

DNR Aquatic & Wetland Invasive Species Monitoring

Maureen (Ferry) Kalscheur
Statewide AIS Monitoring Lead
Wisconsin Department of Natural Resources







Dawn of an era

- First detections in Wisconsin

Year	Species	Waterbody
1923	Rainbow smelt	Lake Michigan
1955	Curly leaf pondweed & Chinese mystery snails	William Lake, Marquette County
1957	Rusty crayfish	Whitefish Lake, Oneida County
1962	Eurasian water milfoil	Lake Mendota, Dane County

Evolution

- Initially incidental reports
- Some systematic *attempts* in 90's
- SWIMS ~2002



Wisconsin's AIS Monitoring



Extension
UNIVERSITY OF WISCONSIN-MADISON



Wisconsin's AIS Monitoring



Extension

UNIVERSITY OF WISCONSIN-MADISON





Evolution

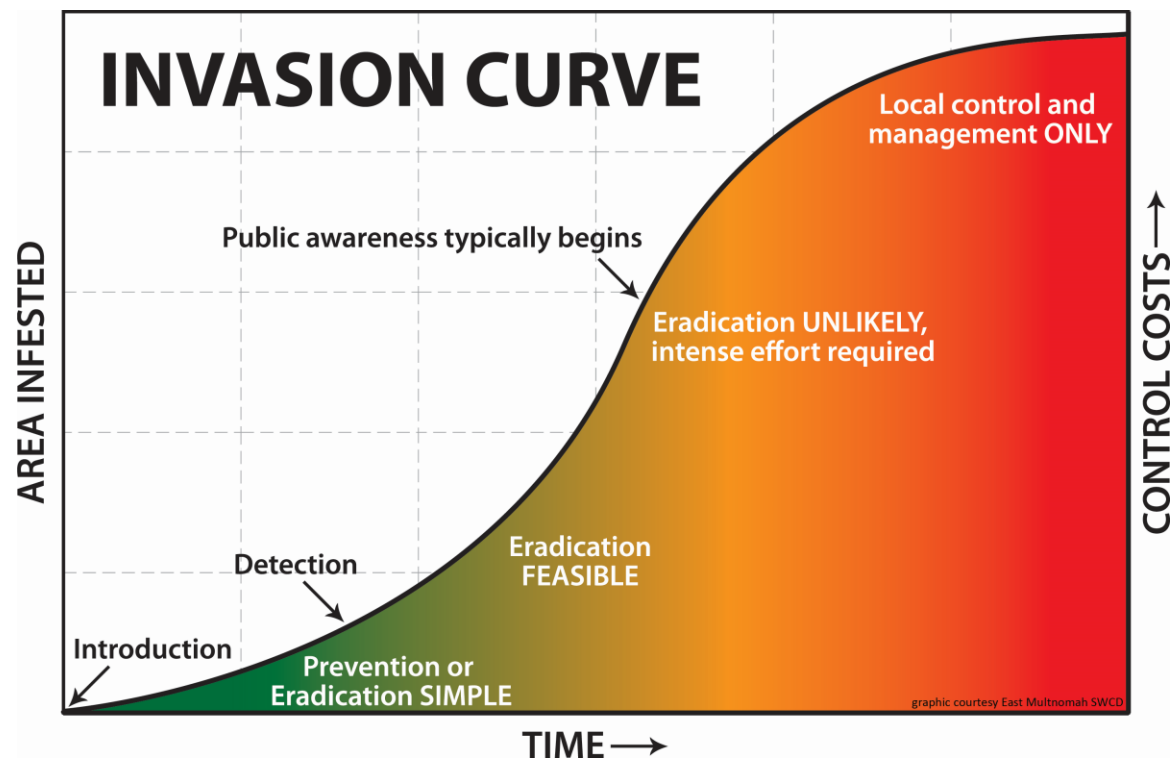
- GLRI Partnership Grant in 2010 for prevention, education, and **monitoring**.
- First statewide systematic AIS monitoring

Great Lakes
RESTORATION



Objective

- Objective:
 - Locate pioneer invasive species populations
 - Enable response
 - Understand spread



Become Familiar



» TOPIC » INVASIVES

INVASIVE SPECIES RULE - NR 40

The invasive species rule, Wis. Admin. Code NR 40, makes it illegal to possess, transport, transfer or introduce certain invasive species in Wisconsin without a permit. Everyone is responsible to comply with these regulations. What you need to do as an individual, business, or organization may vary depending on your type of work and activities. The regulated species list and the details of the rule are shown in the tabs below.

View the [full text of the invasive species rule](#) [PDF exit DNR].

What the rule does **Species list** Compliance Business resources Background

View a [quick summary](#) [PDF] of the invasive species rule.

The invasive species rule creates a comprehensive, science-based system with criteria to classify invasive species into two categories: "prohibited" and "restricted." With certain exceptions, the transport, possession, transfer and introduction of prohibited species is banned.

Invasive Species

[Learn More](#)

[Report an Invasive](#)

[Prevent the Spread](#)

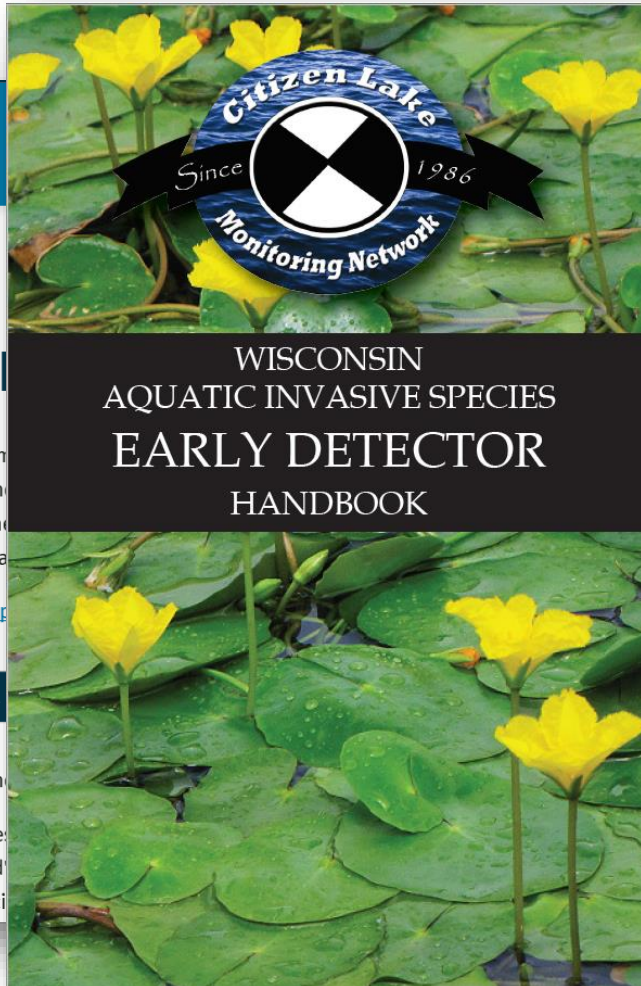
[Control Measures](#)

Rules and Regulations

[Wisconsin Invasive Species Council](#)

[AIS Efforts](#)

Become Familiar



» TOPIC » INVASIVES

INVASIVE SPECIES

The invasive species rule, Wis. Adm. Code Chapter Trans. 102, requires the introduction of certain invasive species in Wisconsin with the intent to sell, lease, give, or otherwise transfer them. The rule also requires the need to do as an individual, business, or organization to maintain a regulated species list and the details of the rule.

View the [full text of the invasive species rule](#).

What the rule does **Species list**

View a [quick summary \(pdf\)](#) of the rule.

The invasive species rule creates two categories: "prohibited" and "regulated." The introduction of prohibited species is prohibited, and the introduction of regulated species is restricted.

ENVIRONMENT FORESTRY LICENSES NEWS ABOUT CONTACT

Invasive Species

[Learn More](#)

[Report an Invasive](#)

[Prevent the Spread](#)

[Control Measures](#)

Rules and Regulations

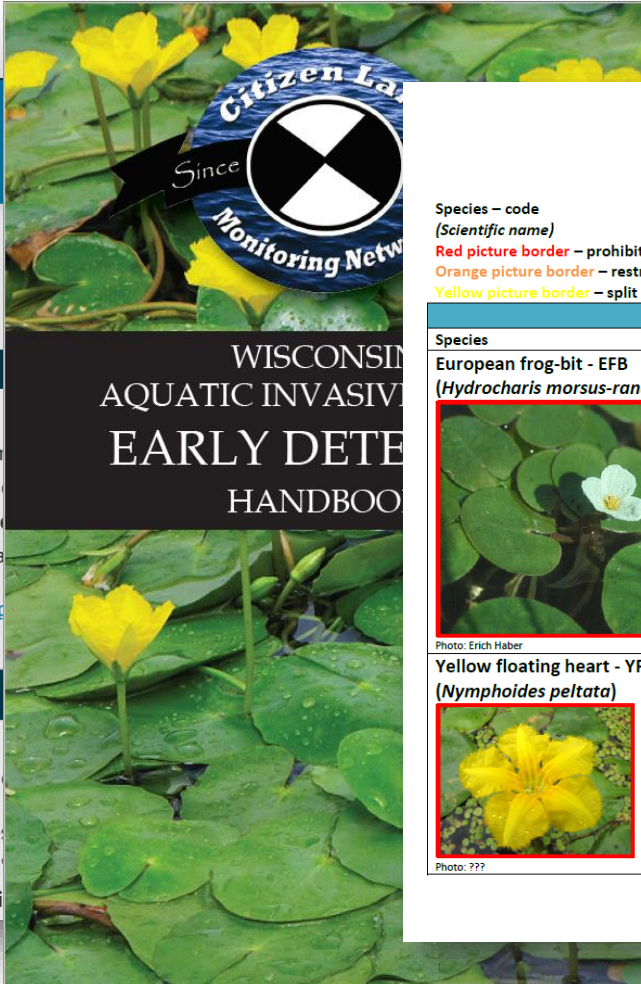
[Wisconsin Invasive Species Council](#)

[AIS Efforts](#)

duce certain
. What you
ivities. The

ive species
transfer and

Become Familiar



» TOPIC » INVASIVES

INVASIVE SPECIES

The invasive species rule, Wis. Adm. Code, requires the Department of Natural Resources to do as an individual, business, or other regulated species list and the details of the rule.

View the [full text of the invasive species rule](#).

What the rule does **Species list**

View a [quick summary \(PDF\)](#) of the rule.

The invasive species rule created two categories: "prohibited" and "restricted" introduction of prohibited species.

Aquatic Invasive Species Identification Guide

November 28, 2017
EGAD #3200-2017-44



Species – code
(Scientific name)
Red picture border – prohibited
Orange picture border – restricted
Yellow picture border – split listed

