

Identification, Biology, and Management of Burning Bush (*Euonymus alatus*)

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UMISC

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Euonymus alatus

- Deciduous shrub
- Native to northeastern Asia
- Hardy to zone 4b



Growing Conditions

- Tolerant of variety of soil conditions
 - Texture, moisture, pH
- Salt tolerant
- Full sun/full shade



Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



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Invasiveness

- Escapes cultivation easily
 - Bird dispersed
- Invades disturbed and undisturbed areas
 - Forests, open woods, forest edges
 - Pastures, prairies
 - Roadsides



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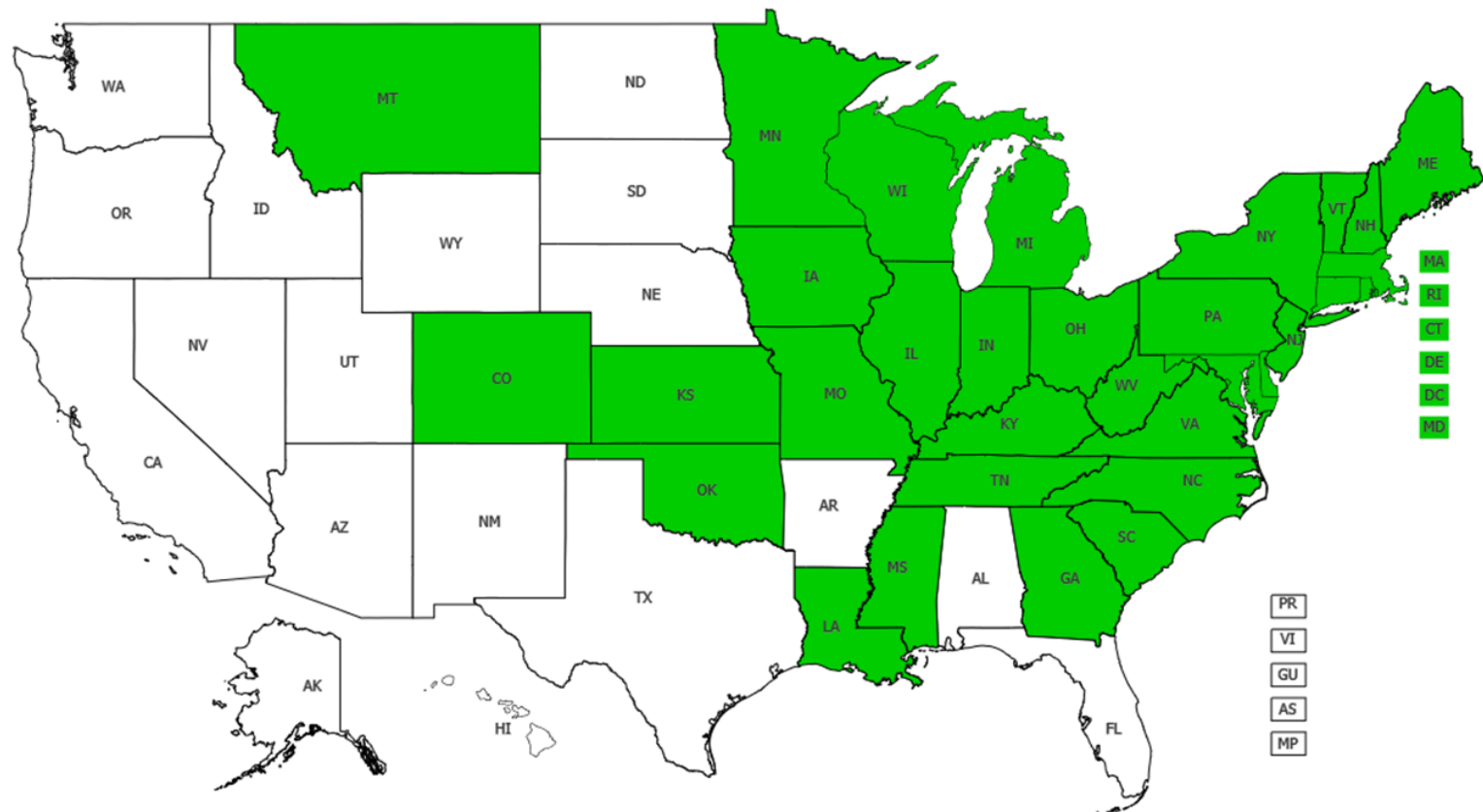
Impacts

