

Southern Indiana Cooperative Weed Management Area

Japanese Chaff Flower Summit



**A FEW OF SICWMA'S
EARLY DETECTION
PRIORITY SPECIES**

Mile-A-Minute Weed

Persicaria perfoliata



- Annual climbing vine, grows fast and high

- Leaves perfectly triangular

- Invades open and disturbed areas (roadsides, fields, rights-of-way)



Mile-A-Minute Weed

Polygonum perfoliatum



- **Fruits look like small blueberries**
- **Reddish stems have recurved barbs**

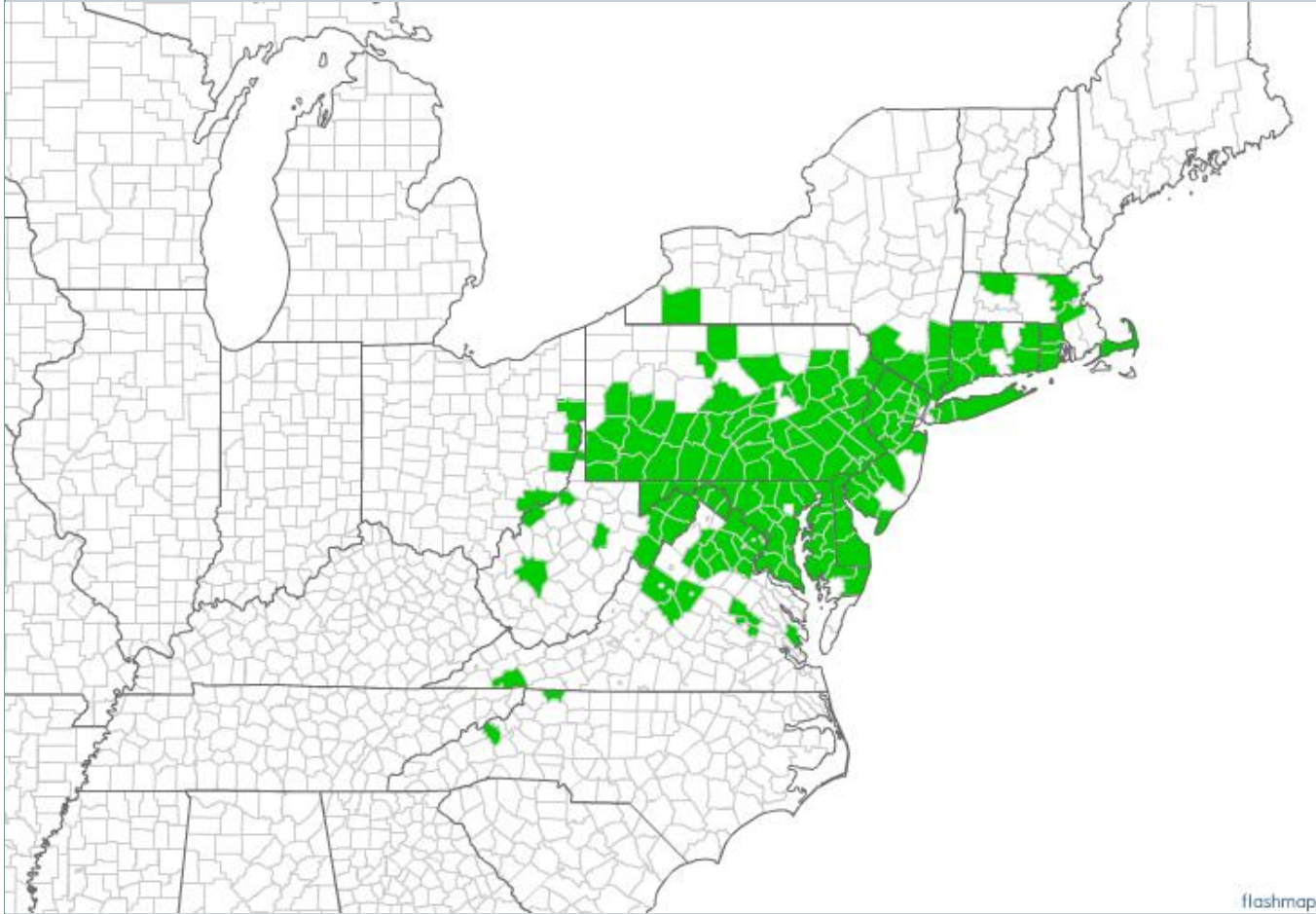


- **Distinctive cup-shaped leaf structure called ocreae at nodes**

Mile-A-Minute Weed

Polygonum perfoliatum

- Invading from East



Giant Hogweed

Heracleum mantegazzianum



- Herbaceous biennial reaches 7-15' in height
