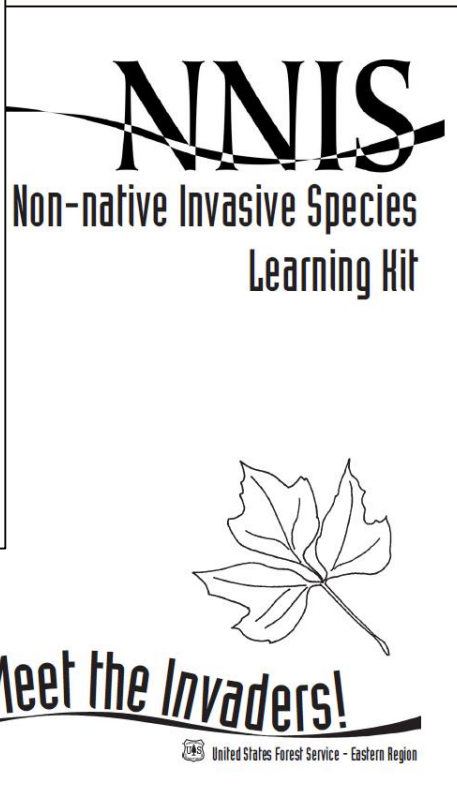
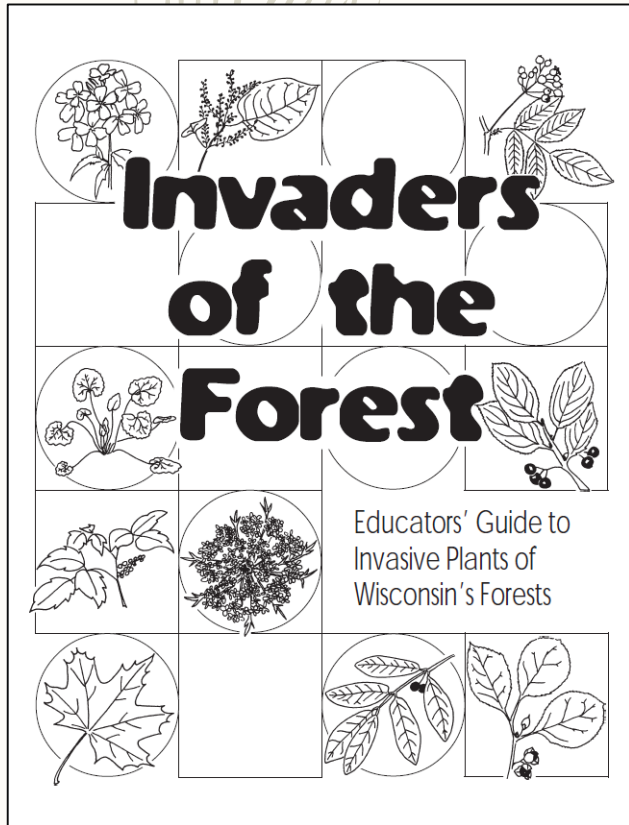




Invasive Species Teaching Resources

& Project Ideas

Lesson Plans & Activities



– Available to download from Google Drive folder



Twig Beads

After removing shrubby invasives, take some time to make twig beads. Use the beads to make garlands, necklaces, or decorations for other art projects. Invasive honeysuckles, with their hollow pith, work especially well for this project.

Materials

- Variety of twigs at least 3/8" in diameter (The more variety in color and texture, the more interesting the finished product.)
- Pruning shears or saws
- Vice or large clamps
- Hammers and nails or drills and bits to hollow out centers
- Carving tools
- Waxed dental floss

Directions

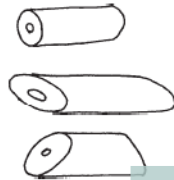
1. Cut the twigs into bead-sized lengths. Vary the diameter of the twig, the length of the bead, and the angle of the cut to make a wide assortment.
2. Make a hole through each bead. If the center is soft, use a nail and hammer. If the center is hard, you will have to drill a hole through the bead. Use a vise to hold the bead during drilling. You can also drill a hole sideways through the bead for a completely different look.
3. Decorate the beads.
 - Peel off the bark. Peel just the outer bark on some. Peel the inner and outer bark off of others.
 - Carve designs such as grooves, dots, or spirals into the bark or the wood.
4. String the beads on dental floss and allow them to dry before use.



Cut beads on an angle, drill holes as shown, and string to form a zig-zag pattern.



Drill holes end-to-side ways.



Cut beads at different angles for unique effects.



Wildflower, Weed, or Botanical Bully?

Method

Students will visit a "weedy" area near their school. They will find and observe plants and their surroundings. Back in the classroom, they will identify the plants and determine if they are native, non-native, non-native invasive, or native invasive.