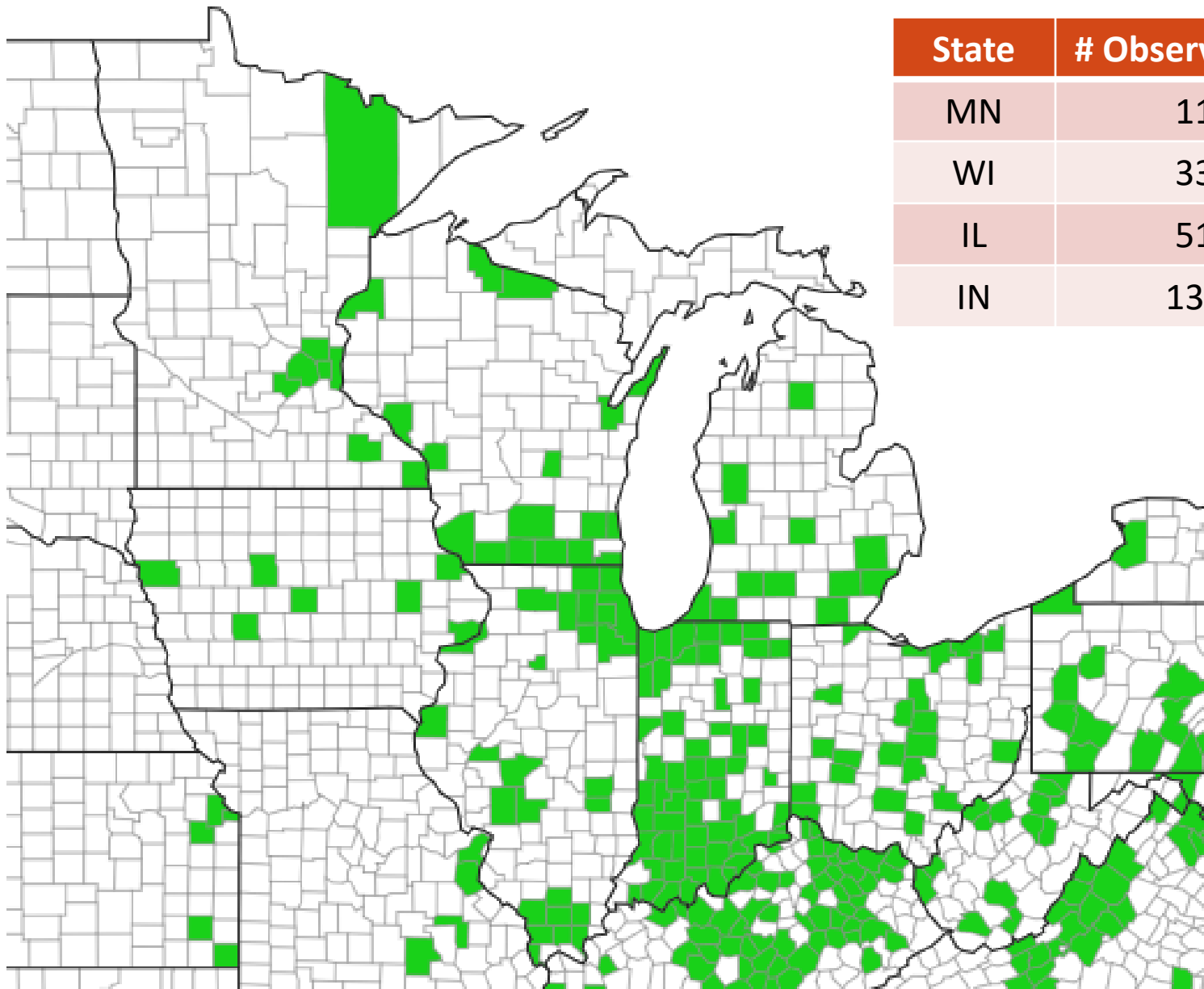
- Shades out native herbs
- Crowds out native shrubs
- Browse damage to natives