- flowers in broad, flat-topped umbels
- Resembles poison hemlock but MUCH larger



Giant Hogweed

Heracleum mantegazzianum



- Compound leaves 1-4' wide, deeply incised and pointed; coarse, dense hairs on underside
- Hollow Stems can have red/purple mottling
- **Do Not Touch!**

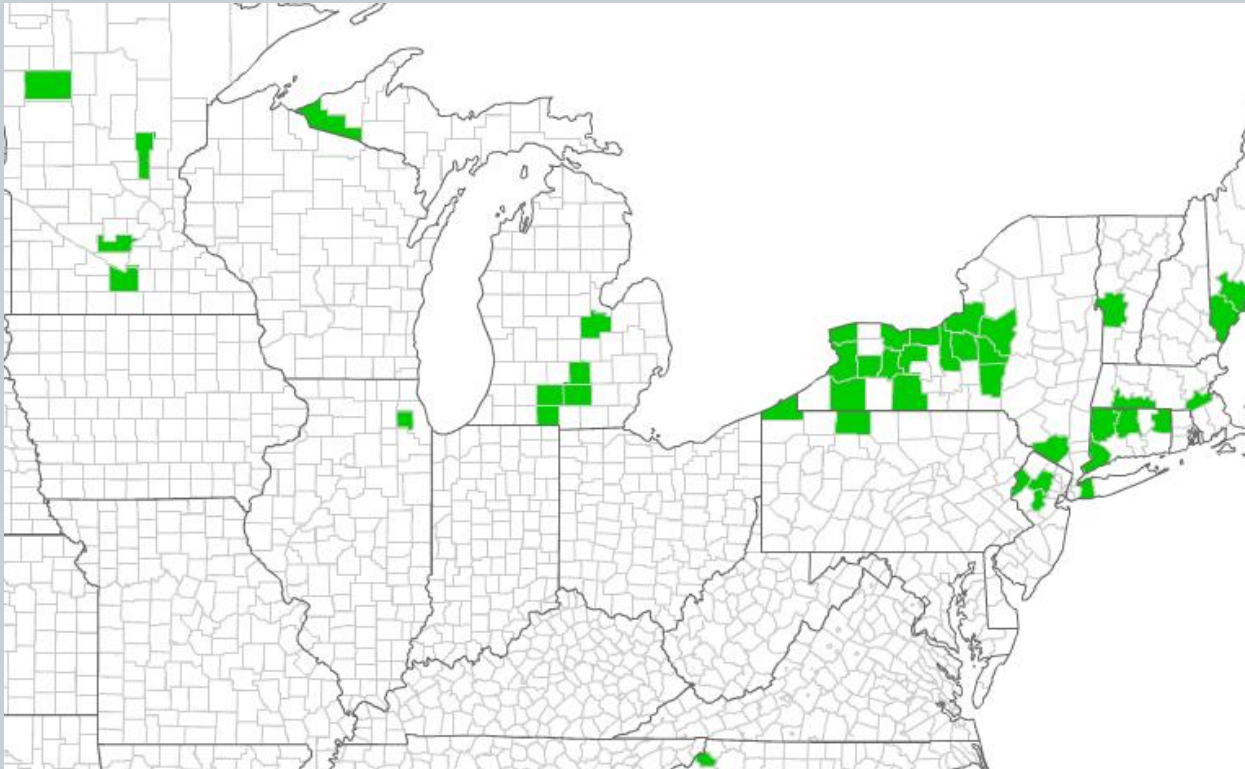


Giant Hogweed

Heracleum mantegazzianum



- There are two known occurrences in Indiana (Kosciusko and St. Joseph Counties)



- Prefers moist disturbed soils such as riverbanks, and right-of-ways

Hydrilla

Hydrilla verticillata



- **Submerged aquatic perennial**
- **Forms dense mats 4' – 6' deep**
- **Can grow up to an inch a day**

Can spread by four different methods:
seeds, fragmentation, turions, and
tubers.