SUBMERGED AQUATIC



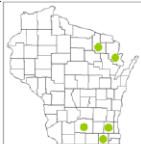
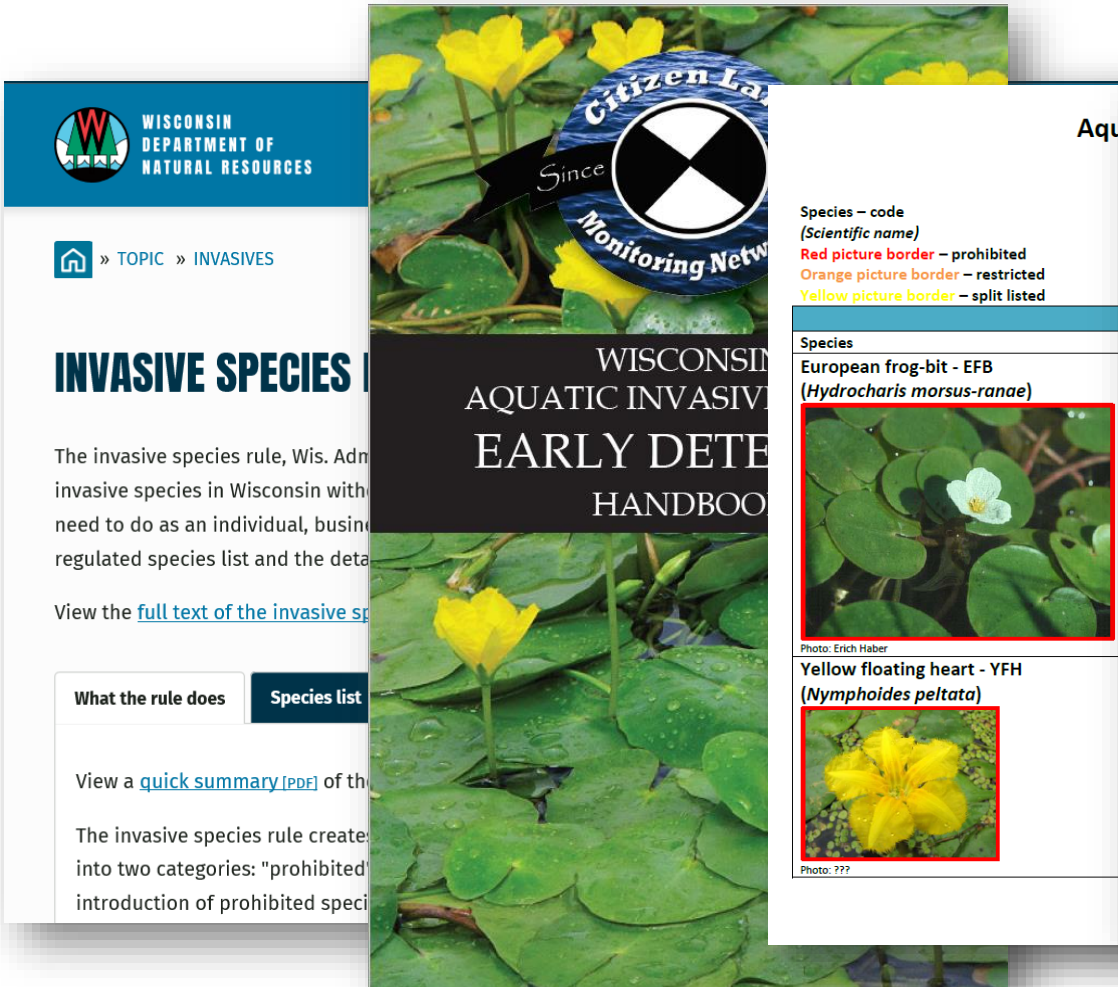
Species	Identification	Distribution/Notes
European frog-bit - EFB <i>(Hydrocharis morsus-ranae)</i> 	Leaves: Usually floating; heart-shaped with long stems; 1.2-6.3 cm (0.5-2.5 in) in diameter; smooth margins; often dark purple beneath; lateral veins are arching and make a 75-90° angle with the midvein; tissue containing airpockets are located mostly along the midvein. Flowers: Three white petals with yellow center ; blooms mid-summer. Fruits & seeds: Rarely produces viable seeds and instead relies on vegetative stolons and turions for reproduction. Similar species: Often confused with American frog-bit (<i>Limnobium spongia</i> ; not known in WI), whose leaves have lateral veins that make a 30-80° angle with the midvein, and whose leaf tissue contains large air pockets throughout. White water lilies (<i>Nymphaea odorata</i>) have circular leaves with a triangular slit, and large, multi-petaled white flowers. <i>Nuphar</i> spp. have yellow cup-like flowers.	Not reported in Wisconsin
Yellow floating heart - YFH <i>(Nymphoides peltata)</i> 	Leaves: Floating; heart-shaped with slightly wavy margins ; 3-15 cm (1.2-6.0 in) in diameter; alternately arranged near the stem base and oppositely arranged near the top; frequently have purplish undersides . Flowers: 2-5 bright yellow flowers arise from erect flower stalks; 3-4 cm (1.2-1.6 in) in diameter; 5 petals arranged like the spokes of a wheel, each with a distinctive fringe along the edge. Fruits & seeds: Fruit is a pod-like capsule (1.2-2.5 cm; 0.5-1.0 in) that splits on one side. One fruit is produced from each flower, and contains many smooth, oval seeds with winged margins.	

Photo: Erich Haber

Photo: ???

Last updated November 28, 2017

Become Familiar



WISCONSIN DEPARTMENT OF NATURAL RESOURCES

» TOPIC » INVASIVES

INVASIVE SPECIES

The invasive species rule, Wis. Adm. Code, requires landowners to manage and control invasive species in Wisconsin with the same care and diligence as they would need to do as an individual, business, or organization. The rule includes a regulated species list and the details of the rule.

View the [full text of the invasive species rule](#).

What the rule does | **Species list**

View a [quick summary \(pdf\)](#) of the rule.

The invasive species rule creates two categories: "prohibited" and "restricted." The introduction of prohibited species is prohibited.

Citizen Lake Monitoring Network

Since 1998

WISCONSIN AQUATIC INVASIVE EARLY DETECTION HANDBOOK

Species - code (Scientific name)

- Red picture border - prohibited
- Orange picture border - restricted
- Yellow picture border - split listed

Species

European frog-bit - EFB
(*Hydrocharis morsus-ranae*)




Photo: Erich Haber

Yellow floating heart - YFH
(*Nymphoides peltata*)


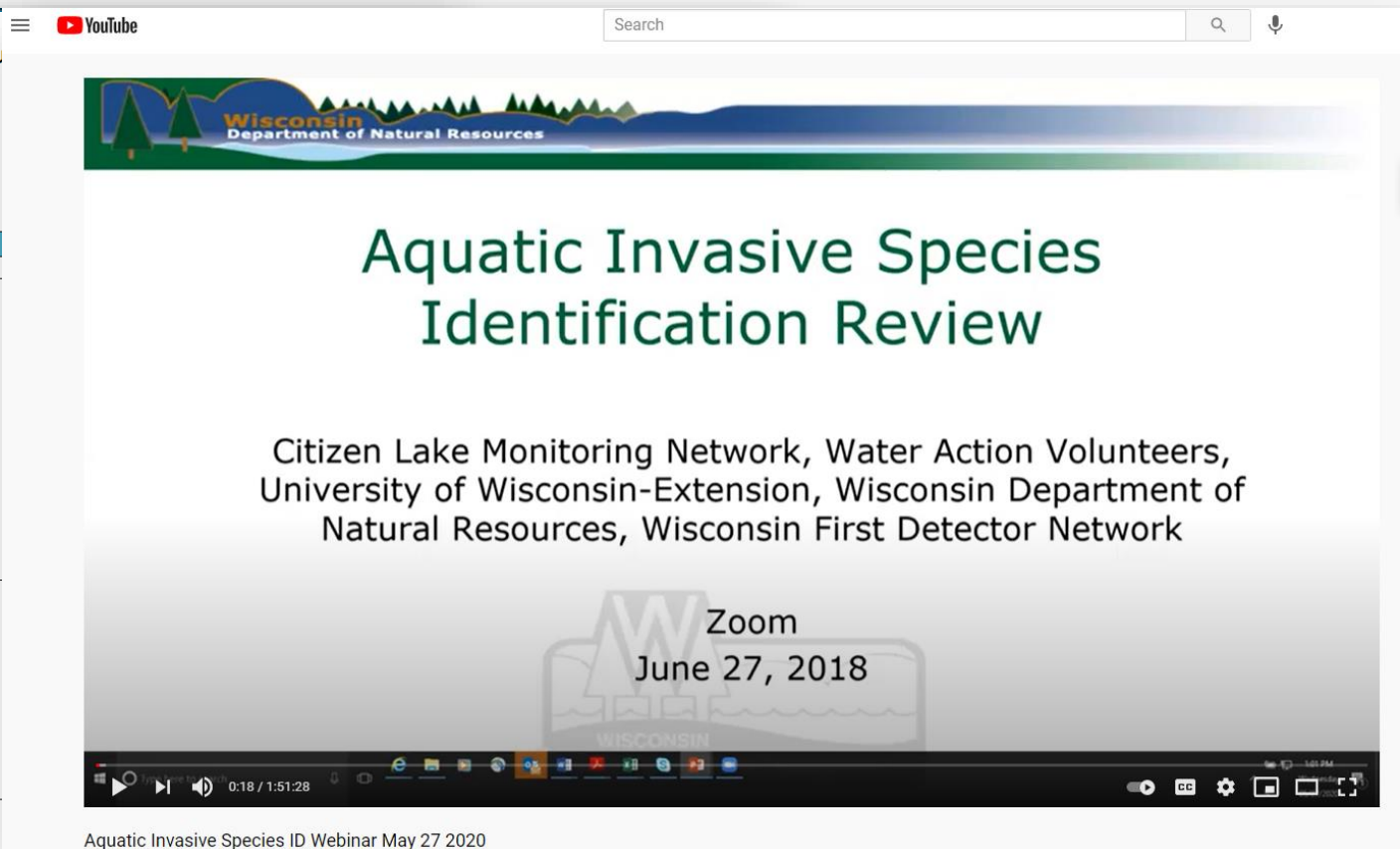


Photo: ???



YouTube

Search

Wisconsin Department of Natural Resources

Aquatic Invasive Species Identification Review

Citizen Lake Monitoring Network, Water Action Volunteers, University of Wisconsin-Extension, Wisconsin Department of Natural Resources, Wisconsin First Detector Network

Zoom
June 27, 2018

0:18 / 1:51:28

Aquatic Invasive Species ID Webinar May 27 2020

Become Familiar

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

» TOPIC » INVASIVES

INVASIVE SPECIES

The invasive species rule, Wis. Adm. Code Chapter DNR 11.02, requires landowners to prevent the introduction of prohibited species into Wisconsin waters. Landowners with regulated species list and the details of the rule.

View the [full text of the invasive species rule](#).

What the rule does | **Species list**

View a [quick summary \(pdf\)](#) of the rule.

The invasive species rule creates two categories: "prohibited" and "restricted". The introduction of prohibited species is prohibited.

WISCONSIN AQUATIC INVASIVE SPECIES EARLY DETECTION HANDBOOK

Citizen Lake Monitoring Network

YouTube

Search

Aquatic Invasive Species Identification Review

Citizen Lake Monitoring Network, Water Action Volunteers, University of Wisconsin-Extension, Wisconsin Department of Natural Resources, Wisconsin First Detector Network

Zoom
June 27, 2018

Aquatic Invasive Species ID Webinar May 27 2020

Field Prep

- Identify monitoring locations
 - Not recently surveyed
 - Proximal AIS
 - Prioritize based on use
- Sample from least to Most AIS

The screenshot displays the Wisconsin Department of Natural Resources website. The header includes the DNR logo and the text "WISCONSIN DEPARTMENT OF NATURAL RESOURCES". The main content area features a "Data & Maps" section with a list of links: "Lakes and aquatic invasive species mapping tool", "Lakes and Rivers with Aquatic Invasives", "Sign Installation", "Species Locations", and "Watercraft Inspection Data". A red box highlights the first three links. To the right, there is a "Take Action" section with links for "Take Prevention Steps" and "Volunteer". Below that is another "Data & Maps" section with links for "Lakes and aquatic invasive species mapping tool", "Lakes and Rivers with Aquatic Invasives", "Sign Installation", "Species Locations", and "Watercraft Inspection Data", with a red box highlighting the last three links. At the bottom right, there is a "Staff & Volunteers" section with a "Log in to Enter Data" link, and a "Contact information" section with a link to "Wisconsin DNR Lakes Division of Water".

Field Prep

- Identify monitoring locations
 - Not recently surveyed
 - Proximal AIS
 - Prioritize based on use

LET'S CHECK IT OUT!

- Sample <https://dnr.wi.gov/lakes/invasives/AquaticInvasive.aspx>
- Most AIS

The screenshot shows the 'Aquatic Invasive Species' page on the Wisconsin DNR website. A large blue banner at the top reads 'Data & Maps'. Below it, a list of links is displayed, with red boxes highlighting 'Lakes and Rivers with Aquatic Invasives', 'Sign Installation', 'Species Locations', and 'Watercraft Inspection Data'. To the right, a sidebar contains a 'Take Action' section with links for 'Take Prevention Steps' and 'Volunteer', and another 'Data & Maps' section with links for 'Lakes and aquatic invasive species mapping tool', 'Lakes and Rivers with Aquatic Invasives', 'Sign Installation', 'Species Locations', and 'Watercraft Inspection Data'. At the bottom right, there is a 'Staff & Volunteers' section with a 'Log in to Enter Data' link, and a 'Contact information' section with the text 'For information on Lakes in Wisconsin, contact: Wisconsin DNR Lakes Division of Water' and a link to 'Wisconsin DNR Lakes'.



Field Prep

- Communication
- Crews
- General safety guidelines
- Snorkeling guidelines
- Ethanol guidelines
- Datasheets

AQUATIC INVASIVE SPECIES EARLY DETECTION MONITORING FIELD PREPARATION

State of Wisconsin Department of Natural Resources

STANDARD OPERATING PROCEDURES

May 2020

DRAFT

These working draft protocols will undergo DNR review in fall/winter 2021 & external review in winter/spring 2022. If you have comments or questions, please contact maureen.ferry@wisconsin.gov.



Field Prep

- Communication
- Crews
- General safety
- Snorkeling guidelines
- Ethanol guidelines
- Datasheets

LET'S CHECK IT OUT!

<https://dnrx.wisconsin.gov/swims/downloadDocument.do?id=239109781>

AQUATIC INVASIVE SPECIES EARLY DETECTION MONITORING FIELD PREPARATION

State of Wisconsin Department of Natural Resources
STANDARD OPERATING PROCEDURES

These working draft protocols will undergo DNR review in fall/winter 2021 & external review in winter/spring 2022. If you have comments or questions, please contact maureen.ferry@wisconsin.gov.

Forms

Aquatic Invasive Species Monitoring Data

Form 3200-154 (2/21) Page 1 of 3

The purpose of this form is to notify DNR of aquatic invasive species (AIS) surveillance results.