Getting Ready

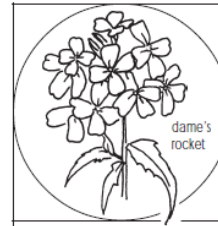
1. **Optional:** Using the Internet or other resources, find pictures of the plants referred to in the introduction below. See *Finding Out More!* for Web sites that feature plant photos.
2. Find a "weedy" place where students can observe plants closely. Depending on your location, this might be a vacant lot or a forgotten corner of the playground. While highway and railroad right-of-ways are excellent places to find non-native plants, these locations are not safe. If using school property, check with the maintenance staff to be sure the area hasn't been recently sprayed. If the area is not on school property, obtain permission to collect a limited number of plants. Be sure the site you choose doesn't have poison ivy, wild parsnip, stinging nettle, or other hazardous plants.

Introducing the Activity

It isn't easy to tell by just looking at a plant whether it is "good" or "bad." A dandelion growing on a golf course would be considered a weed. A dandelion given as a gift to a mom would be a wildflower. Some people kill all the dandelions in their yards; others enjoy the yellow flowers as a welcome sign of spring. Poison ivy in a woods provides valuable food for wildlife. Poison ivy in your backyard would be a weed that needs to be controlled! Dame's rocket cultivated in a garden would be considered a wildflower, but when dame's rocket invades a wooded area, it is a botanical bully that pushes out native species. Woodland sunflower is a beautiful, native forest wildflower, but given the chance, it can be a botanical bully. If it were growing in a crop field, the farmer would consider it a weed.

Activity Examples

- Classroom activities
- Field activities
- Various ages and activity times
- Options to extend the learning



dame's rocket

Objectives

- Become familiar with plants of weedy areas.
- Understand that many of the plants found in weedy areas are non-native species.
- Identify one plant and determine its ecological status.

Grades

4 – adult

Group Size

Small groups of 3 students

Activity Time

Two or three 50-minute periods

Setting

Weedy area during spring, summer, or fall; preferably when plants are in bloom

Materials

- Pictures of plants (i.e., poison ivy, dandelion, dame's rocket, woodland sunflower)
- Copies of *Plant Characteristics* (page 18)
- Notebooks and pencils
- Trowels, pruners, or scissors for collecting plants
- Plastic shopping bags
- Plant identification books (See list on page 139.)
- Access to Internet
- *Invasive Plants of the Upper Midwest*

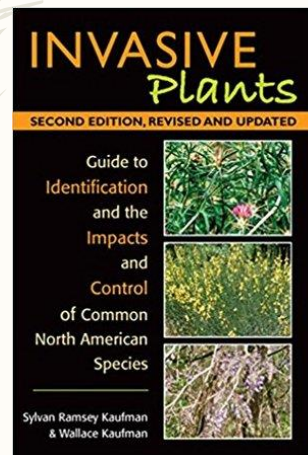
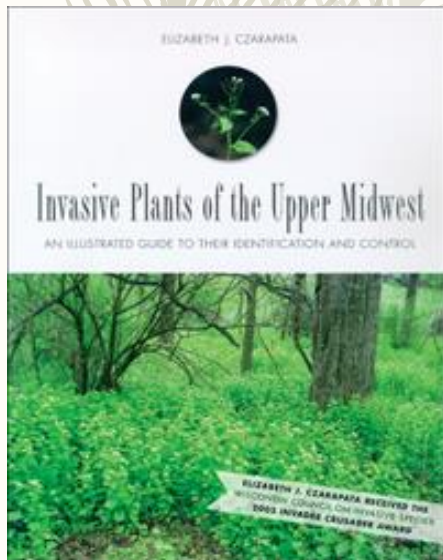
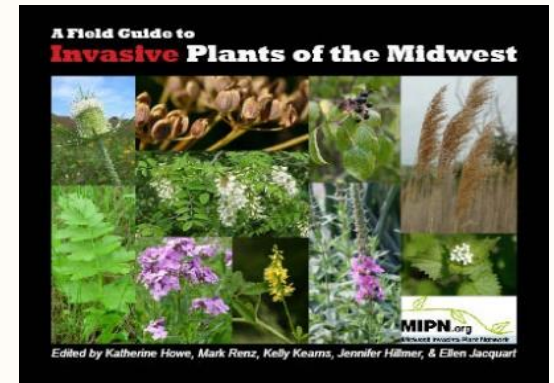
Connections

See next page.

Other resources



- Field Guides
- Books
- Brochures & factsheets
- Youtube Videos



Cultivating awareness:
Ornamental plants invading natural areas

presented by
The Midwest Invasive Plant Network



Incorporate Invasive Concepts in your Lesson Plans

- Web of Life
 - Everything in an ecosystem is connected, how do invasives disrupt that?
 - Why can plants become invasive when moved from their native range?
- How do Invasives impact wildlife?
 - Pollinators? Habitat? Food?
- How have humans helped move invasives?
 - AND, what can you do to slow the spread?