Hydrilla

Hydrilla verticillata







- leaves have serrated edges and occur in whorls of 4 to 8 leaves along the stem



Hydrilla

Hydrilla verticillata

Identification Characteristics of the Hydrocharataceae

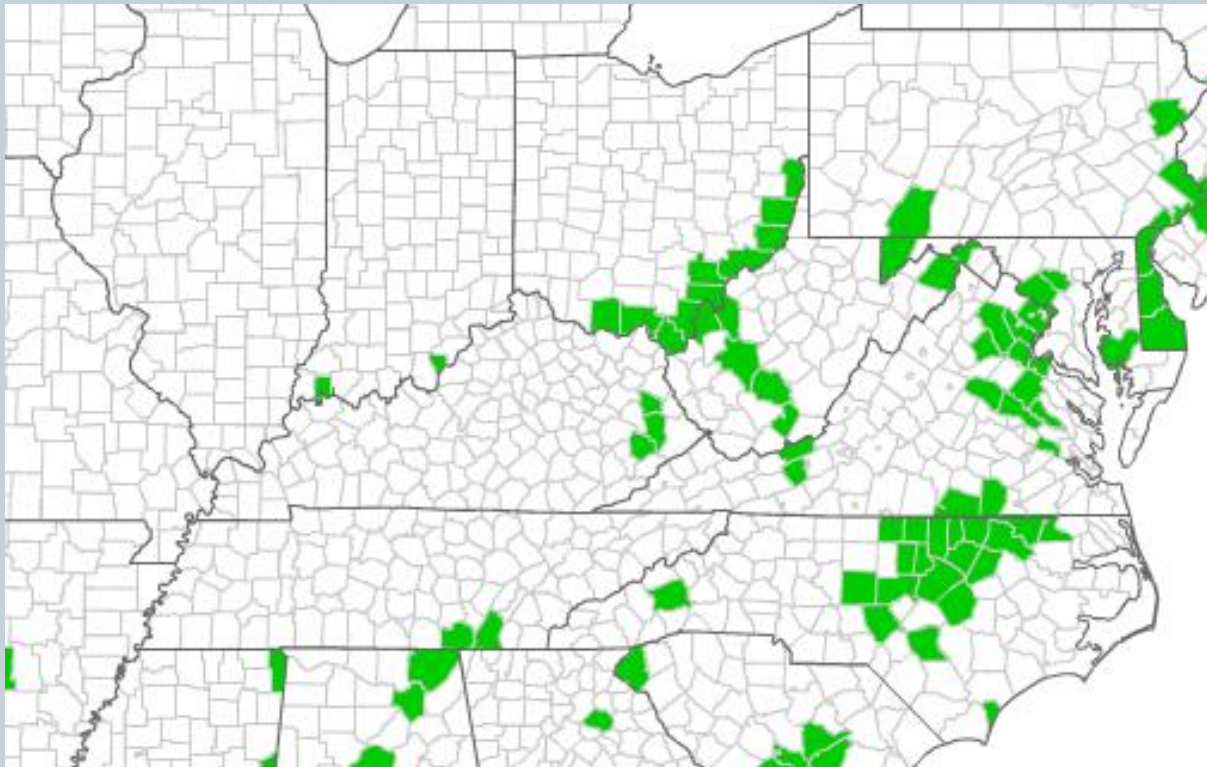
Character	Brazilian Elodea (<i>Egeria densa</i>)	American Elodea (<i>Elodea canadensis</i>)	Hydrilla (monoecious) (<i>Hydrilla verticillata</i>)	Hydrilla (dioecious) (<i>Hydrilla verticillata</i>)
Leaves per Whorl	4 (3-5) 	3(2) 	5(2-8) 	4-5 (2-8) 
Serrated Edges Visible	With magnification	With magnification	Distinct on older plants	Distinct
Leaf Size	Up to 4cm	Up to 1.5 cm	1-2 cm	1-2 cm
Flowers	Male only, up to 2 cm	Tiny, male and female on separate plants	Male and female on same plants, to 1 cm	Only female plants in US, to 1 cm
Tubers Present	No	No	Yes	Yes