<https://www.flickr.com/photos/59327252@N06/5489188644/>

Distribution





State	# Observations
MN	11
WI	33
IL	51
IN	137

Regulation

Wisconsin

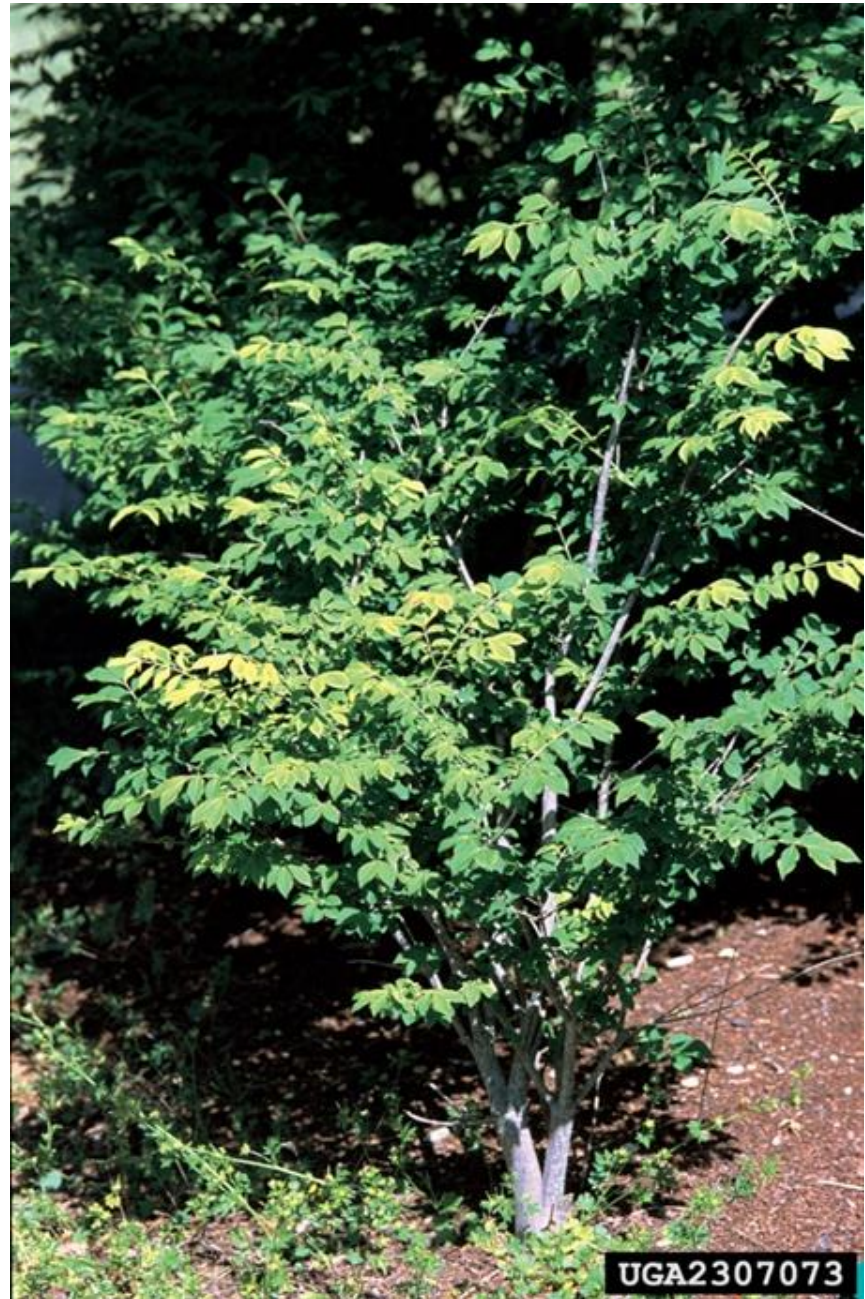
- Restricted statewide
 - Includes straight species and cultivar “Nordine”
 - All other cultivars excluded



