

DOWN IN THE WEEDS

Invasive Species in the RoW

Nor Serocki

SWxSW Corner CISMA

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- What are invasive species?
- What's a general best practice?
- Species of Interest
 - Phragmites
 - Japanese Knotweed
 - Black and Pale Swallow-wort
 - Giant Hogweed (and Look-a-Likes)
 - Wild Parsnip
 - Oak Wilt
- What about others?



What is an invasive species?

Not native to the area and causes damage to the *environment, economy, or human health*

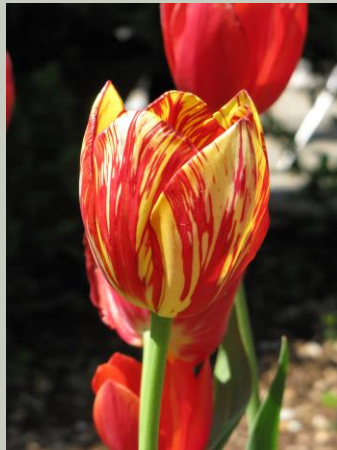


Thomas B. Denholm, New Jersey Department of Agriculture, Bugwood.org, UGA2121079

Not Native



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Causes Damage



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Alex Katovich, Bugwood.org

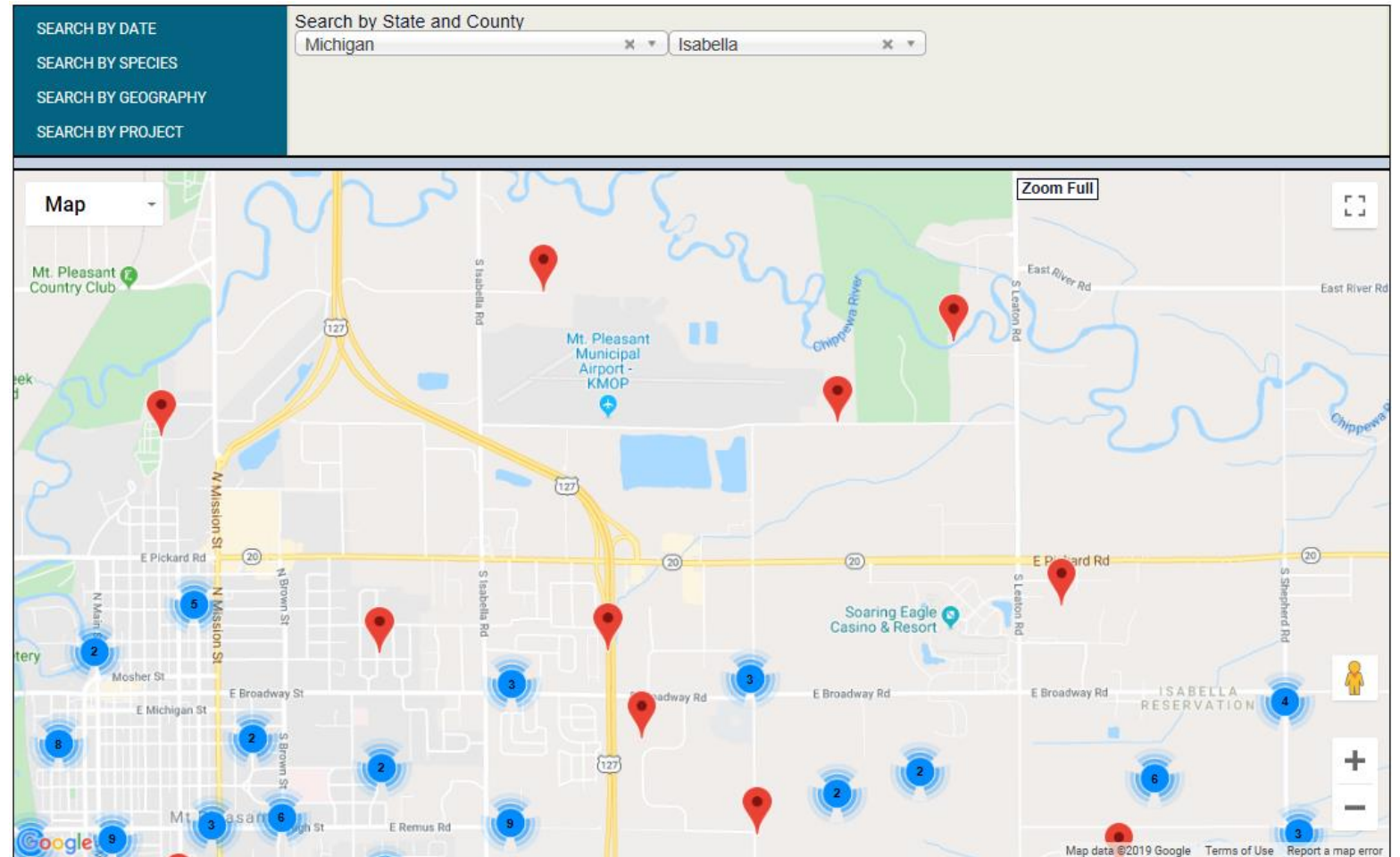
Identify the Issue

- Recognize the “big hitters” in the RoW
 - Including mowers/contractors/crews
- Work with CISMA for helpful information
- Ask for help with new problems