Hydrilla

Hydrilla verticillata



- **Found 3 times in Indiana**
- **Found recently in OH river upstream from IN**



Hydrilla

Hydrilla verticillata



Control

- **Hydrilla control is VERY expensive requiring special herbicides and aquatic removal equipment**
- **Prevention is best; remove all water, mud, and plant material from your boat, trailer, and vehicle before and after boating**
- **Do not boat in areas with dense mats of Hydrilla**
- **It is illegal to import or sell Hydrilla in the United States**

Kudzu

Pueraria montana var. *lobata*



- Deciduous, fast growing, smothering vine
- Leaves alternate, with three leaflets, each up to 4" across

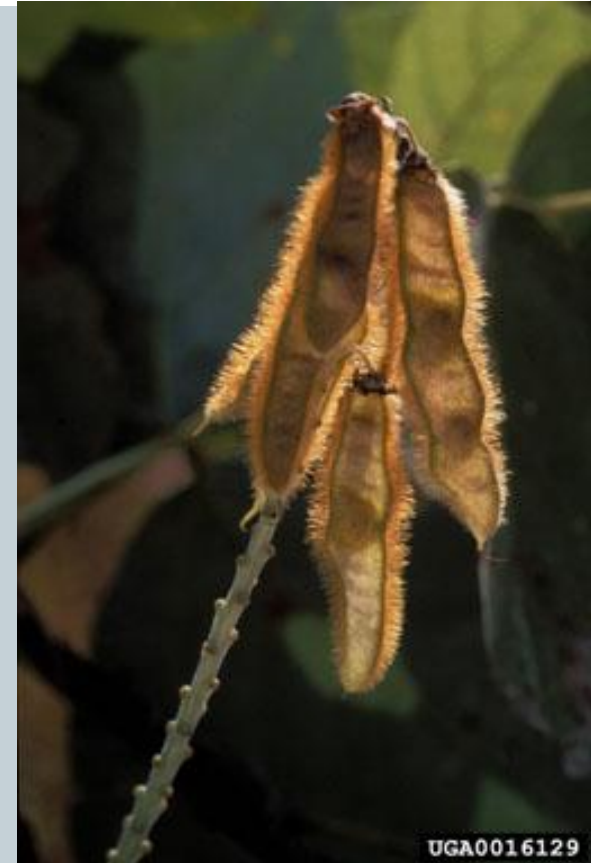


Kudzu

Pueraria montana var. *lobata*



- Late summer flowers in purple clusters
- Fruit pods brown, hairy – like soybeans



Kudzu

Pueraria montana var. *lobata*



Control

Control of Kudzu is a long term prospect and each root node must be eradicated or it will rapidly re-colonize the site.

- Repeated Cutting, mowing, or grazing can be used to control the spread of Kudzu if used continuously over a 3-5 year period
- Mowing or grazing can also be used to knock back Kudzu in preparation for herbicide treatments
- The average homeowner will need to make many repeated treatments with a systemic herbicide containing Clopyralid, Glyphosate or Triclopyr in mid-late Summer to see success.

Purple loosestrife

Lythrum salicaria



- Herbaceous perennial, 3-10' tall with multi-sided somewhat woody stems
- Forms dense clusters in wet areas (wetlands, reservoirs, lakes, ponds, roadside ditches.)