To find where aquatic invasives have already been found, visit: <http://dnr.wi.gov/topic/Invasives/report.html>

Notice: Information on this voluntary form is collected under ss. 33.02 and 281.11, Wis. Stats. Personally identifiable information collected on this form will be incorporated into the DNR Surface Water Integrated Monitoring System (SWIMS) Database. It is not intended to be used for any other purposes but may be made available to requesters under Wisconsin's Public Records laws, ss. 19.32 - 19.39, Wis. Stats.

If the plant or animal cannot be collected due to safety concerns or it is located on private property, please take a photo (see Sample section below). DNR staff will then follow-up if further monitoring is needed for identification

Instructions: Bold fields must be completed.

Location Name		SWIMS Station ID	County	Collector(s)	Date	Start Time	End Time
Protocol		<input type="radio"/> Wetland <input type="radio"/> Lake <input type="radio"/> Stream <input type="radio"/> Roadside <input type="radio"/> OIT			AIS Sign Present	Paid Hours (Hrs x PPL)	Vol. Hours (Hrs x PPL)
Pathway		<input type="checkbox"/> Maritime <input type="checkbox"/> State & Fed <input type="checkbox"/> Road & Trans <input type="checkbox"/> Canal, Dam, Div <input type="checkbox"/> Rec <input type="checkbox"/> OIT <input type="checkbox"/> Natural			<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A		

STEP 1: Become familiar with the ID handout before monitoring. Circle species looked for. These species will appear in SWIMS dropdown when entering fieldwork event.

AQUATIC PLANTS/ALGAE	RIPARIAN PLANTS	INVERTEBRATES
----------------------	-----------------	---------------

*Prohibited or Split Listed Species, †Unregulated species

STEP 2: Record locations of sites in decimal degrees. If diverting from the protocol (i.e. not snorkeling), indicate how and why in comments. List AIS found, gross area, cover, infested area and whether specimens were live/dead. Indicate whether specimens/photos were collected. Include internal and external labels with species name, SWIMS Station ID, Station name, county, sample date, and collector(s). Indicate if no AIS were found. Legibility is important. If needed, preserve with alcohol (4:1). If possible, submit maps.

1 Boat landing (BL), access (A), targeted search site (TS), meander/incidental site (MS). 2 Record locations of sites in decimal degrees. 3 Record whether AIS present at the site (Y/N). 4 Species present. Each species on a separate row. 5 Gross Area: estimate square meter area of survey site. We generally survey 15m x 15m or 225m² (~50R x 50R or 2,500ft²) at each site. 6 Cover (Daubenmire): 1: 0-5% (2.5%), 2: 5-25% (15%), 3: 25-50% (37.5%), 4: 50-75% (62.5%), 5: 75-95% (85.0%), 6: 95-100% (97.5%). Median % cover is the value in parentheses. 7 Infested area: gross area x median % cover. For median % cover see value in parenthesis in cover above. This will be calculated on iPads, but manually calculated in SWIMS. 8 Live:Dead Classes - 1: 100:0; 2: 95:5; 3:75:25; 4: 50:50; 5: 25:75; 6: 5:95; 7: 0:100. Live (L) animals will contain flesh and respond; live plants will be green or with live tissue when scratched and have reproductive fragments (seeds, flowers, apical meristem, etc.). Dead (D) animals will not contain flesh or respond and dead plants sterile fragments that won't root. 9 Indicate whether a photo was taken of the species at the site (Y/N). Photos are only mandatory when first occurrence. 10 Indicate whether a specimen was collected (Y/N). Specimens only mandatory for NR 40 prohibited species. 11 Indicate how and why protocols varied from SOP. Habitat description. Any other pertinent information.

Site ¹	Latitude ² XX.XXXXX	Longitude ² -XX.XXXXX	AIS Present ⁴ (Y/N)	Species ⁴ , gross area ⁵ , cover (1-6) ⁶ , infested a. (sq m) ⁷ , and L:D (1-7) ⁸				Photo taken? ⁹ (Y/N)	Specimen collected? ¹⁰ (Y/N)	Comments ¹¹ (include habitat description or protocol changes)
				Species ⁴	Gross Area ⁵	Cover ⁶	Infested Area ⁷			

Save... Clear Data

Note: In order to fill and save this form electronically, it must be opened using Adobe Reader or Acrobat software. Save a copy of the file, open Adobe Reader, select File > Open and browse for the file you saved.

State of Wisconsin
Department of Natural Resources
Wisconsin Lakes Partnership

Aquatic Invasive Species Incident Report
Form 3200-153 (R 05/21) Page 1 of 2

The purpose of this form is to notify DNR of a new populations of AIS. Only use if you found an aquatic invasive species where it hasn't been found previously.

To find where aquatic invasives have already been found, visit: <http://dnr.wi.gov/topic/Invasives/report.html>

Notice: Information on this voluntary form is collected under ss. 33.02 and 281.11, Wis. Stats. Personally identifiable information collected on this form will be incorporated into the DNR Surface Water Integrated Monitoring System (SWIMS) Database. It is not intended to be used for any other purposes, but may be made available to requesters under Wisconsin's Public Records laws, ss. 19.32 - 19.39, Wis. Stats.

If the plant or animal cannot be collected due to safety concerns or it is located on private property, please take a photo (see Sample section below). DNR staff will then follow-up if further monitoring is needed for identification

Primary Data Collector

Name	Phone Number	Email
Location		
Name (e.g. Lake, Stream, Wetland)	Township	County
Date and Time of Monitoring or Discovery		
Monitoring Date	Start Time	End Time

Add a new Invasive Specie found below ==> [+]

Information on the Aquatic Invasive Species Found (Fill out one form for each species found.)

AQUATIC PLANTS	RIPARIAN PLANTS	INVERTEBRATES
----------------	-----------------	---------------

Habitat Type (Lake, Stream, Wetland, Roadside, or Other)

Where did you find the invasive species? (Give boat landing, nearest intersection/road, stream crossing, and general description)

Latitude in decimal degrees (xx.xxxxx, -xx.xxxxx): _____ Longitude in decimal degrees (xx.xxxxx, -xx.xxxxx): _____

Area species was covering. Estimate in square feet. _____ About how many individuals were there (1, 50, 100, 1,000, many beds, etc.)? _____

Can the species move or is it attached? Check One: Rooted/Attached Floating/Swimming/Crawling

Is specimen alive or dead? Check One: Live Dead

Habitat

Water depth where the Invasive(s) were found (if applicable) Feet Meters

Where was the Invasive Species Located? Check all that apply

Below water Mud / Muck Sand Rock In/on plants Dock / Pier

Watercraft Above water Shoreline Wet field Ditch Other _____

Sample

Did you collect a sample (specimen) and bring it to your local DNR office? If so, which office?

Eau Claire Green Bay Plymouth Spooner Did not take sample to a DNR office

Fitchburg Oshkosh Rhinelander Superior Other Office _____

Photo Taken? Yes No Photos should be sent to WNDR AIS Coordinators or DNRIrvasivePhotos@wisconsin.gov

The purpose of this form is to notify DNR of aquatic invasive species (AIS) surveillance results.

To find where aquatic invasives have already been found, visit: <http://dnr.wi.gov/topic/Invasives/report.html>

Notice: Information on this voluntary form is collected under ss. 33.02 and 281.11, Wis. Stats. Personally, identifiable information collected on this form will be incorporated into the DNR Surface Water Integrated Monitoring System (SWIMS) Database. It is not intended to be used for any other purposes but may be made available to requesters under Wisconsin's Public Records laws, ss. 19.32 - 19.39, Wis. Stats.

If the plant or animal cannot be collected due to safety concerns or it is located on private property, please take a photo (see Sample section below). DNR staff will then follow-up if further monitoring is needed for identification

Instructions: Bold fields must be completed.

Location Name		SWIMS Station ID	County	Collector(s)	Date	Start Time	End Time
Protocol	Wetland <input type="radio"/> Lake <input type="radio"/> Stream <input type="radio"/>	LET'S CHECK IT OUT!			Hours (Hrs x PPL)	Vol. Hours (Hrs x PPL)	
Pathway	Maritime <input type="checkbox"/> State & Fed <input type="checkbox"/> Road <input type="checkbox"/>						

STEP 1: Become familiar with the ID handout before monitoring. Circle species looked for. These species will appear in SWIMS dropdown when entering fieldwork event.

AQUATIC PLANTS/ALGAE	https://dnr.wi.gov/files/pdf/forms/3200/3200-154.pdf
----------------------	---

*Prohibited or Split Listed Species, †Unregulated species

STEP 2: Record locations of sites in decimal degrees. If diverting from the protocol (i.e. not snorkeling), indicate how and why in comments. List AIS found, gross area, cover, infested area and whether specimens were live/dead. Indicate whether specimens/photos were collected. Include internal and external labels with species name, SWIMS Station ID, Station name, county, sample date, and collector(s). Indicate if no AIS were found. Legibility is important. If needed, preserve with alcohol (4:1). If possible, submit maps.

¹ Boat landing (BL), access (A), targeted search site (TS), meander/incidental site (MS). ² Record locations of sites in decimal degrees. ³ Record whether AIS present at the site (Y/N). ⁴ Species present. Each species on a separate row. ⁵ Gross Area: estimate square meter area of survey site. We generally survey 15m x 15m or 225m² (~50ft x 50ft or 2,500ft²) at each site. ⁶ Cover (Daubenmire): 1: 0-5% (2.5%), 2: 5-25% (15%), 3: 25-50% (37.5%), 4: 50-75% (62.5%), 5: 75-95% (85.0%), 6: 95-100% (97.5%). Median % cover is the value in parentheses. ⁷ Infested area: gross area x median % cover. For median % cover see value in parenthesis in cover above. This will be calculated on iPads, but manually calculated in SWIMS. ⁸ Live:Dead Classes - 1: 100:0; 2: 95:5; 3:75:25; 4: 50:50; 5: 25:75; 6: 5:95; 7: 0:100. Live (L) animals will contain flesh and respond; live plants will be green or with live tissue when scratched and have reproductive fragments (seeds, flowers, apical meristem, etc.). Dead (D) animals will not contain flesh or respond and dead plants sterile fragments that won't root. ⁹ Indicate whether a photo was taken of the species at the site (Y/N). Photos are only mandatory when first occurrence. ¹⁰ Indicate whether a specimen was collected (Y/N). Specimens only mandatory for NR 40 prohibited species. ¹¹ Indicate how and why protocols varied from SOP. Habitat description. Any other pertinent information.

Site ¹	Latitude ² XX.XXXXX	Longitude ² -XX.XXXXX	AIS Present ³ (Y/N)	Species ⁴ , gross a ⁵ , cover (1-6) ⁶ , infested a. (sq m) ⁷ , and L:D (1-7) ⁸					Photo taken? ⁹ (Y/N)	Specimen collected? ¹⁰ (Y/N)	Comments ¹¹ (include habitat description or protocol changes)
				Species ⁴	Gross Area ⁵	Cover ⁶	Infested Area ⁷	Live:Dead ⁸			
					Gross Area	Cover	Infested a. (sq. m.)	Live:Dead			
					Gross Area	Cover	Infested a. (sq. m.)	Live:Dead			
					Gross Area	Cover	Infested a. (sq. m.)	Live:Dead			
					Gross Area	Cover	Infested a. (sq. m.)	Live:Dead			



Save... Clear Data

Note: In order to fill and save this form electronically, it must be opened using Adobe Reader or Acrobat software. Save a copy of the file, open Adobe Reader, select File > Open and browse for the file you saved.

State of Wisconsin
Department of Natural Resources
Wisconsin Lakes Partnership

Aquatic Invasive Species Incident Report

Form 3200-153 (R 05/21) Page 1 of 2

The purpose of this form is to notify DNR of a new populations of AIS. Only use if you found an aquatic invasive species where it hasn't been found previously.

To find where aquatic invasives have already been found, visit: <http://dnr.wi.gov/topic/Invasives/report.html>

Notice: Information on this voluntary form is collected under ss. 33.02 and 281.11, Wis. Stats. Personally identifiable information collected on this form will be incorporated into the DNR Surface Water Integrated Monitoring System (SWIMS) Database. It is not intended to be used for any other purposes, but may be made available to requesters under Wisconsin's Public Records laws, ss. 19.32 - 19.39, Wis. Stats.