Identification

Multi-stemmed

Fibrous roots



Leaves & Stems

Opposite leaves
~2 inches long

Bright red fall
foliage

Stems winged



Flowers & Fruit

Inconspicuous
flowers

Bright orange-red
fruits



Control- Behavioral

- Don't plant burning bush!
- Remove existing plantings

Control- Mechanical

- Hand pull/dig up to 2'
- Weed wrench
- Remove roots



<https://hrats.org/2011/10/01/tool-review-weed-wrench/>

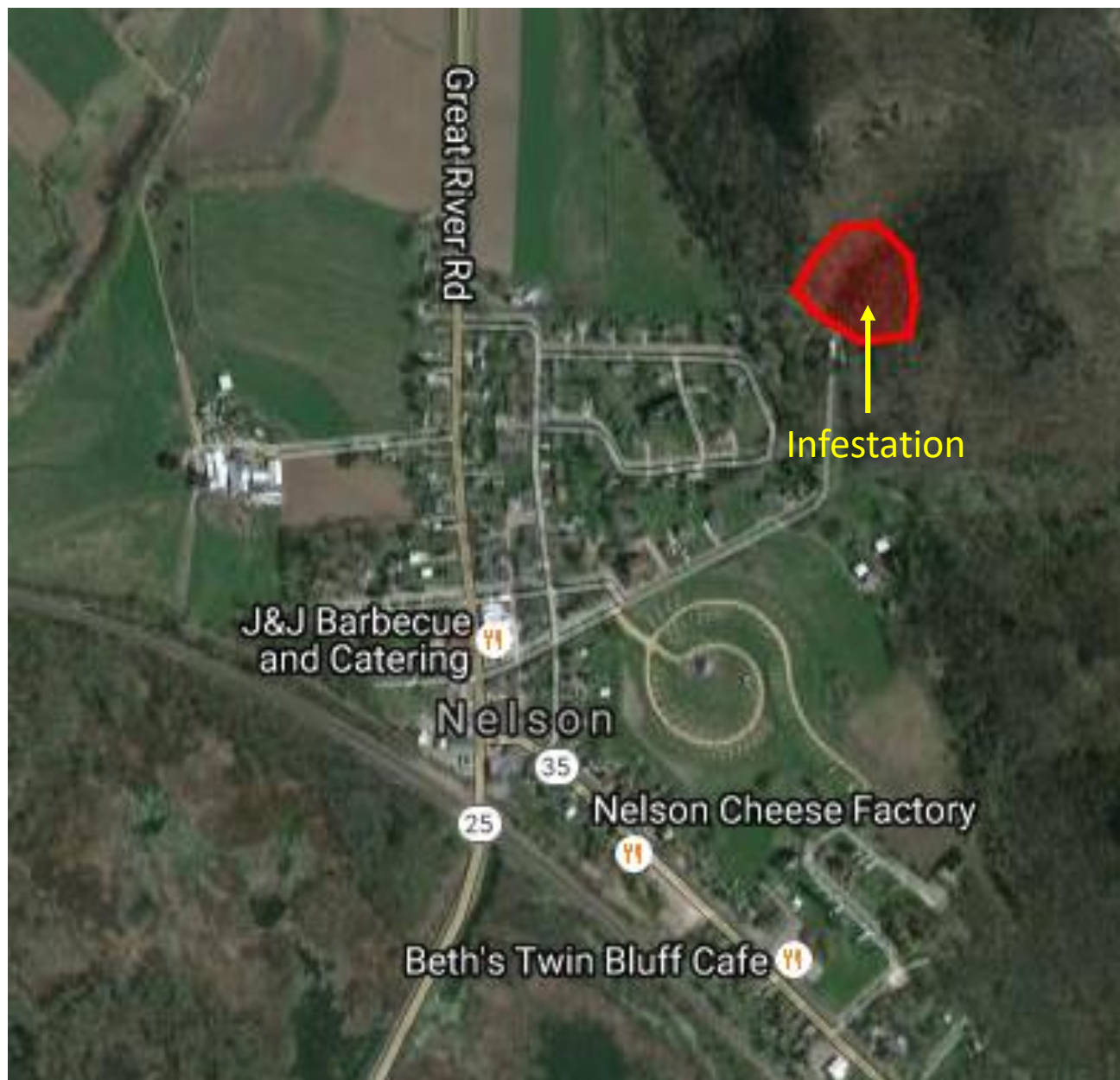
A Management Guide for Invasive Plants in Southern Forests (2015). USDA/USFS General Technical Report SRS-131..