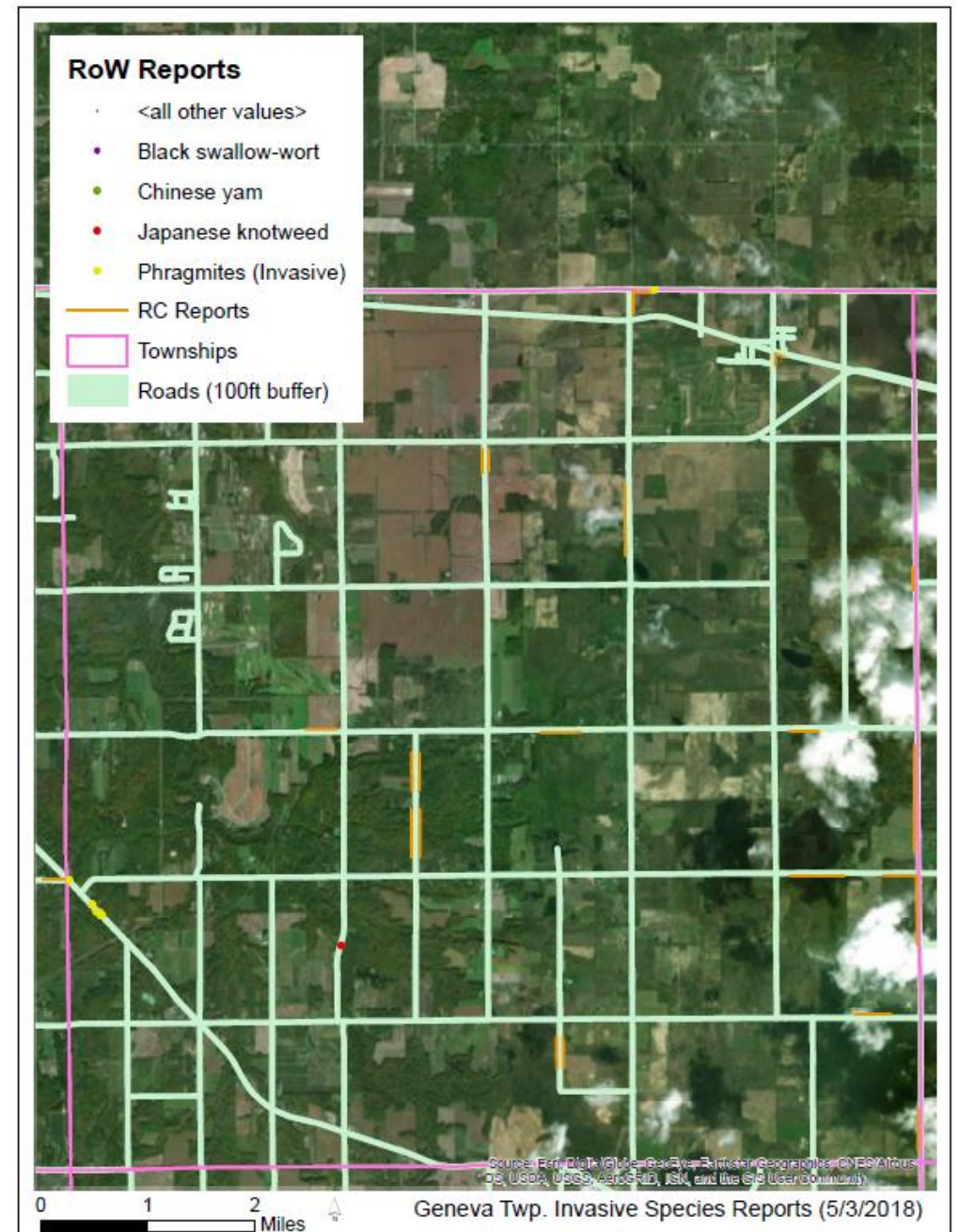
Map the Issue

- MISIN
- CISMA internal programs
- Integrate invasive species reporting into systems



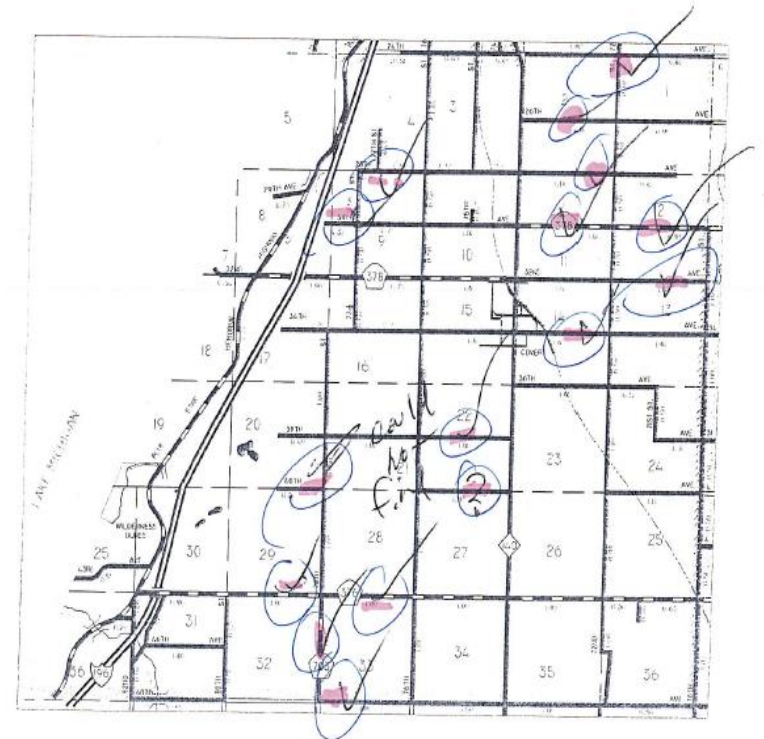
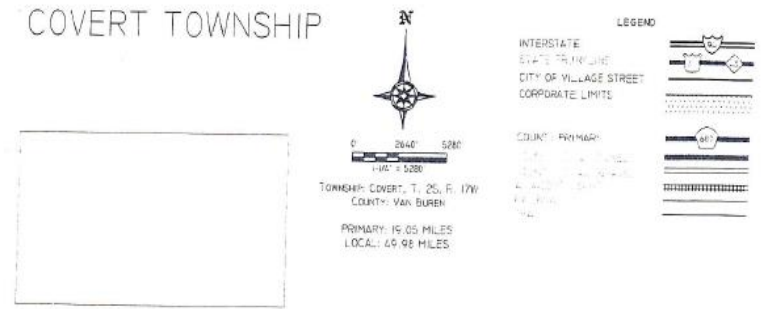
Map the Issue

- MISIN
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Map the Issue

- MISIN
- CISMA internal programs
- Integrate invasive species reporting into systems



Plan a solution

- Plan Long Term
- Plan by patch
- Right Plant, Right Treatment
- Avoid mowing when possible



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Phragmites

Impacts

- Quickly fills wetlands
 - Drainage, channels, or low areas
- Pushes out native plants/animals
- Impacts drainage
- Decreases line of site
- Can be fire hazard



Phragmites

Identification

- Tall (15'), dense growing reed
- Long, blue-green leaves
- Large, fluffy seed head
- Dies back yearly
 - Standing dead stems common



