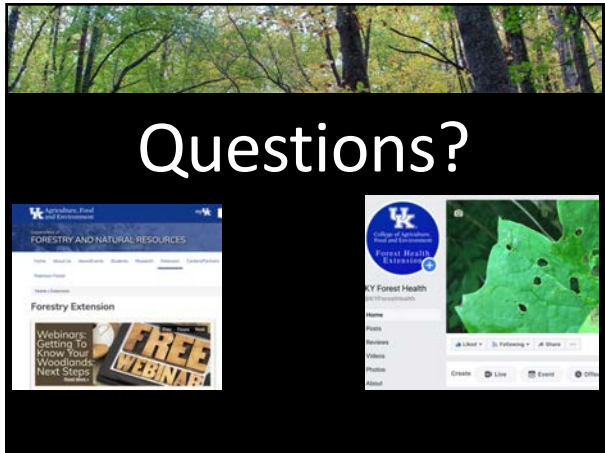
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Questions?



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