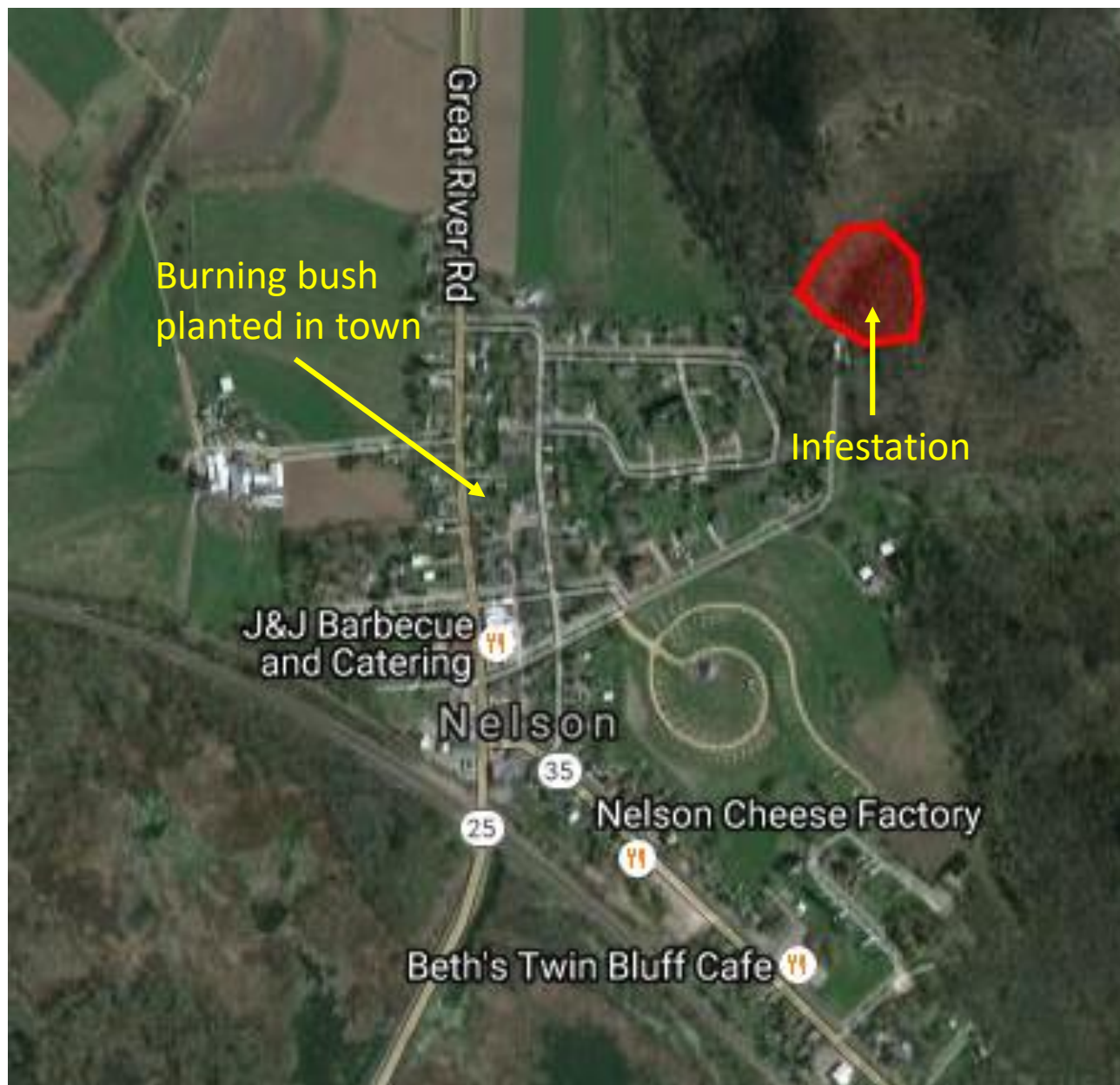
Control- Chemical

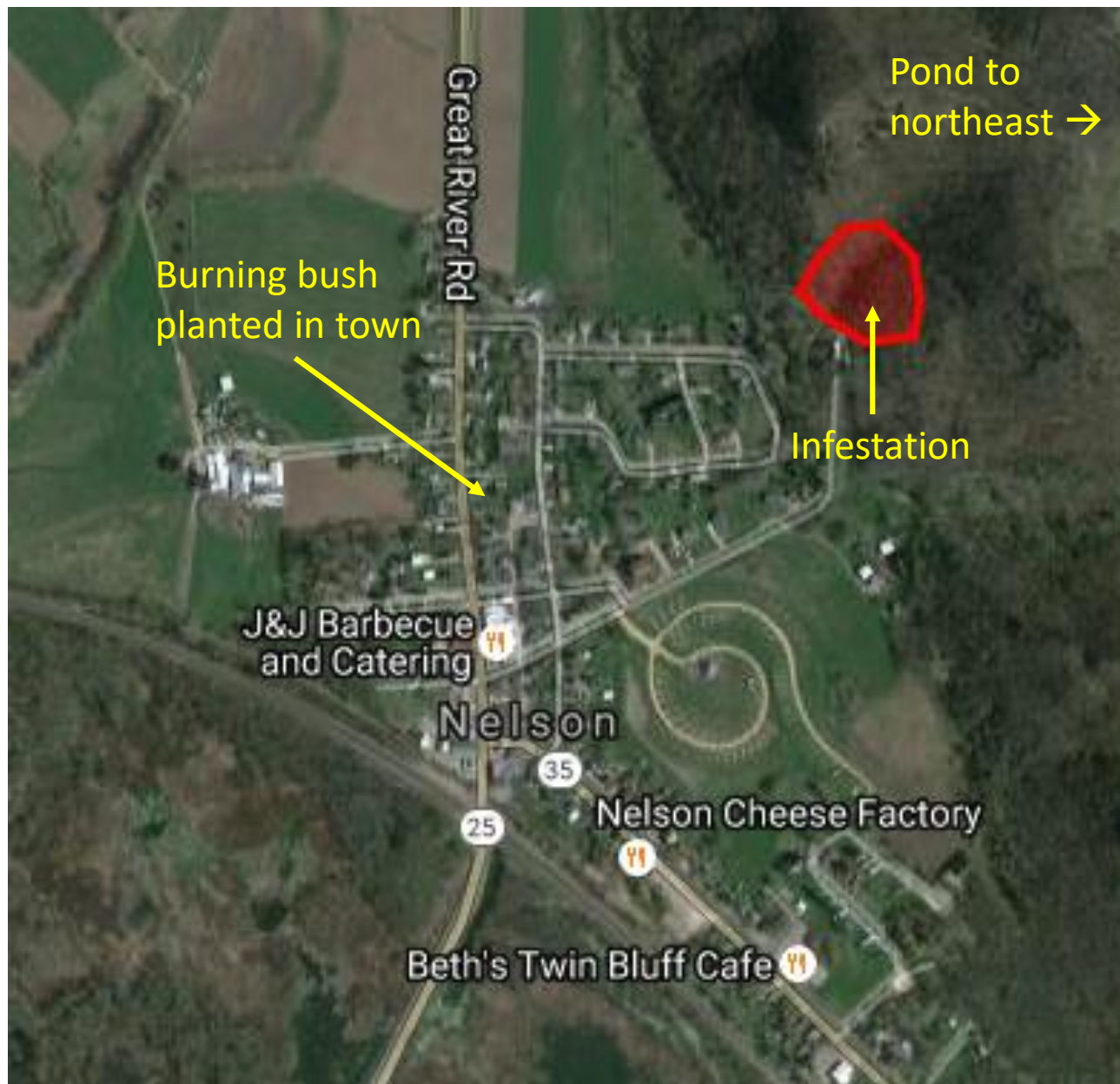
- Foliar spray
 - May-September (leaves out, plant actively growing)
 - 3% Garlon 3A or Garlon 4 (triclopyr)
- Basal bark
 - Year-round, except when snow blocks base
 - 20% Garlon 4 (triclopyr) in labeled basal oil product
- Cut stump
 - Year-round, large plants
 - 20% glyphosate