Identifying: Phragmites

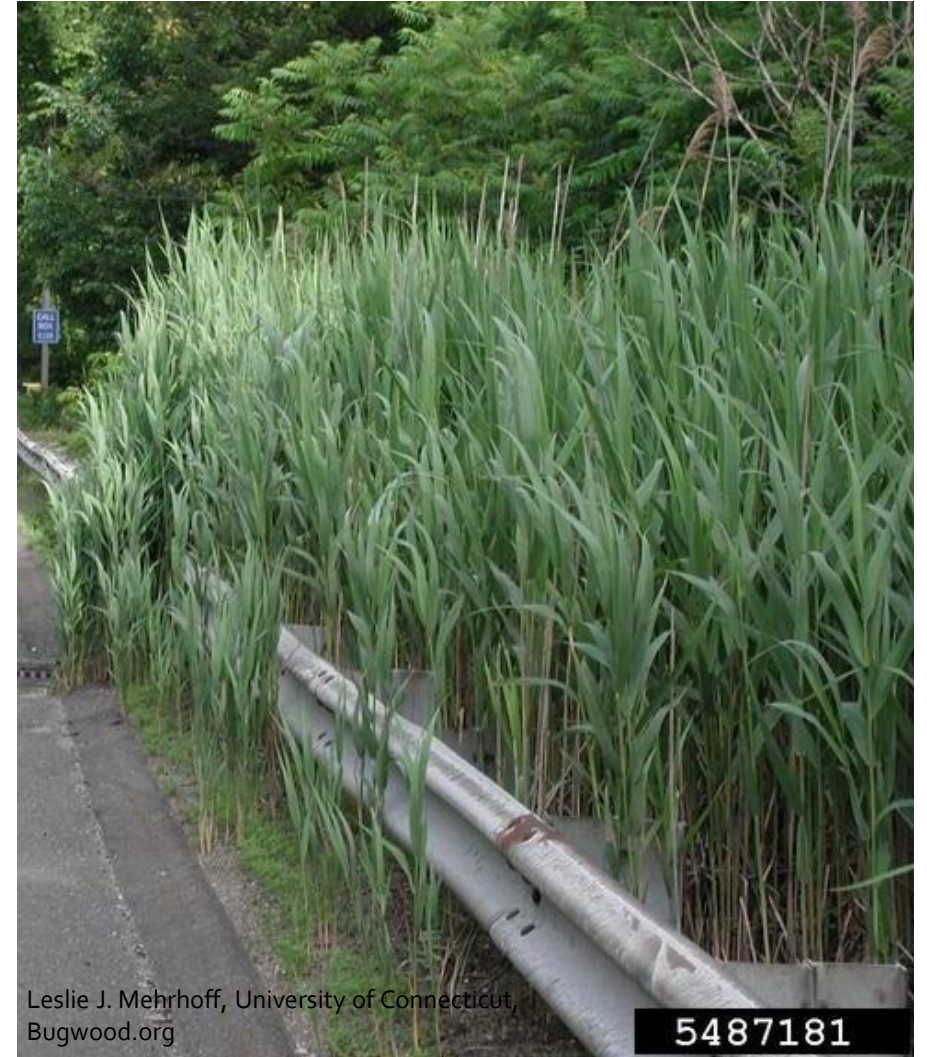


L. Wallis



M. Demman

Identifying: Phragmites



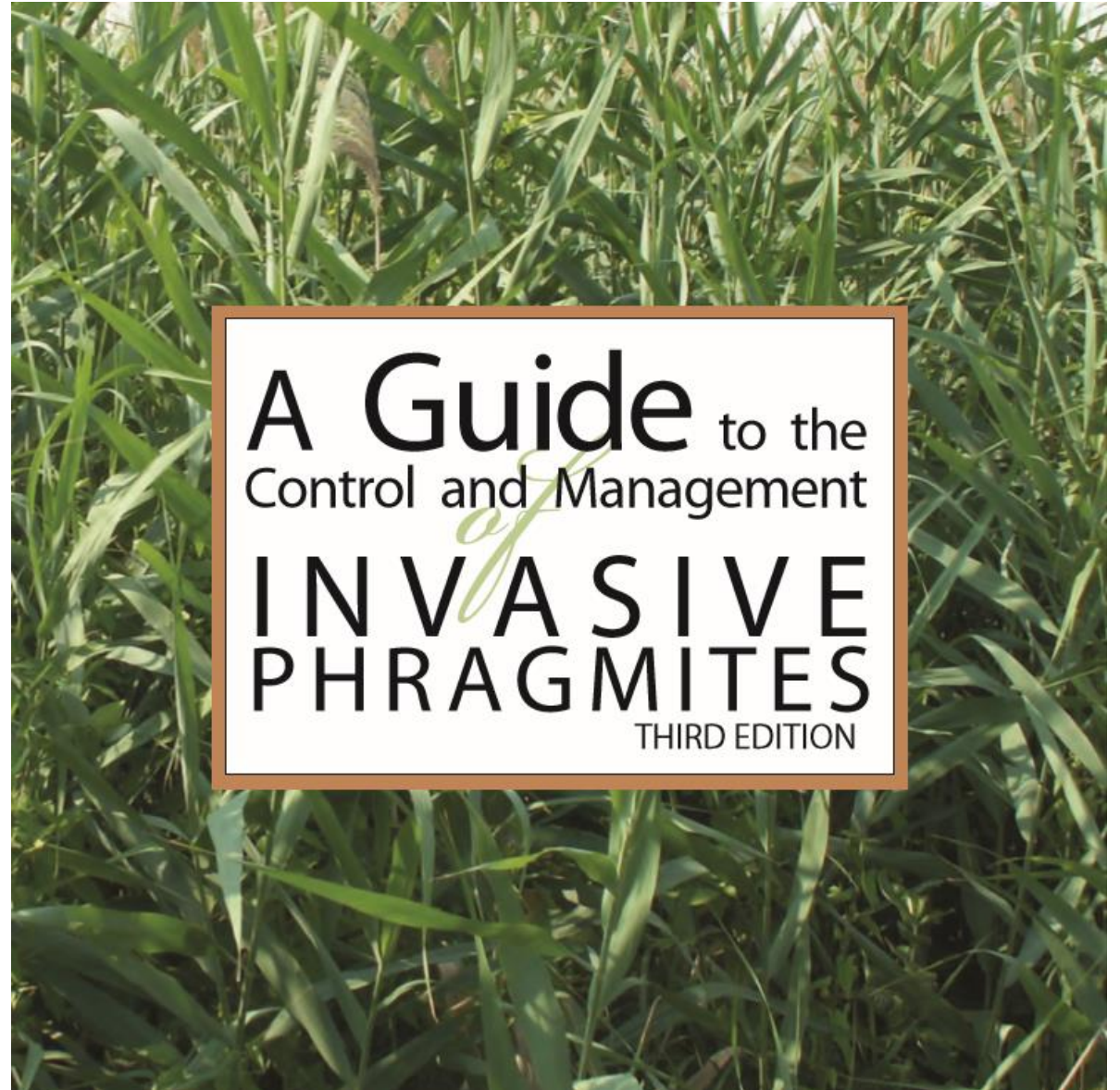
Identifying: Phragmites



Phragmites

Actions

- Generally chemically treated fall
- Mowing in winter to knock back biomass
- Early spring mow to lower height



Knotweed

Impacts

- Also called “Michigan Bamboo”
- Can break hardtop/concrete
- Easily spread by mowing/tilling
- Quickly moves along RoW
- Often moved in fill/gravel



Knotweed

Identification

- Tall, bamboo like stems
- Wide, shield shaped leaves
- Fluffy white flowers
- Stems with “zig-zag” pattern towards tips
- Standing dead in winter
 - Often reddish
 - Holds onto “fluffy” flower stems



Identifying: Japanese Knotweed



Identifying: Japanese Knotweed



Knotweeds

Actions

- Chemically treated in fall
 - Wider periods for treatment dependent on chemical
- **Avoid disturbance (mowing/grading/digging)**
- Check areas gravel/fill



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Black and Pale Swallow-worts

Impacts

- Twining vine swamps trees/shrubs
- Out competes native plants
- Hurts butterfly populations
- Toxic to cattle



Swallow-worts

Identification

- Shiny, opposite leaves
- Tiny flowers
 - Either dark purple or light pink
- Long, “Milkweed like” seed pods
- Early stages don’t flower/vine



Identifying: Swallowwort



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Identifying: Swallowwort



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Swallow-worts

Actions

- Chemical treatment between flowering and seedset
 - June/July
- Avoid cutting/digging
 - Mowing only to limit seedset