If the plant or animal cannot be collected due to safety concerns or it is located on private property, please take a photo (see Sample section below). DNR staff will then follow-up if further monitoring is needed for identification

Primary Data Collector		
Name	Phone Number	Email
LET'S CHECK IT OUT!		
Monitoring Date	Start time	End time

<http://intranet.dnr.state.wi.us/formscatalog/ffAPI.aspx?HotLink=InitiateForm&formid=6162>

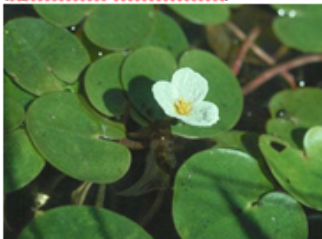



Information on the Aquatic Invasive Species Found (Fill out one form for each species found.)		
AQUATIC PLANTS	RIPARIAN PLANTS	INVERTEBRATES
Habitat Type (Lake, Stream, Wetland, Roadside, or Other)		
Where did you find the invasive species? (Give boat landing, nearest intersection/road, stream crossing, and general description)		
Latitude in decimal degrees (xx.xxxxx, -xx.xxxxx):		Longitude in decimal degrees (xx.xxxxx, -xx.xxxxx):
Area species was covering. Estimate in square feet.	About how many individuals were there (1, 50, 100, 1,000, many beds, etc.)?	
Can the species move or is it attached? Check One: <input type="radio"/> Rooted/Attached <input type="radio"/> Floating/Swimming/Crawling		Is specimen alive or dead? Check One: <input type="radio"/> Live <input type="radio"/> Dead
Habitat		
Water depth where the Invasive(s) were found (if applicable) <input type="radio"/> Feet <input type="radio"/> Meters		
Where was the Invasive Species Located? Check all that apply		
<input type="checkbox"/> Below water	<input type="checkbox"/> Mud / Muck	<input type="checkbox"/> Sand
<input type="checkbox"/> Watercraft	<input type="checkbox"/> Above water	<input type="checkbox"/> Shoreline
<input type="checkbox"/> In/on plants	<input type="checkbox"/> Dock / Pier	<input type="checkbox"/> Other _____
<input type="checkbox"/> Rock	<input type="checkbox"/> Wet field	<input type="checkbox"/> Ditch
Sample		
Did you collect a sample (specimen) and bring it to your local DNR office? If so, which office?		
<input type="checkbox"/> Eau Claire	<input type="checkbox"/> Green Bay	<input type="checkbox"/> Plymouth
<input type="checkbox"/> Spooner	<input type="checkbox"/> Did not take sample to a DNR office	
<input type="checkbox"/> Fitchburg	<input type="checkbox"/> Oshkosh	<input type="checkbox"/> Rhinelander
<input type="checkbox"/> Superior	<input type="checkbox"/> Other Office _____	
Photo Taken? <input type="radio"/> Yes <input type="radio"/> No		
Photos should be sent to WNDR AIS Coordinators or DNRInvasivePhotos@wisconsin.gov		



Photos





- Collect MULTIPLE photos of each new species
- Target identification characteristics
- Include datasheet
- Include landscape

SUBMERGED AQUATIC

Species – code <i>Scientific name</i>	Identification	Distribution/Notes
European frog-bit - EFB <i>(Hydrocharis morsus-ranae)</i> 	Leaves: Usually floating; heart-shaped with long stems; 1.2-6.3 cm (0.5-2.5 in) in diameter; smooth margins; often dark purple beneath; lateral veins are arching and make a 75-90° angle with the midvein; tissue containing airpockets, are located mostly along the midvein. Flowers: Three white petals with yellow center; blooms mid-summer. Fruits & seeds: Rarely produces viable seeds and instead relies on vegetative stolons and turions for reproduction. Similar species: Often confused with American frog-bit (<i>Limaea bilum spargia</i> ; not known in WI), whose leaves have lateral veins that make a 30-80° angle with the midvein, and whose leaf tissue contains large air pockets throughout. White water lilies (<i>Nymphaea odorata</i>) have circular leaves with a triangular slit, and large, multi-petaled, white flowers. <i>Nuphar</i> , spp. have yellow cup-like flowers.	Not reported in Wisconsin 
Yellow floating heart - YFH <i>(Nymphoides peltata)</i> 	Leaves: Floating; heart-shaped with slightly wavy margins; 3-15 cm (1.2-6.0 in) in diameter; alternately arranged near the stem base and oppositely arranged near the top; frequently have purplish undersides. Flowers: 2-5 bright yellow flowers arise from erect flower stalks; 3-4 cm (1.2-1.6 in) in diameter; 5 petals arranged like the spokes of a wheel, each with a distinctive fringe along the edge. Fruits & seeds: Fruit is a pod-like capsule (1.2-2.5 cm; 0.5-1.0 in) that splits on one side. One fruit is produced from each flower, and contains many smooth, oval seeds with winged margins. Similar species: Spatterdocks (<i>Nuphar</i> , spp.) have much larger leaves, and cup-like flowers without fringed petals. <i>Watershield</i> (<i>Brasenia schreberi</i>) has small oval floating leaves often with a jelly-like covering on the undersides, and small purple flowers. Other species of <i>Nymphoides</i> such as <i>N. aquatica</i> and <i>N. cordatum</i> (native	



WISCONSIN
 AQUATIC INVASIVE SPECIES
 EARLY DETECTOR
 HANDBOOK

Photos_322 Brazilian waterweed - BWW <i>(Egeria densa)</i> 	to the southern U.S.), and <i>N. cristata</i> and <i>N. indica</i> (non-native and sold as ornamental plants) are also similar in appearance. Leaves: Finely serrated (under magnification); 1-3 cm (0.4-1.2 in) long and up to 5 mm (0.2 in) wide; occur in whorls of 4-8. Flowers: Small (1.8-2.5 cm; 0.7-1.0 in); three white petals with yellow center; float on or rise above the surface of the water. Fruits & seeds: Seeds are not known to be produced outside of its native range. Spreads through vegetative reproduction - plant fragments containing double nodes can produce new plants. Roots: Slender, and white or pale. Adventitious roots are freely produced from double nodes on the stem. Similar species: Common and slender waterweed (<i>Elodea</i> spp.) have leaves in whorls of 3, and leaf edges appear smooth to the naked eye. <i>E. densa</i> is overall more robust than native <i>Elodea</i> spp. Non-native hydrilla (<i>Hydrilla verticillata</i>), often produces tubers and has small teeth on the underside of the leaf midrib, while <i>E. densa</i> does not produce tubers and the leaf underside is smooth.	
Photos_322 (left); Washington State Department of Ecology (right) Hydrilla - HYD <i>(Hydrilla verticillata)</i> 	Leaves: Occur in whorls of 3-8; 6-20 mm (0.2-0.8 in) long and 1-4 mm (0.04-0.16 in) wide; small spines give leaf margins a visible toothed appearance; midrib on underside of leaf is often reddish and has visible spines; rough to the touch. Flowers: Tiny (4-8 mm; 0.16-0.31 in); female flowers are white, have 3 petals and 3 sepals, and are located on threadlike stalks emerging from the leaf axils; male flowers are white to red/brown. Fruits & seeds: Monoecious variety can set viable seed although primarily	





Agri-Science Species (200) Field Observation Monitoring Data Sheet

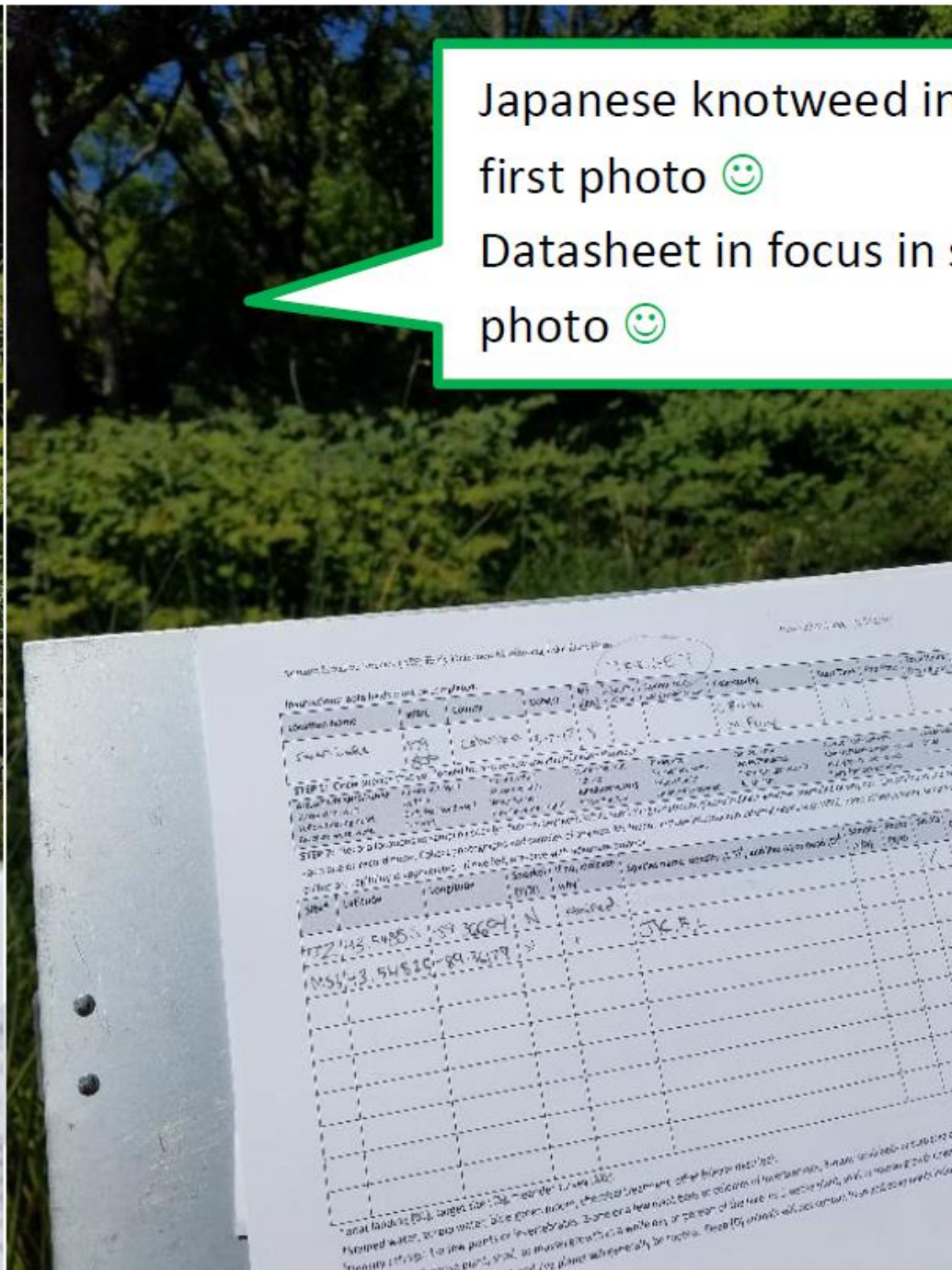
Instructions: Bold text must be completed

Location Name	WVC	County	SWMS	Alt. (m)	Spec. Date	Observer(s)	Date
Plant Lake	195	Cheshire	L1-17	4			

STEP 2: Circle species that you collect for and write the identification number

Agri-Science Species	Common Name	Plant Height	Spec. Date	Observer(s)	Date

STEP 3: Record location of sampling site on separate map sheet. When recording a national grid co-ordinate, record the easting and northing to the nearest 100m. Use the 100m grid lines to locate the site.



Japanese knotweed in focus in first photo 😊

Datasheet in focus in second photo 😊

**Local Coordinators indicate if you can verify the sample and fill out...

AIS Bridge Snapshot Day Datasheet

Sept

Site: *Butternut Creek @ CTH N*

Names of Volunteers:

Coordinates:

*My Jacobson
Andy WARD*

Protocols (circle one):

Dry Bridge/Culvert Dry Shoreline

Wet Bridge/Culvert Wet Shoreline

Did you use a handscoop? Yes No

Did you use a rake? Yes No

Start Time: *11:00 Am*

End Time:

Site Coordinator/Initial Verifier:

List each aquatic invasive species observed, estimate the area and density of population. Indicate in the check box if you collected a sample and/or took a picture. Indicate whether you collected a sample and/or took a picture.

Species	Estimated area (m ²)	Density*	Sample Collected?		Picture taken?		Comments
			Y	N	Y	N	
<i>A curly leaf pondweed</i>	<i>1</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>some native snails same location</i>
<i>C curly leaf pondweed</i>	<i>1</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>D pine needle plant</i>	<i>2</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>in center of stream</i>
			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Plant and data sheet in focus 😊
Data sheet mostly complete 😊
No coordinates and no end time 😞



Aquatic Invasive Species (AIS) Early Detection Monitoring Data Form

Form

Instructions: **Bold** fields must be completed.

Location Name	WBIC	County	Date(s)	AIS sign?	Secchi (ft or m)	Transparency (nos/cm)	Collector(s)	Start
Example Lake	123123	Portage	6/1/15	Y			Paul Skowit Maureen Fe	



STEP 1: Circle species that you looked for and review the Identification Hand

AQUATIC PLANTS/ALGAE	Hydrilla	Water hyacinth	Water chestnut	INVERTEBRATES
European frogbit	Curly leaf pondweed	Water lettuce	RIPARIAN PLANTS	Zebra/quagga mus
Yellow floating heart	Fanwort	Eurasian water milfoil	Flowering rush	Asian clam
Brazilian waterweed	Parrot feather	Didymo	Phragmites	New Zealand mud
			Japanese knotweed	
			Japanese hop	

STEP 2: Record locations of sampling sites (in decimal degrees). Indicate whether snorkeled or why not. List AIS f sample of any new AIS found. Collect five new invasive plant specimens, 20 Dreissenids, and up to 3 of each WBIC, name of lake, county, sample date, sample type (snails, spiny water flea or zebra mussel) and collector. Region ethanol.