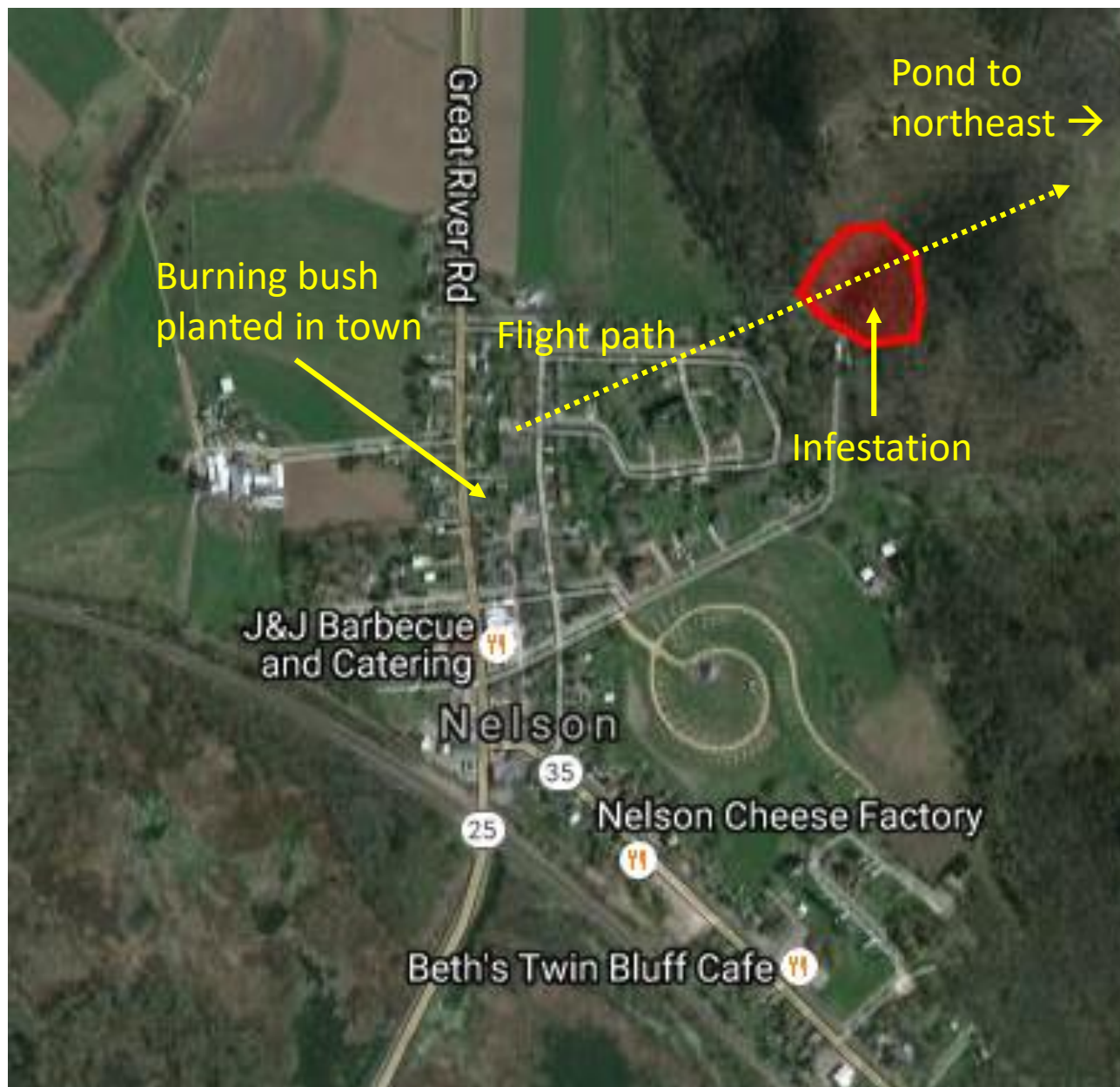
Case Study- Nelson, WI













Gary Christopherson

Early Detection



Gary Christopherson

Early Detection

Nelson, WI- Management

2015

- 5 treatments
- Cut stumps: 20% Element (triclopyr)
- Young plants
 - Mostly hand pulled
 - Some foliar spray: 1% Element (triclopyr) with NIS

Nelson, WI- Management

2015

- 5 treatments
- Cut stumps: 20%
Element (triclopyr)
- Seedlings
 - Mostly hand pulled
 - Some foliar spray: 1%
Element (triclopyr)
with NIS

2016

- 95% effective
- Continued dispersal
from town

Summary

- Widely planted ornamental
- Underreported invasive
 - Fall is prime time to look!
- Relatively easy to control