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Purple loosestrife

Lythrum salicaria

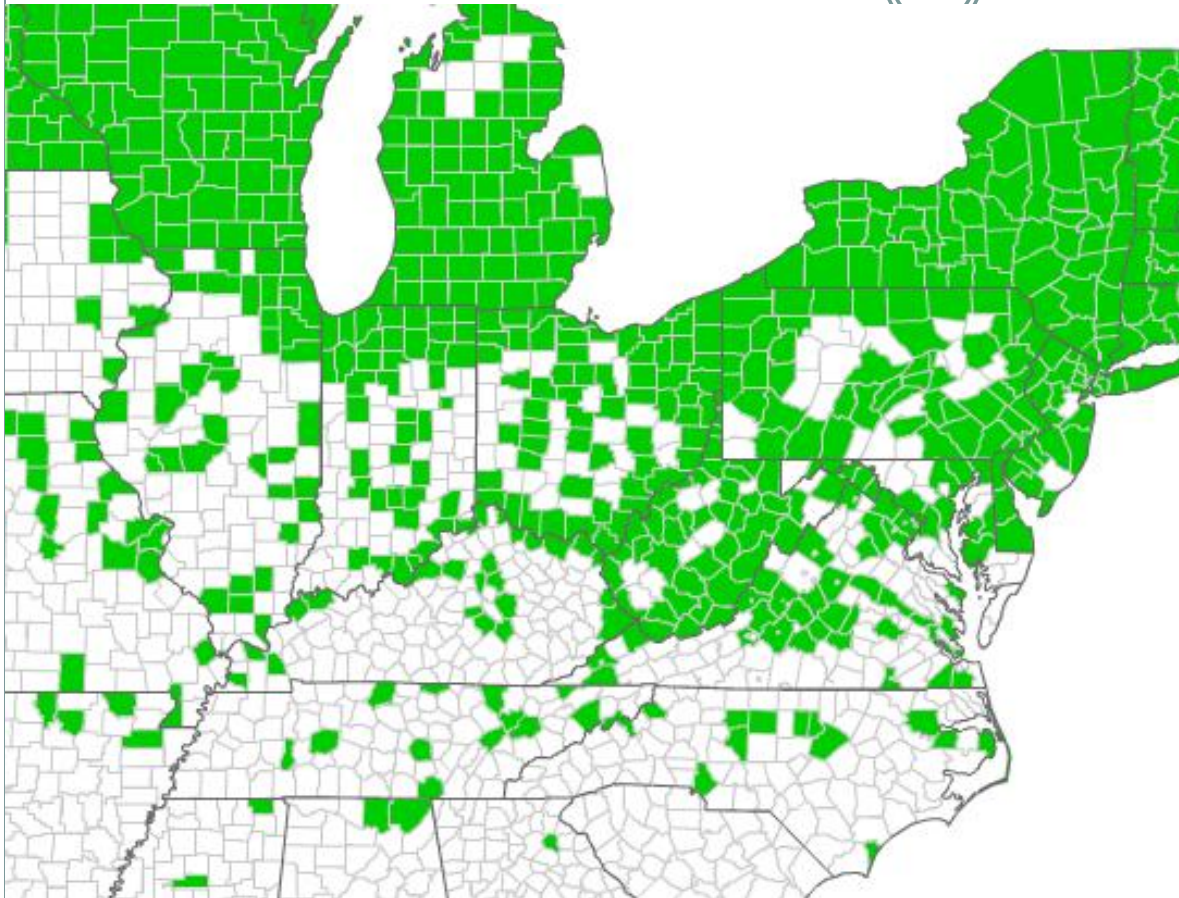


- Lance-shaped leaves are opposite, pairs alternating at 90°,
- Showy purple flower spikes visible around June-August.



Purple loosestrife

Lythrum salicaria



- **Common in Northern Indiana, fewer infestations in Southern Indiana**
- **Can be controlled by biological agent**

Purple loosestrife

Lythrum salicaria



Control

- **Manual:** Small populations can be pulled by hand before seed set but care must be taken to remove as much of the root system as possible. Place plants in trash bag for disposal.
- **Chemical:** Follow all manufacturer herbicide label recommendations. When near water only approved aquatic herbicides labeled for purple loosestrife should be used. Non-selective Glyphosate products (Rodeo, Aquaneat for wet areas) can be applied to the foliage at a rate of 1-1.5% or to the cut-stems of loosestrife plants as a 20-30% solution. Broadleaf specific herbicides like triclopyr (Renovate 3 for wet areas) can be used at the same rates and may help retain native vegetation. A surfactant should be used and herbicides are typically applied during the bud to early-blooming stages to prevent seed production.