Site*	Latitude	Longitude	Snorkel (Y/N)	If no, indicate why†	Species name, density (1-5)‡, and live (L) or dead (D)§
BL	44.xxxx	89.xxxx	Y		Asian clam (Corbicula), 1, L

Data sheet complete and legible 😊

Asian clam in focus and with ID characteristics 😊



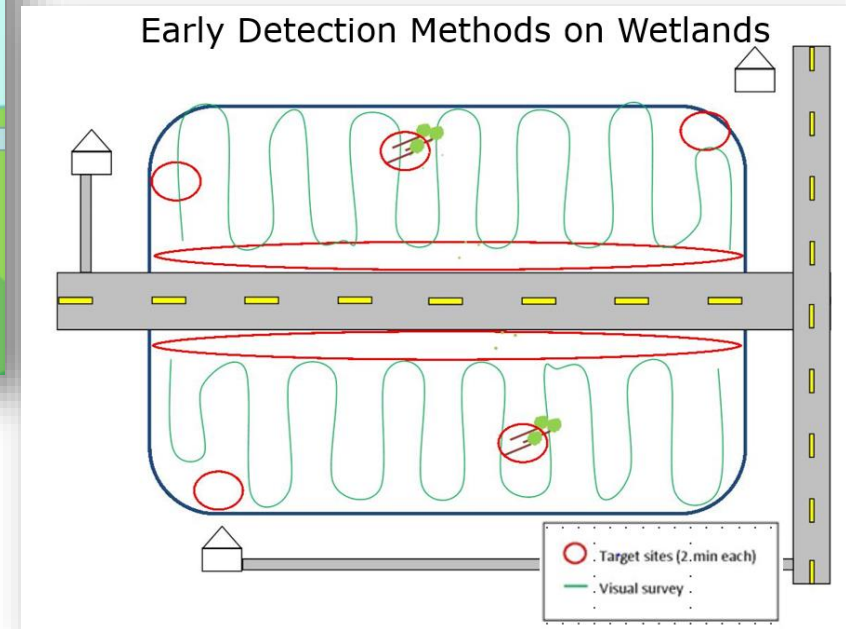
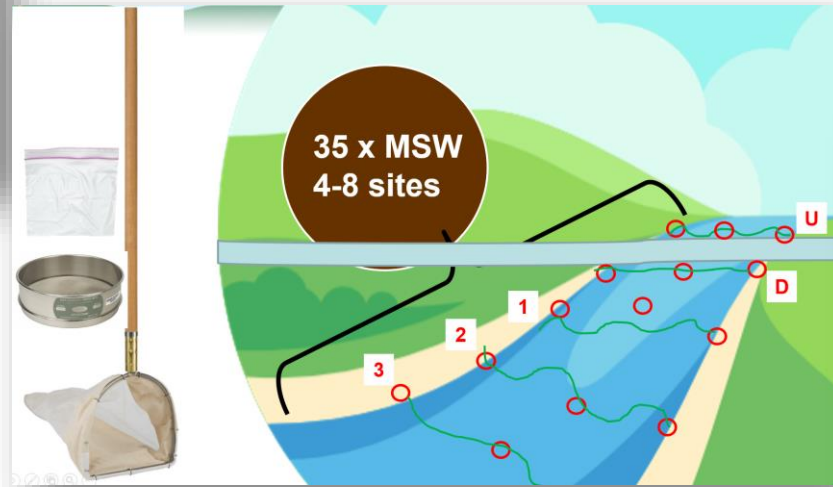
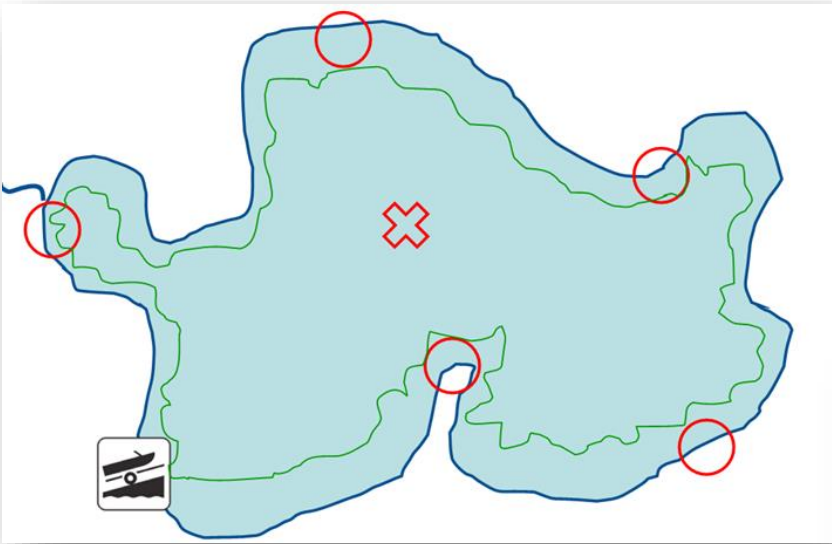
Photo Guidance

- Instruction for reporting aquatic and wetland invasive species with photos
- <https://dnrx.wisconsin.gov/swims/downloadDocument.do?id=145712698>

Specimens



Monitoring Protocols



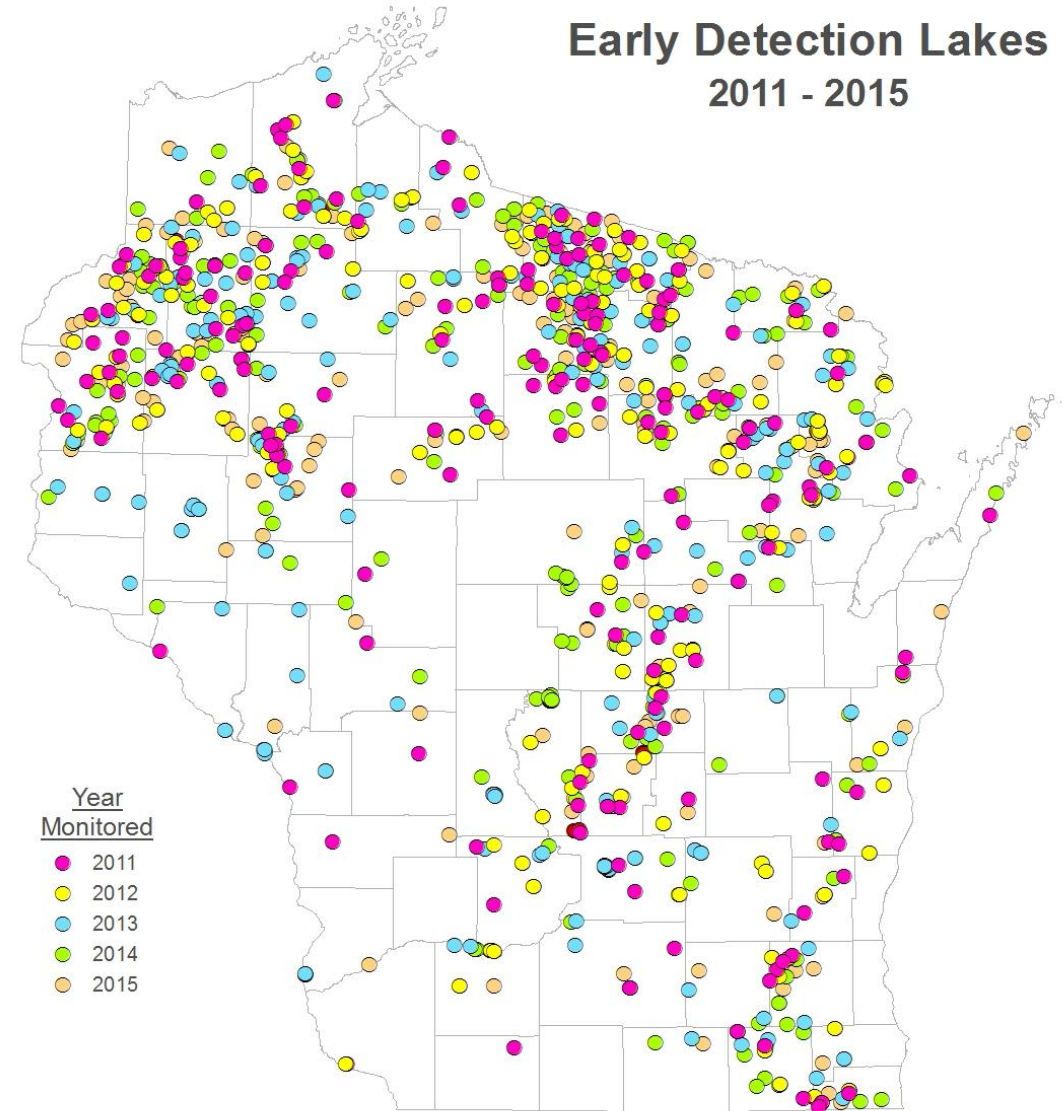


Design

- Design
 - May 15-Sept 15 (shorter/broader for some species)
 - Access/target
 - Meander

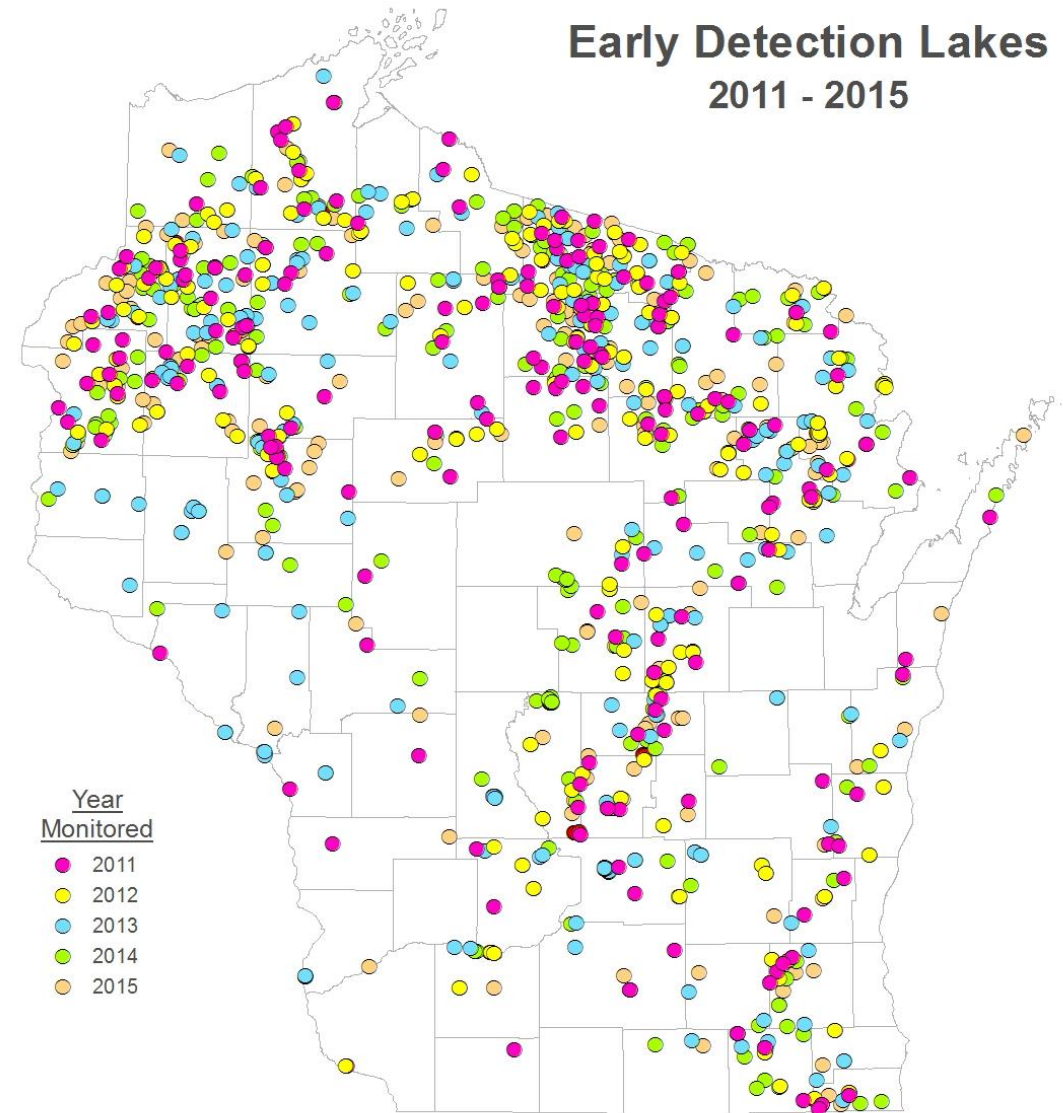
AIS Monitoring in Lakes

- Rate of AIS spread
- 200 public lakes/year
2010-2015



AIS Monitoring in Lakes

- Rate of AIS spread
- 200 public lakes/year
2010-2015
- Rate is stable
- AIS at ~75% sites
- Protocols detect AIS