Mark Renz

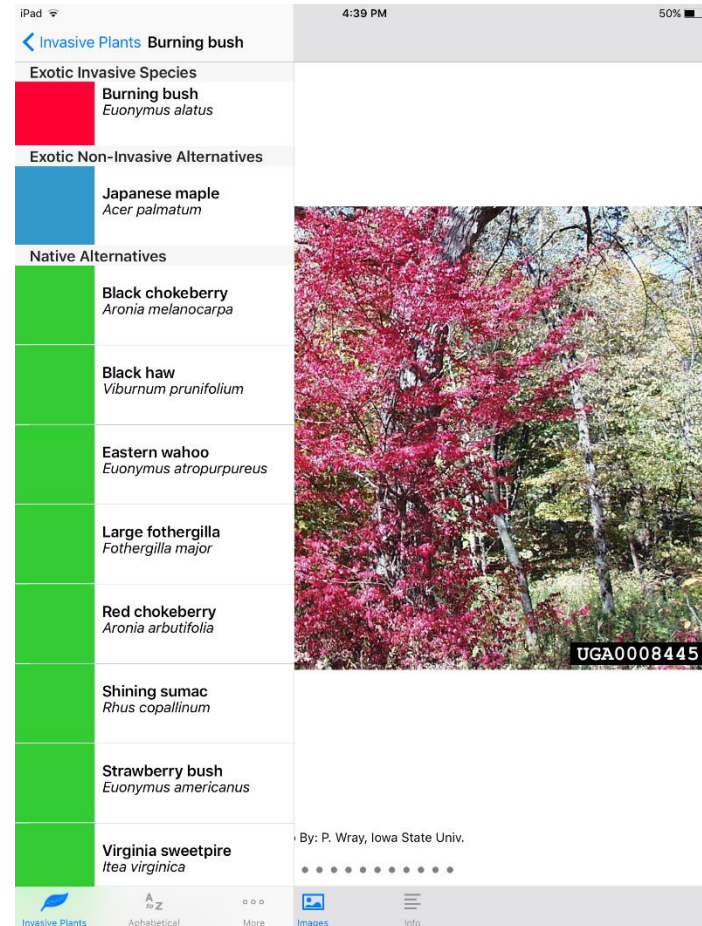
What you can do...

- Remove existing ornamental plantings
- Replace with native or non-invasive shrubs
 - MIPN app



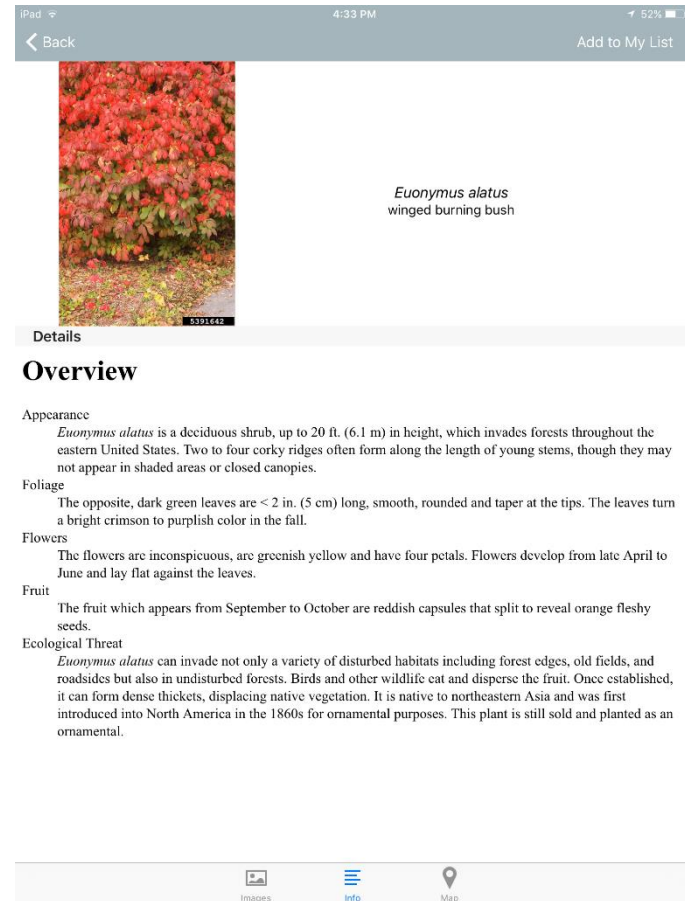
What you can do...

- Remove existing ornamental plantings
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What you can do...

- Map plants that have escaped cultivation



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