Winged Burning Bush

Euonymus alatus



- Used heavily in landscaping
- Typically 5' – 10' deciduous shrub

- Leaves bright red in late fall
- Often on roadsides and forest edges, also in forest understory



Winged Burning Bush

Euonymus alatus



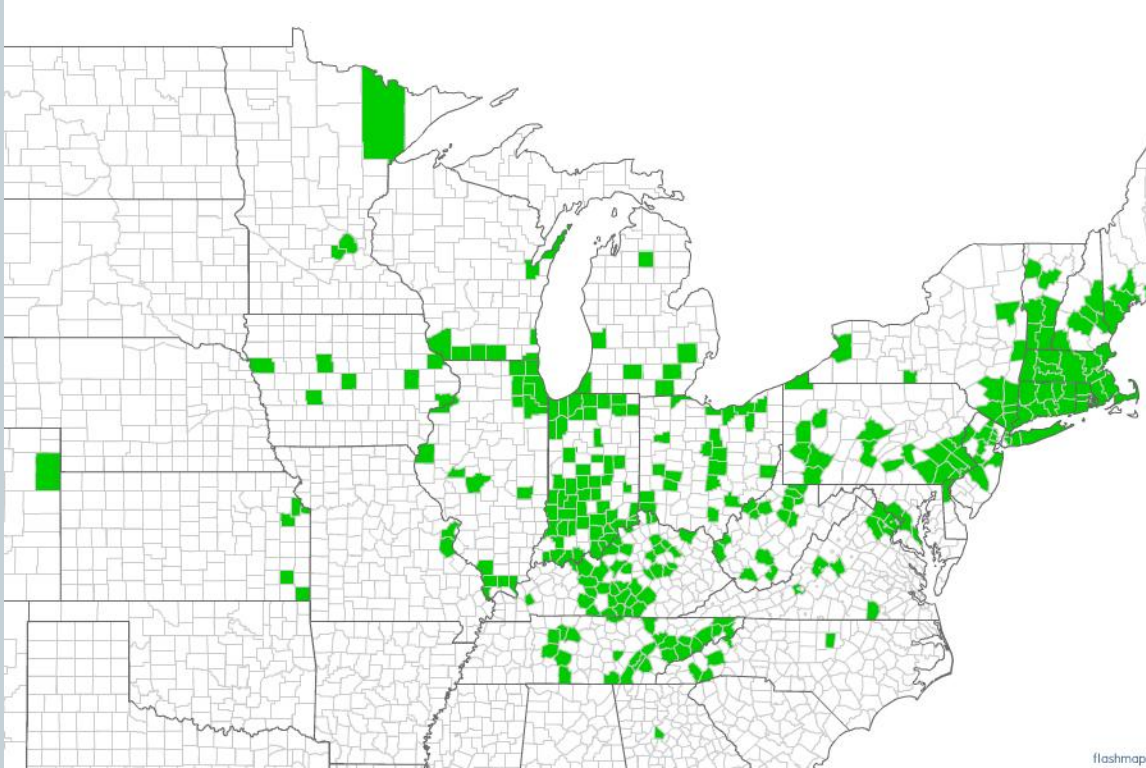
- Opposite leaves are deciduous, turning bright red in Fall
- Mostly winged corky stems



- Red-purple fruits mature during summer

Winged Burning Bush

Euonymus alatus



- Invades forest understory, forest edges, and roadsides
- Spreads via seed and root suckers.
- Do not plant!!!

Winged Burning Bush

Euonymus alatus



Control

Manual: Hand-pull seedlings up to 2 feet tall; cut or dig out larger plants; root systems can be removed with a spading fork or pull with a weed wrench

Chemical- It can be effectively controlled using any of several readily available general use herbicides such as glyphosate, imazapyr, or triclopyr. Foliar application have proven effective but less chemical will be the cut-stump method. Follow the herbicide label rates and directions.