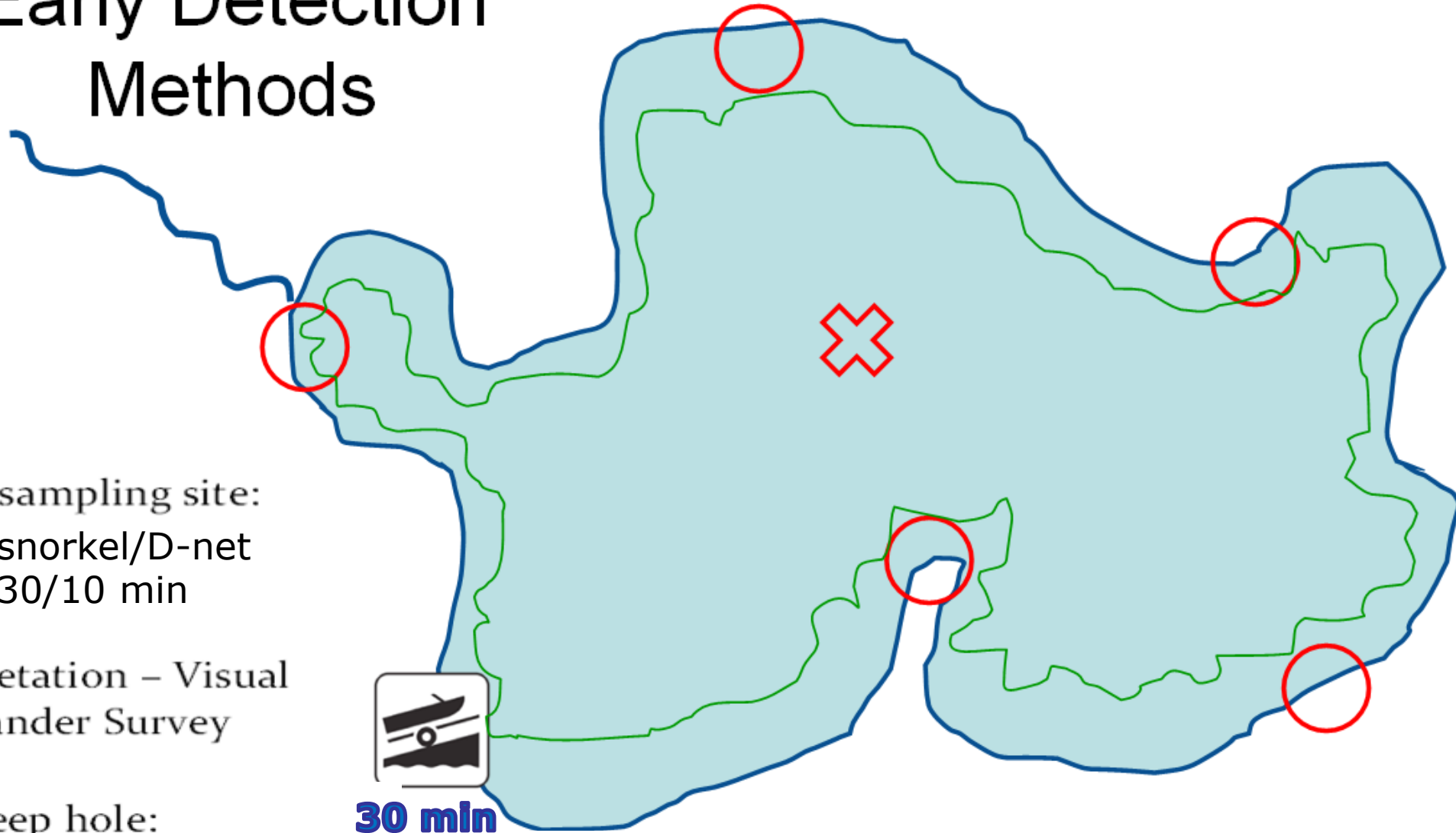



LIFE IS EASIER WHEN YOU'VE GOT A POSSE.





Early Detection Methods

Any new species found will be counted as a "detect."



 = sampling site:
snorkel/D-net
30/10 min

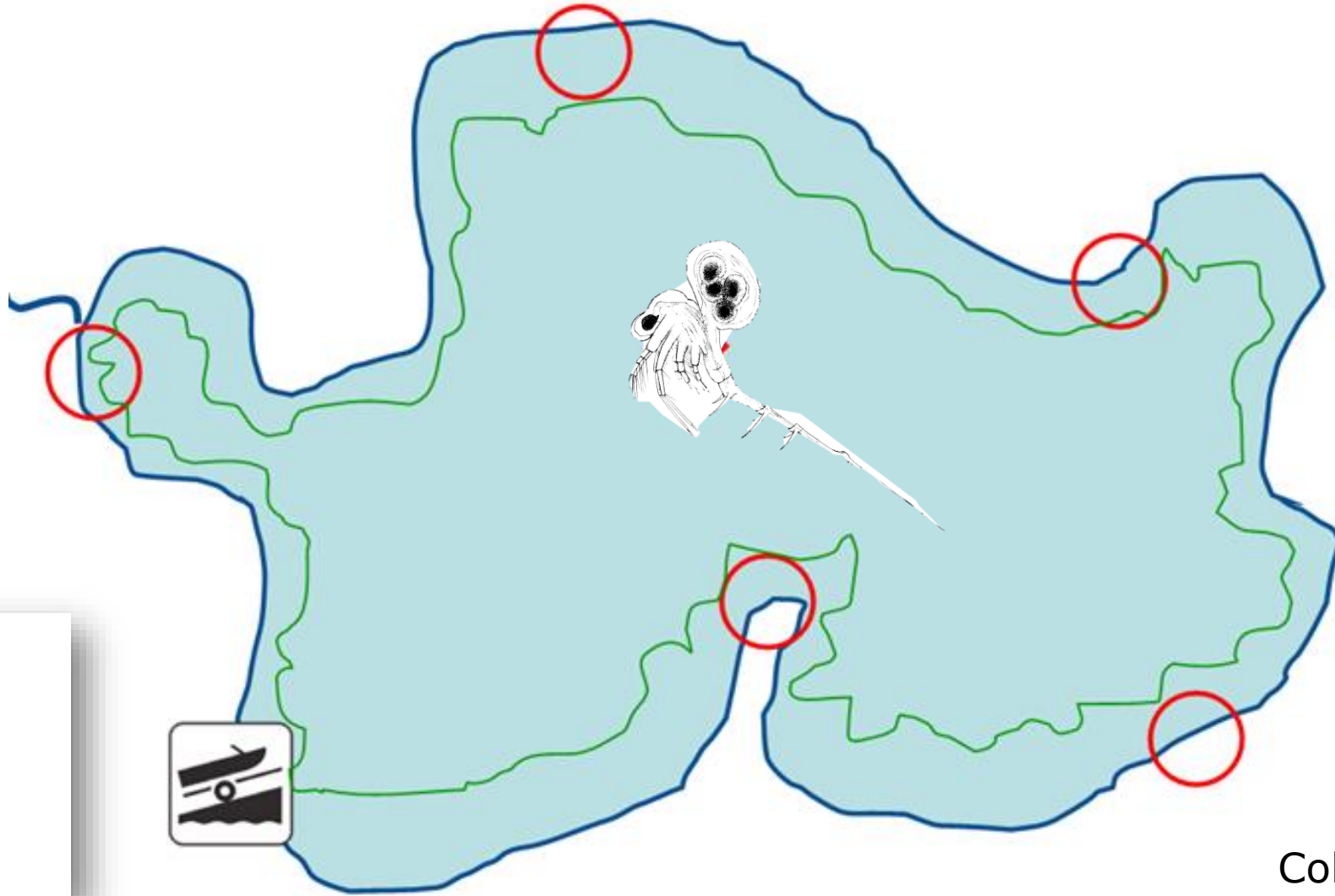
 Vegetation - Visual
Meander Survey

 = deep hole:
Water quality
Eckman

 **30 min**

Eckman Dredge

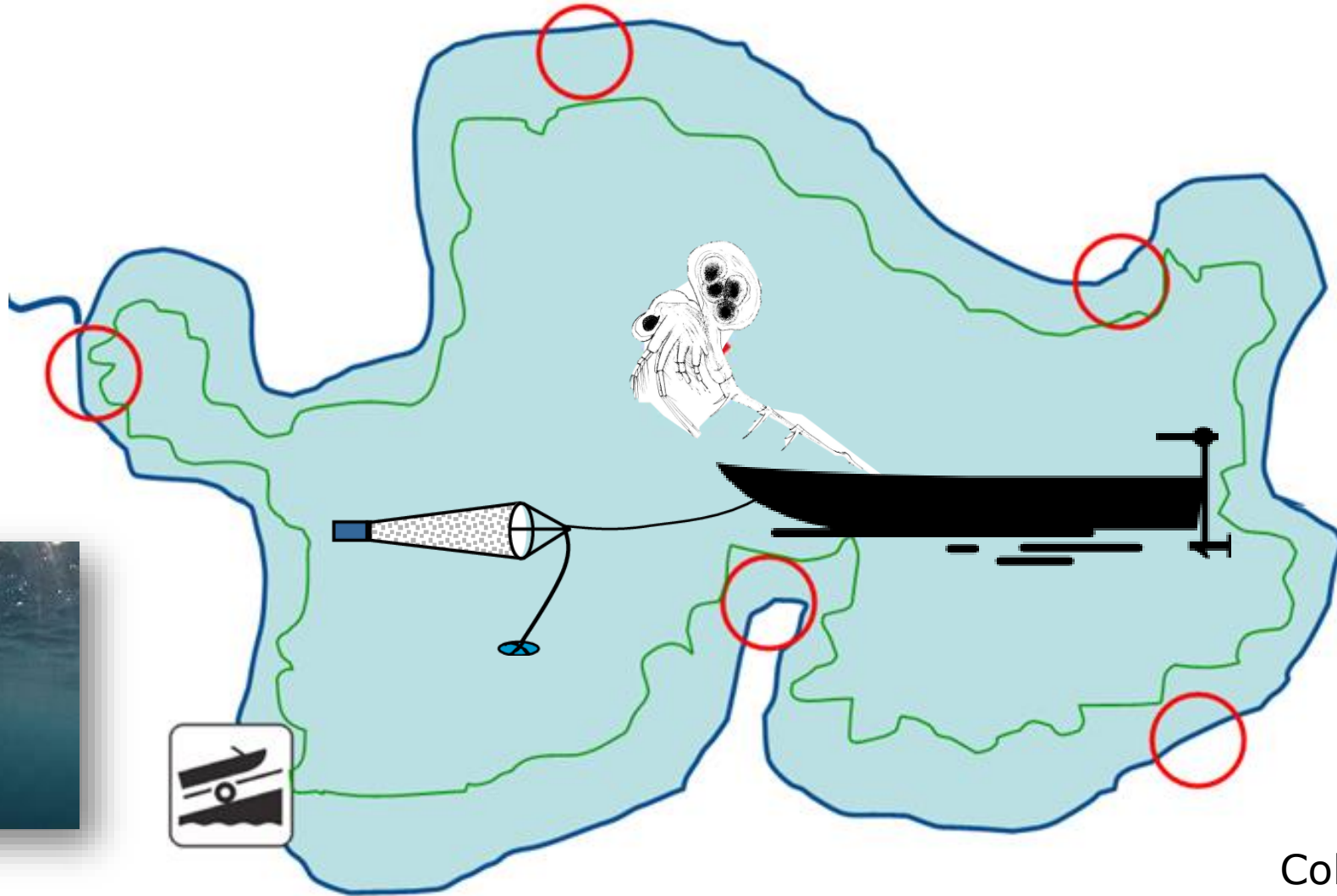
- Carefully lower
- Keep boat clean!
- Scoop into baggie