Giant Hogweed

Impacts and Identification

- Can cause severe reaction to skin, eyes
- Avoid contact
- Large (7'-14' tall) "Queen Anne's Lace" like plants
- Large, deeply lobed leaves (up to 5'!)
- Hairy stems with purple
- Flowers white, slightly curved tops



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Others of Interest

- Many look-a-likes for Hogweed
 - Some native, some non-native
- Great resources
 - <https://www.dec.ny.gov/animals/72766.html>
- Pay attention to
 - Leaf lobe patter
 - Flower shape
 - Stem color

<p>Cow Parsnip</p>  <p>6 to 8 feet tall This plant may cause burns.</p>	 <p>White flat-topped flower clusters no longer than one foot wide. 15-30 rays per cluster. Flowers late May - Late June</p>	 <p>Compound, less incised than hogweed, between 2 - 2.5 feet wide</p>	 <p>Green and rigid with fine white hairs 1-2 inches in diameter.</p>
<p>Angellia</p>  <p>4 to 8 feet tall This plant may cause burns.</p>	 <p>Softball-sized and shaped clusters, greenish-white or white Flowers mid May - mid June</p>	 <p>Compound leaves that may extend up to 2 feet wide</p>	 <p>Smooth, waxy purple, 1 to 2.5 inches in diameter (no hairs or bristles)</p>
<p>Wild Parsnip</p>  <p>Up to 6 feet tall Native of Eurasia This plant can cause burns. Do not touch.</p>	 <p>Single flower stalk with flat-topped umbel of yellow flower clusters Flowers late May - early July</p>	 <p>Compound, pinnate, 5 to 15 toothed leaflets, variably lobed, yellowish-green</p>	 <p>Yellowish-green with full length grooves (no hairs or bristles)</p>
<p>Poison Hemlock</p>  <p>4 to 8 feet tall Native of Eurasia All parts of this plant are very poisonous. DO NOT INGEST</p>	 <p>Small and white arranged in numerous flat-topped clusters on all branches Flowers late May - late June</p>	 <p>Bright green, small and fern-like, may appear glossy</p>	 <p>Smooth and waxy stem with purple blotches, 1 to 2 inches in diameter (no hairs or bristles)</p>

Wild Parsnip Identification

- Can cause severe reaction to skin, eyes
- Avoid contact
- Large (7'-14' tall) "Queen Anne's Lace" like plants
- Large, deeply lobed leaves (up to 5'!)
- Hairy stems with purple
- Flowers white, slightly curved tops



Actions

- **Avoid all contact**
- Avoid mowing, especially once fully size or flowering
 - Avoid moving seed
- Manage only with proper PPE
- Herbicide application in early Spring
 - Follow up mid summer may be necessary



Oak Wilt

Impacts

- Fungus that “plugs” water moving tissue
- Quickly kills oak trees
 - Red Oaks <1 year
 - White oaks much slower
- Can spread through root system to other trees
- Spread across landscape by beetles

Joseph OBrien, USDA Forest Service, Bugwood.org



Oak Wilt

Identification

- Die back from tips/tops down
- Off season browning
- Leaves “wilt” from branches
- Leaves dying from midrib
- Fungal growth under bark
- Older infections appear in patches
- Generally see in damaged trees
 - After trimming/storm damage