3 Different Ways to Structure an Invasive Lesson

Pick a Plant



Pick a Place

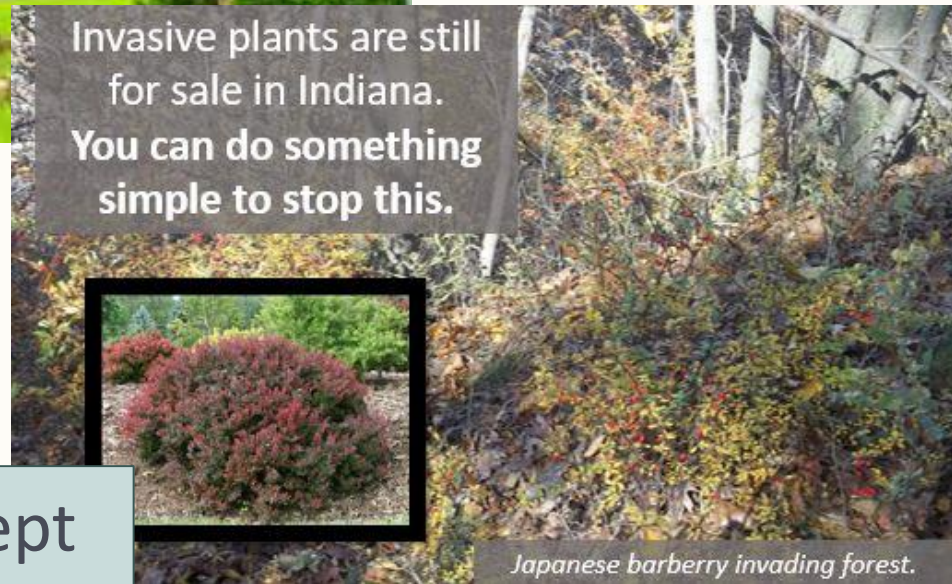


Invasive plants are still for sale in Indiana. You can do something simple to stop this.

Pick a Concept



Japanese barberry invading forest.



Getting Involved!

Invasive Field Trips & Service
Opportunities

Get Involved! Nature Hikes

- **Nature Hike** – Local invasive expert can lead group and ID invasive plants
- Invasive plants might also be growing around your own school!



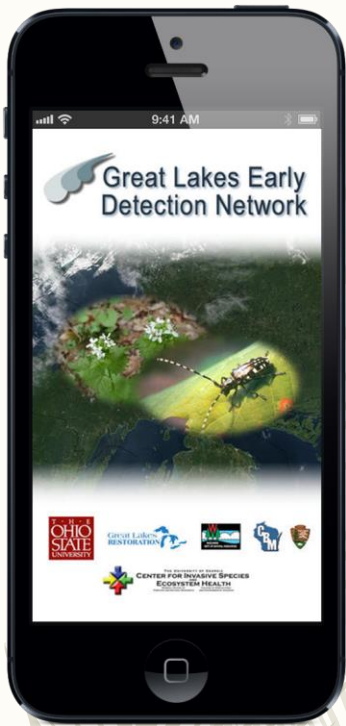
Get Involved! Workdays

- **Workday** – Help remove invasives at a local park/natural area, or even at your school.



Get Involved! Map Invasives

- **Map it!** – Learn to ID one or more invasive plants, then use a smartphone app to map their locations in your community.
- Try this project while an invasive is flowering in spring, or fall when the leaves change



Get Involved! Grow it

– **Grow it – natives**

- Help plant a native wildflower garden
- Get native plant seeds and grow your own natives to plant or sell

– **Grow it – what's in that seed mix?**

- Wildflower mixes can include a lot of invasives, what do you get if you grow the seeds?





Get Involved! Build it



– Build it - tools

- Build custom tools to control invasives

– Build it - Signs

- Build or install a sign at a park or trail to tell people about local invasives

Local Experts Can Help!