Collected year-round

Waterflea Tow

- Reverse
- Slow!
- 2 min
- Raise
- 4:1 ethanol: water

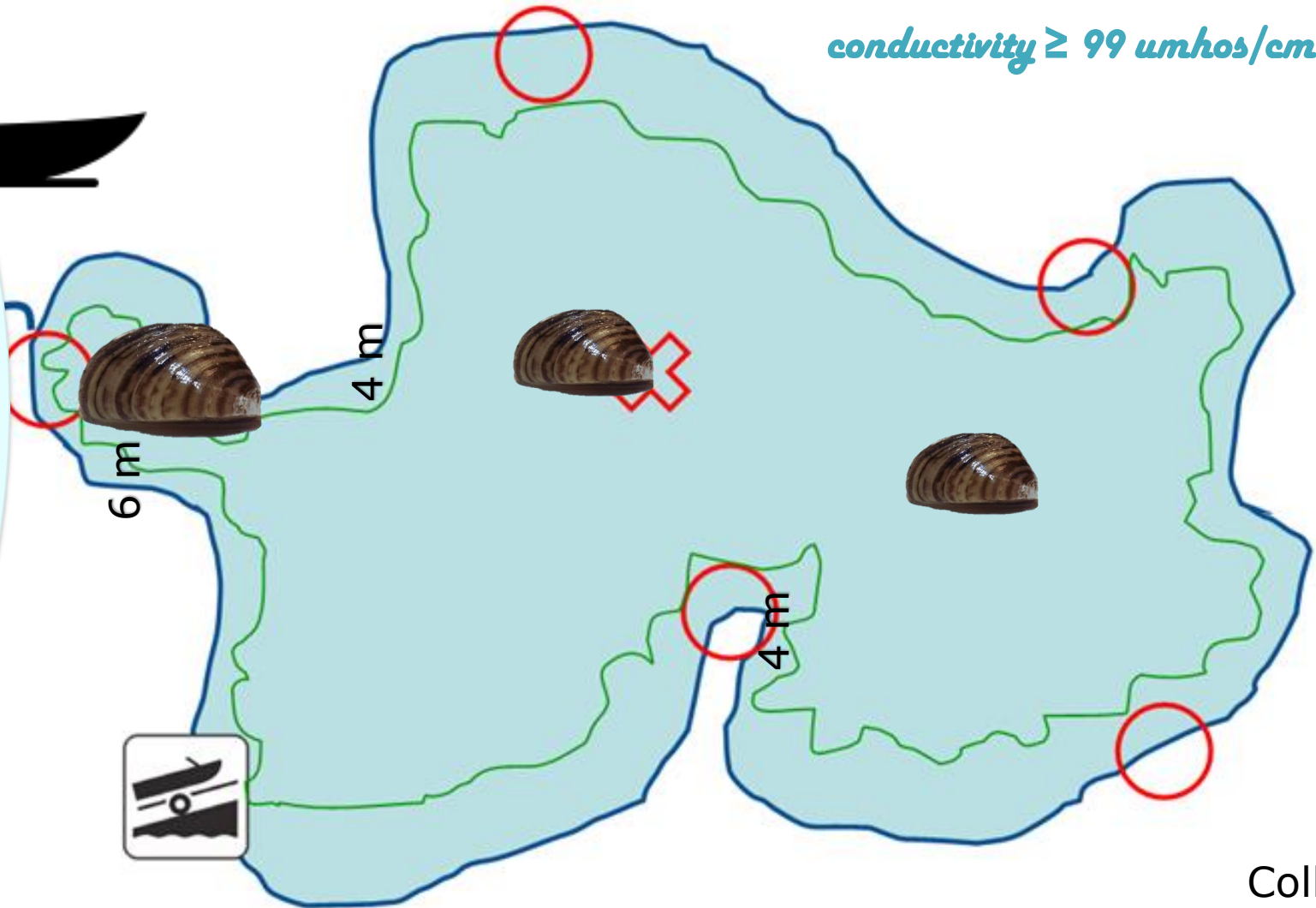
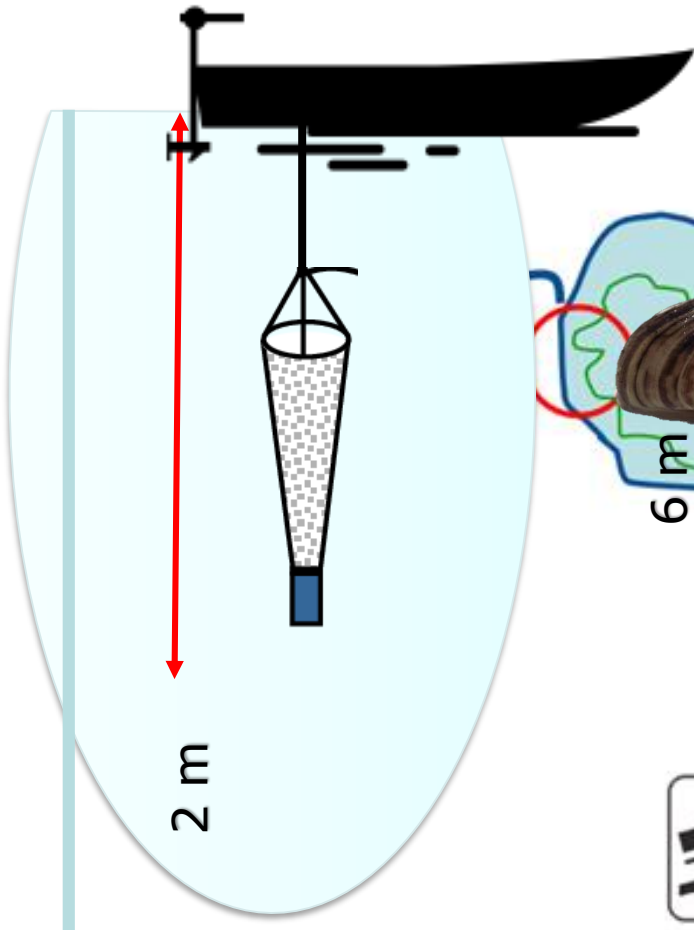


Collected Sept-Oct

Veliger Tows

Water column ≥ 6 m

Water column < 6 m



- Downwind/
downstream
- Lowering
below
thermocline
- 4:1
ethanol:
water

Collected $> 55^{\circ}\text{F}$



Lake Sampling Protocols

Invasive Species Monitoring in Lakes

Procedures for AIS Monitoring in Lakes (PDF)

<https://dnrx.wisconsin.gov/swims/downloadDocument.do?id=239110004>

Procedures for waterflea and mussel veliger sampling (tows and dredges).
Webinar (1 hour 20 minutes)

<https://p.widencdn.net/dcyuvs/WaterfleaVeligerSampleWebinar20200424>

PowerPoint ([PDF](#))

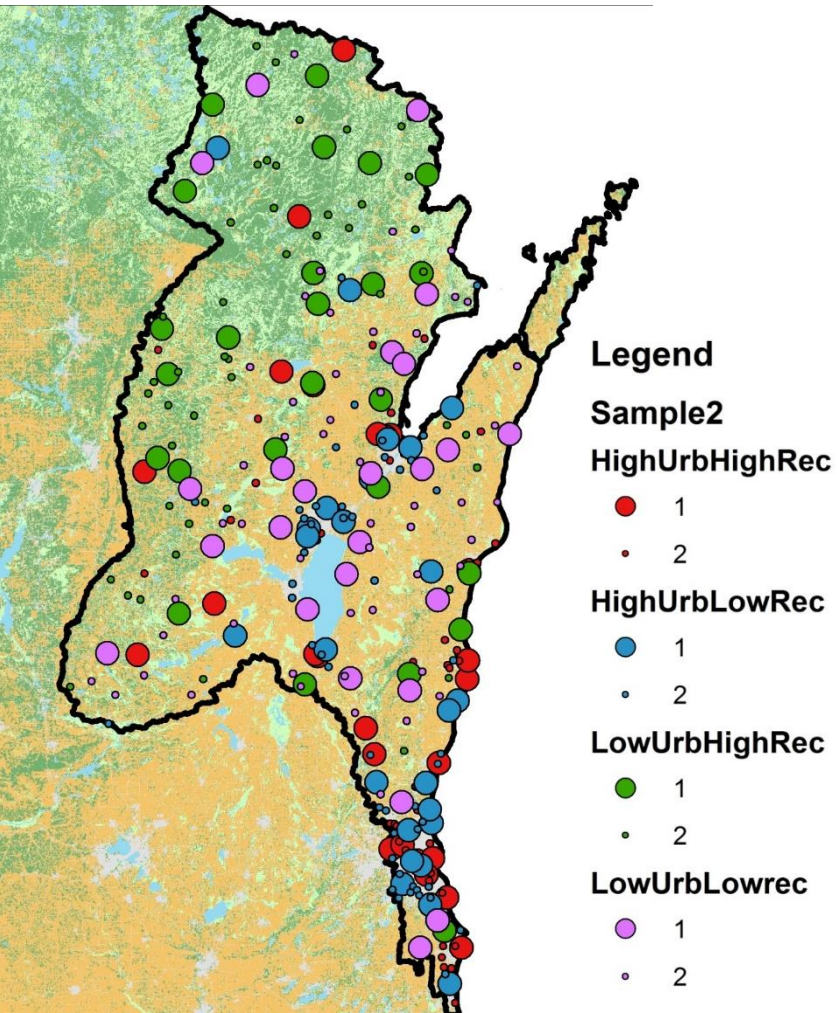
<https://dnrx.wisconsin.gov/swims/viewDocument.do?id=272389726>

AIS Monitoring in Streams



AIS Monitoring in Streams

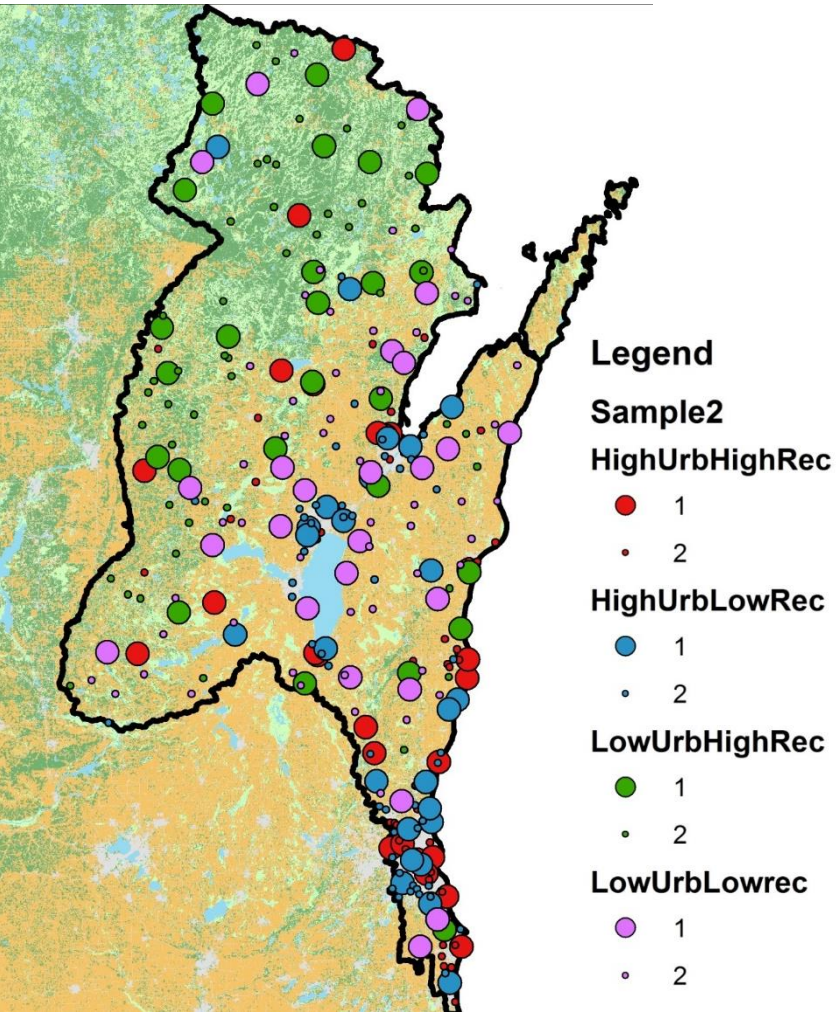
- Where are AIS in streams?



	Number of Targeted Samples	
	High Urban	Low Urban
High Recreation	25	25
Low Recreation	25	25

AIS Monitoring in Streams

- Where are AIS in streams?