Callery Pear

Pyrus calleryana



- Used heavily in landscaping industry
- Small tree with pyramidal shape, weak branches
- Popular cultivars include Bradford pear, Cleveland Select, Chanticleer, and Aristocrat,

•once sterile but crossed in the wild



Callery Pear

Pyrus calleryana



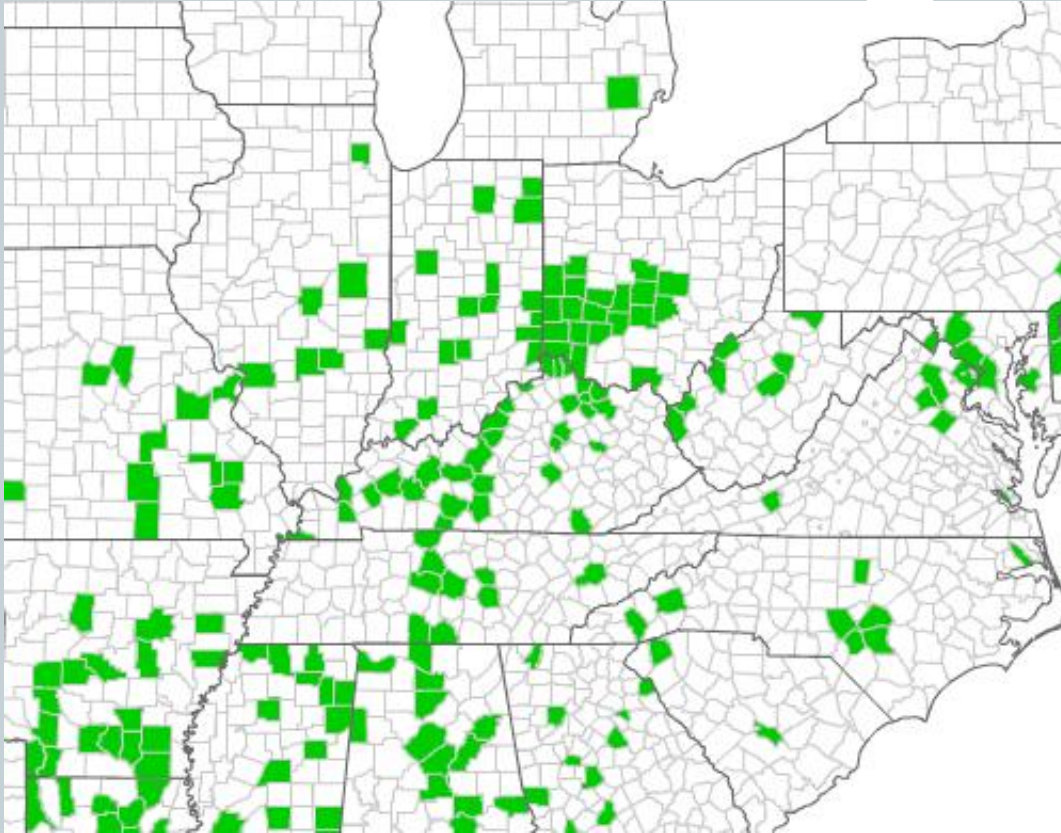
- Leaves are alternate, simple, and shiny with wavy, slightly-toothed margins

- Small round, brown fruit



Callery Pear

Pyrus calleryana



- Invades forest edges and open areas from escaped landscaping
- Many more sites this map shows
- particularly dense infestations around Crane Naval Reserve

Callery Pear

Pyrus calleryana



Control

- Manual: Seedlings and shallow-rooted plants can be pulled when soil is moist. Dig small trees up or pull out using a Weed Wrench®, ensuring removal of the root system. If cutting is not possible, trees can be girdled during the spring and summer, by cutting through the bark all around the trunk, about 6" above the ground
- Chemical- Large trees should be cut down and stumps treated immediately with an appropriate systemic herbicide such as glyphosate or triclopyr. Follow the directions and rates on your herbicide label.
- Do Not Plant any Cultivar of Callery Pear!!



Thanks for your attention!

For Questions Contact:

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