CISMAs – Like Dubois ISAC & SICIM

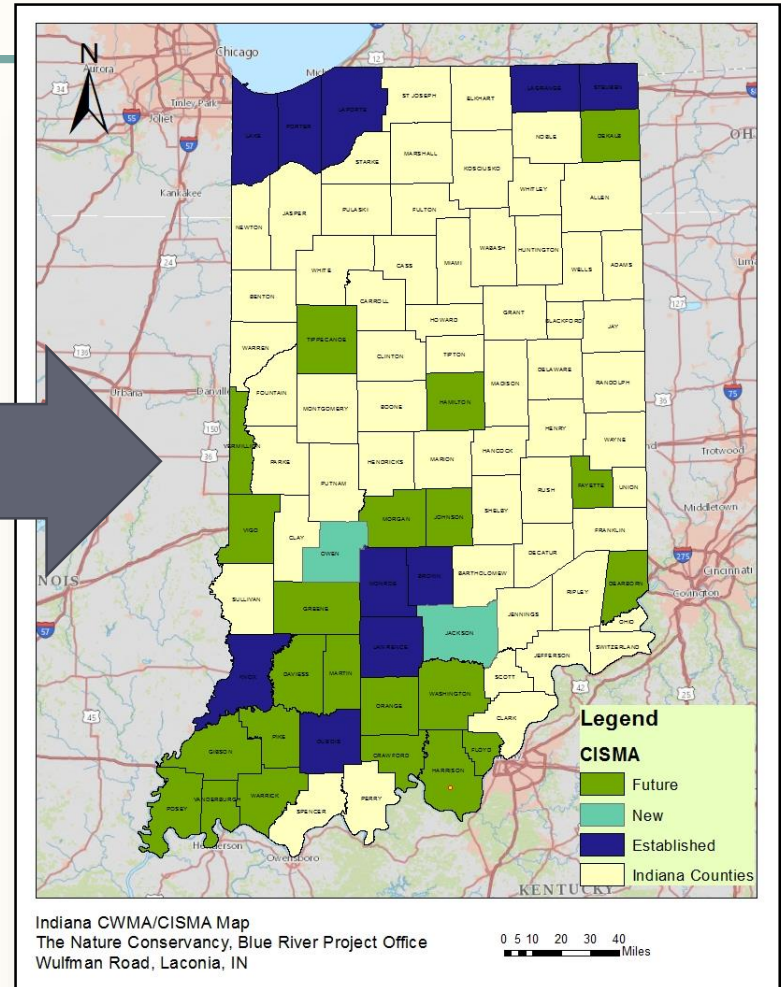
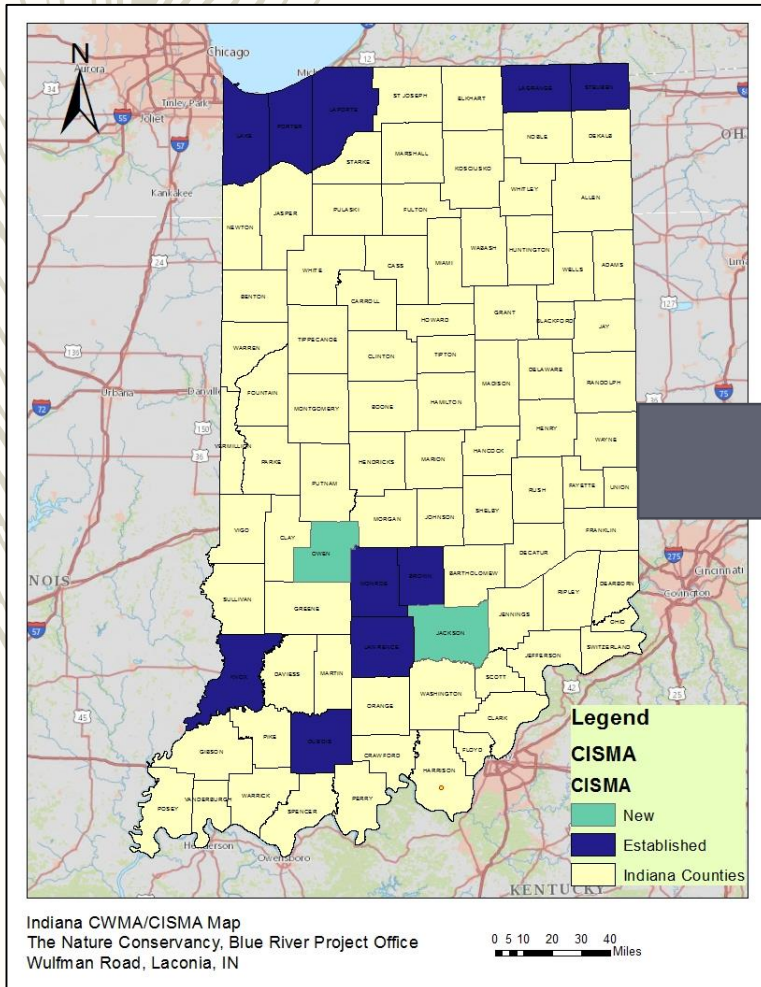
SWCDs

Purdue

DNR – Patoka Lake, Ferdinand State Forest

US Forest Service

CISMAs are forming across the state!



Questions?





Southern Indiana Cooperative Invasives Management

More on the SICIM Website

www.sicim.info

NEWS ABOUT GET INVOLVED + RESOURCES REPORT + INDIANA INVASIVES INITIATIVE

LANDOWNER TOOLKIT

LOCAL RESOURCES BY COUNTY

PRESENTATIONS

LANDSCAP

CONTROL AND MANAGEMENT

CONTRACTORS

LINKS & RESOURCES