Identifying: Oak Wilt



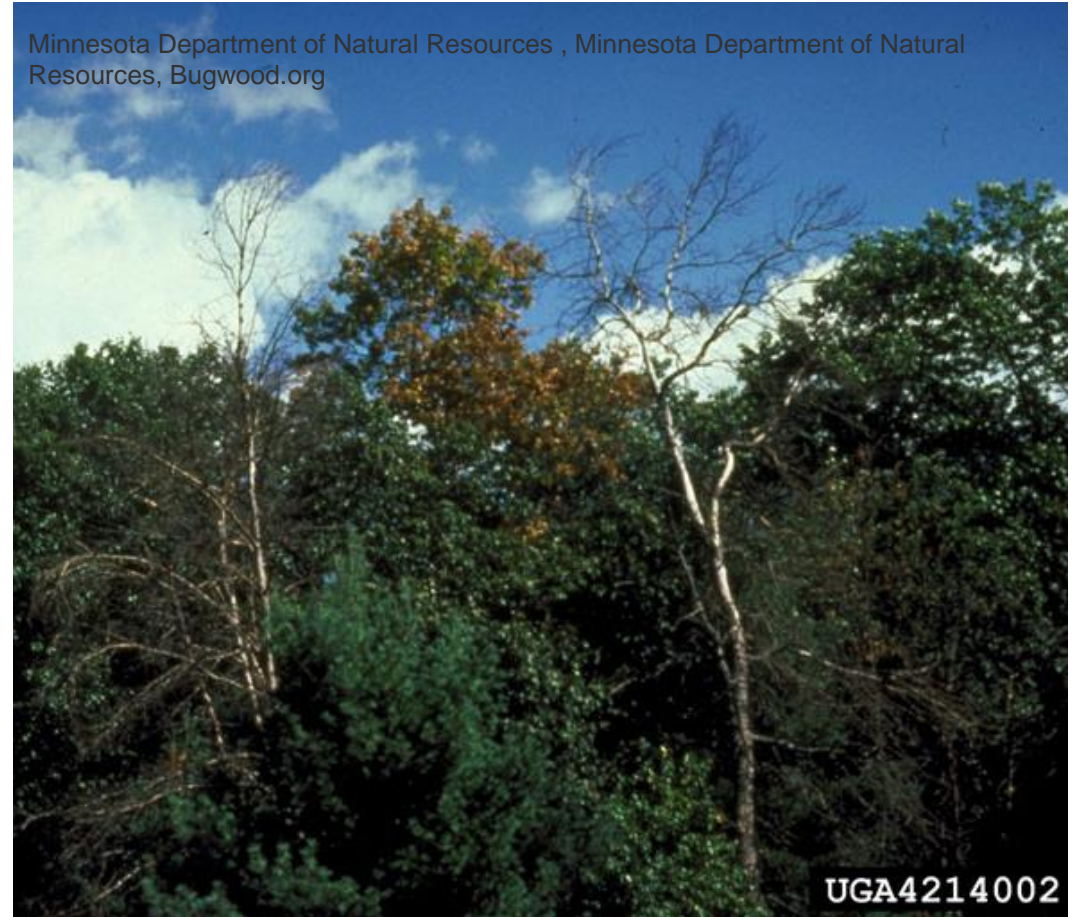
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UGA4214002

Minnesota Department of Natural Resources , Minnesota Department of Natural Resources, Bugwood.org

Oak Wilt

Actions

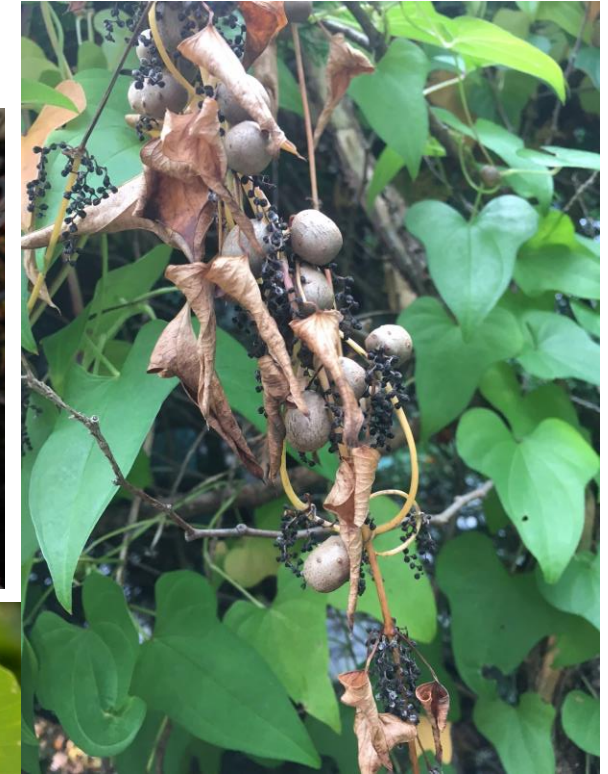
- Avoid pruning during growing season
- Avoid tree removal during growing season
- Paint damage/cuts to prevent infection

- Infected trees (and those bordering) often removed
- Vibratory plowing to sever root connections



What about others?

- There are over 400 species on MISIN!
- Keep an eye out for “new” or “aggressive”
- MISIN App
- Contact your CISMA!





Question?

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