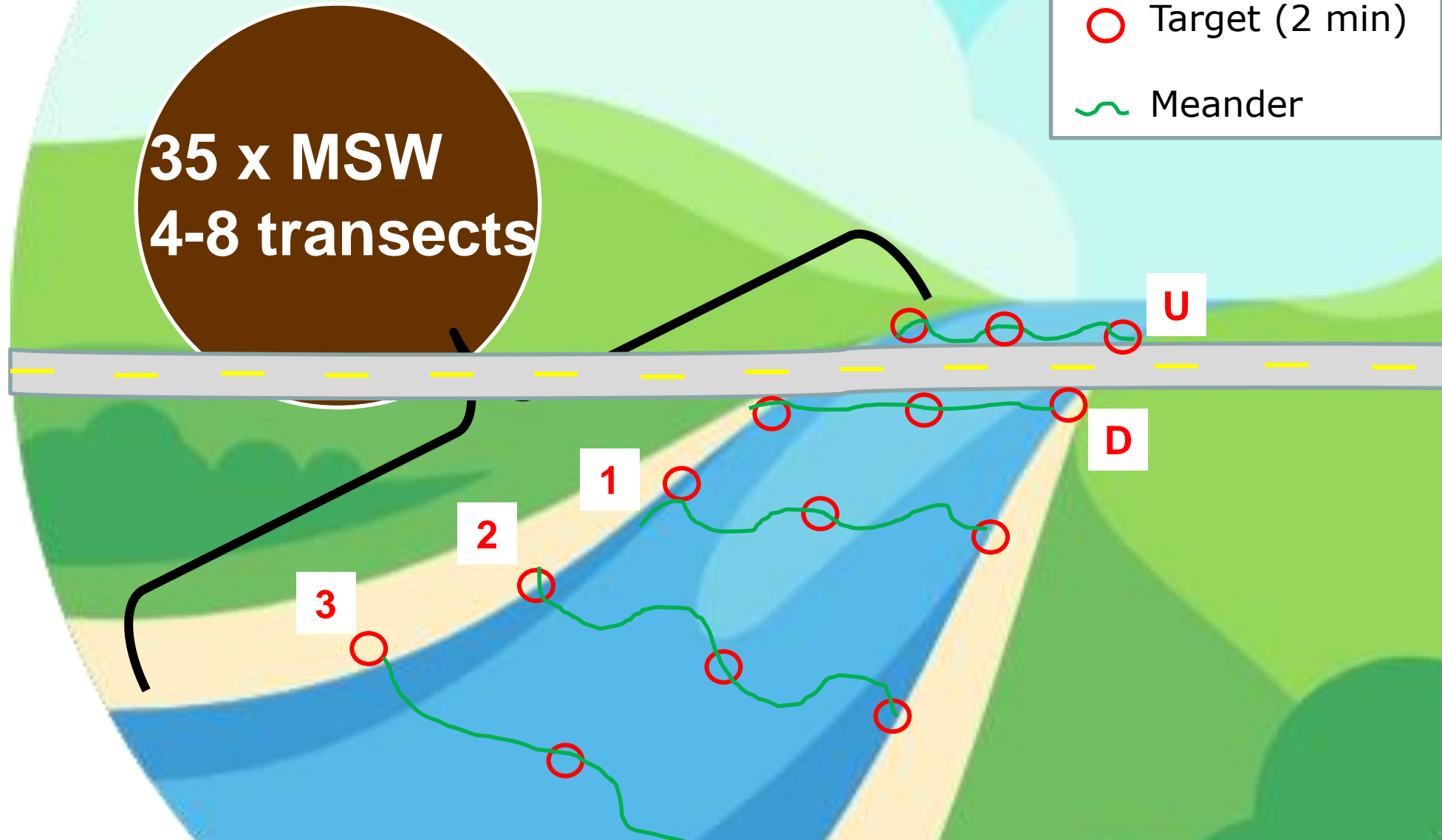
	Number of Targeted Samples	
	High Urban	Low Urban
High Recreation	25	25
Low Recreation	25	25

- No statistical difference
- AIS at ~75% sites
- Protocols detect AIS

AIS Monitoring in Streams

35 x MSW
4-8 transects

- Target (2 min)
- ~ Meander





AIS Monitoring in Streams

Invasive Species Monitoring in Streams

<https://dnrx.wisconsin.gov/swims/downloadDocument.do?id=239110032>



AIS Monitoring in Wetlands



AIS Monitoring in Wetlands

- Great Lakes-Mississippi River Interbasin Study
- Locations with AIS transfer risk
- 8 locations in WI



AIS Monitoring in Wetlands

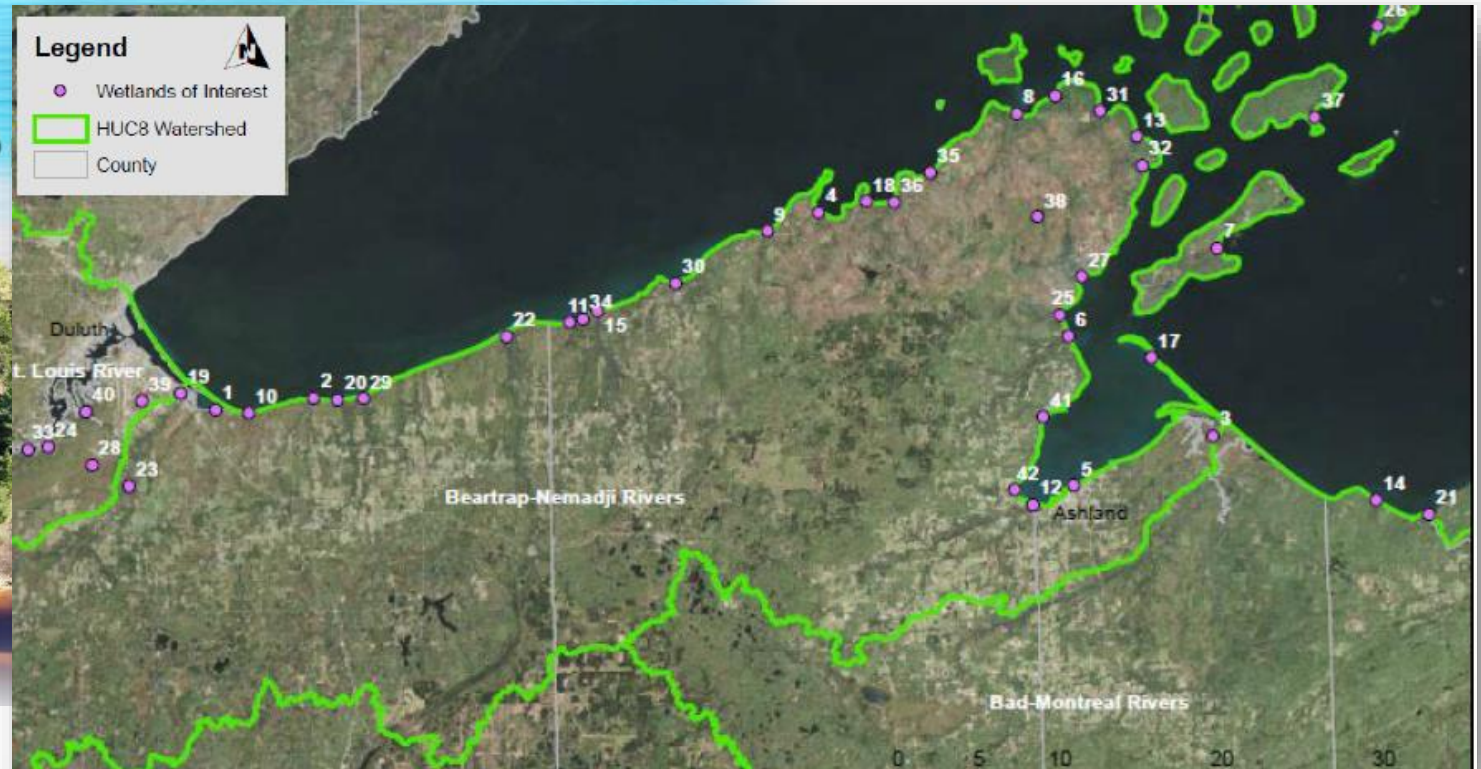
- Coastal Management Grant, 2016

Lake Superior Coastal Wetlands AIS EDRR Technical Team Meeting 2

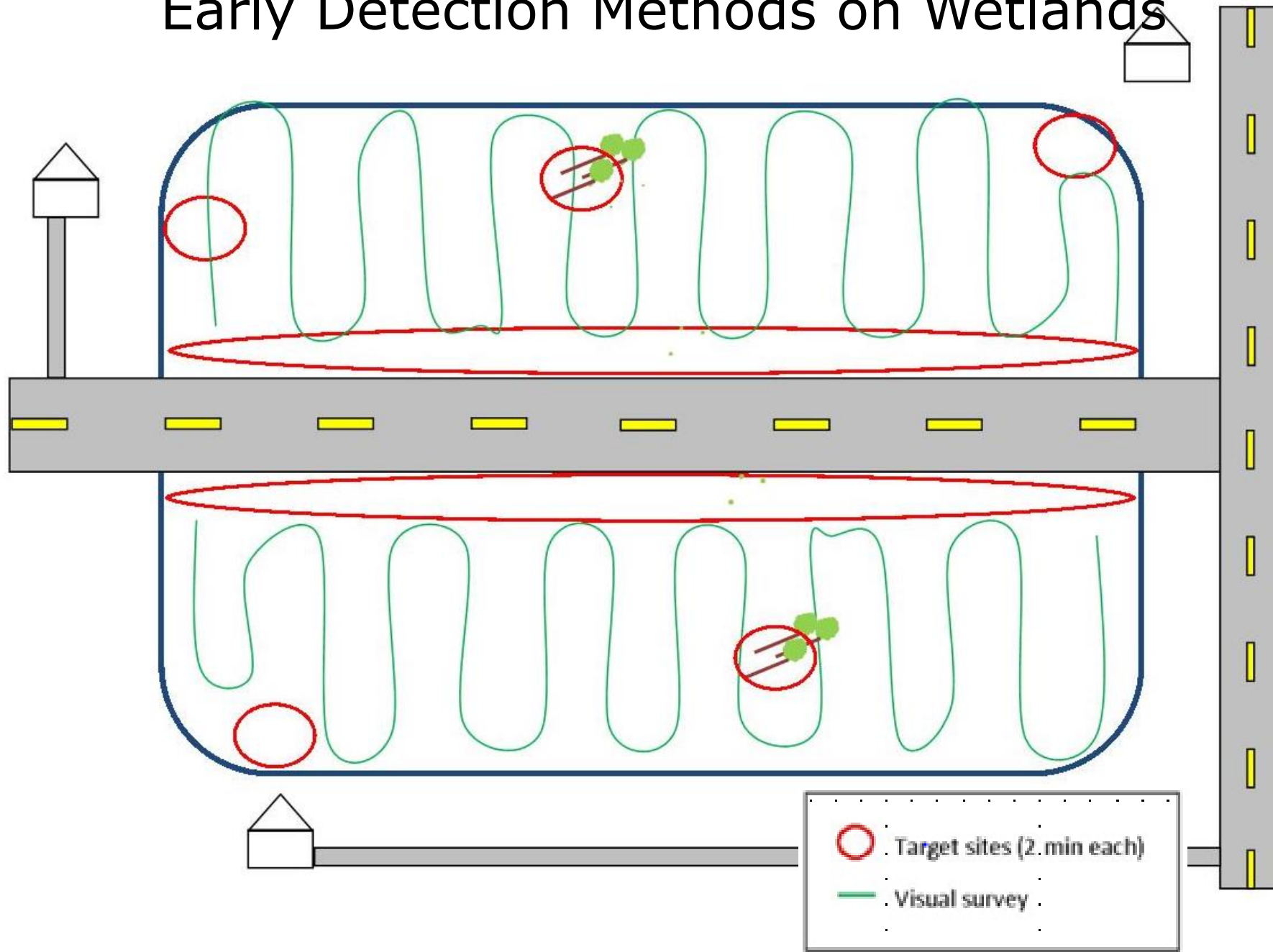
TUESDAY, JANUARY 16, 2018

1:00 PM TO 3:30 PM

SUPERIOR DNR / TOLL FREE / SKYP



Early Detection Methods on Wetlands



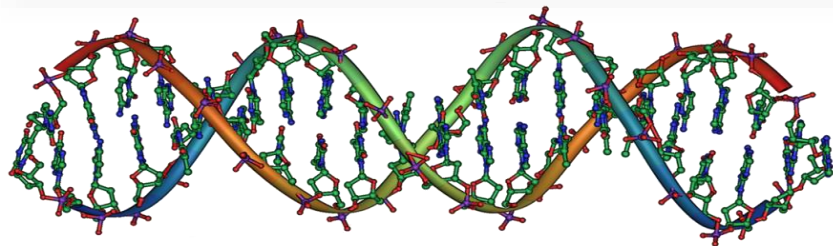
Wisconsin DNR Boat, Gear, & Equipment Disinfection Manual Code

The screenshot shows the Wisconsin Department of Natural Resources website. At the top left is the DNR logo. A yellow search bar contains the text "dnr.wi.gov search 'disinfection'". Below the search bar, the breadcrumb trail reads "TOPIC > INVASIVES". The main heading is "BOAT, GEAR AND EQUIPMENT DECONTAMINATION AND". To the right of this heading is a blue box labeled "Invasive Species". The search results are listed as follows:

1. [Manual Code #9183.1 \[PDF\]](#)
2. [Full BMPs for boat, gear and equipment decontamination \[PDF\]](#)
3. [Check](#) for species present in work area using one of the following tools:
 - [Lakes and aquatic invasive species mapping tool](#)
 - [Lakes, Rivers and Wetlands with Aquatic Invasives](#)
4. Select best [disinfection method for species present](#)

On the right side of the page, there is a vertical menu with the following items: Council, AIS Efforts, and Publications. Below this menu, it says "For more information, contact: DNR invasive species staff". At the bottom left, there is a video player thumbnail titled "AIS Disinfection Supplemental Trai..." showing two people outdoors.

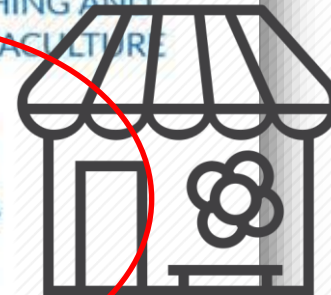
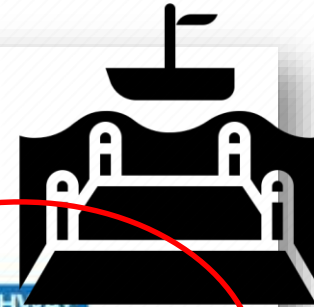
Monitoring Projects



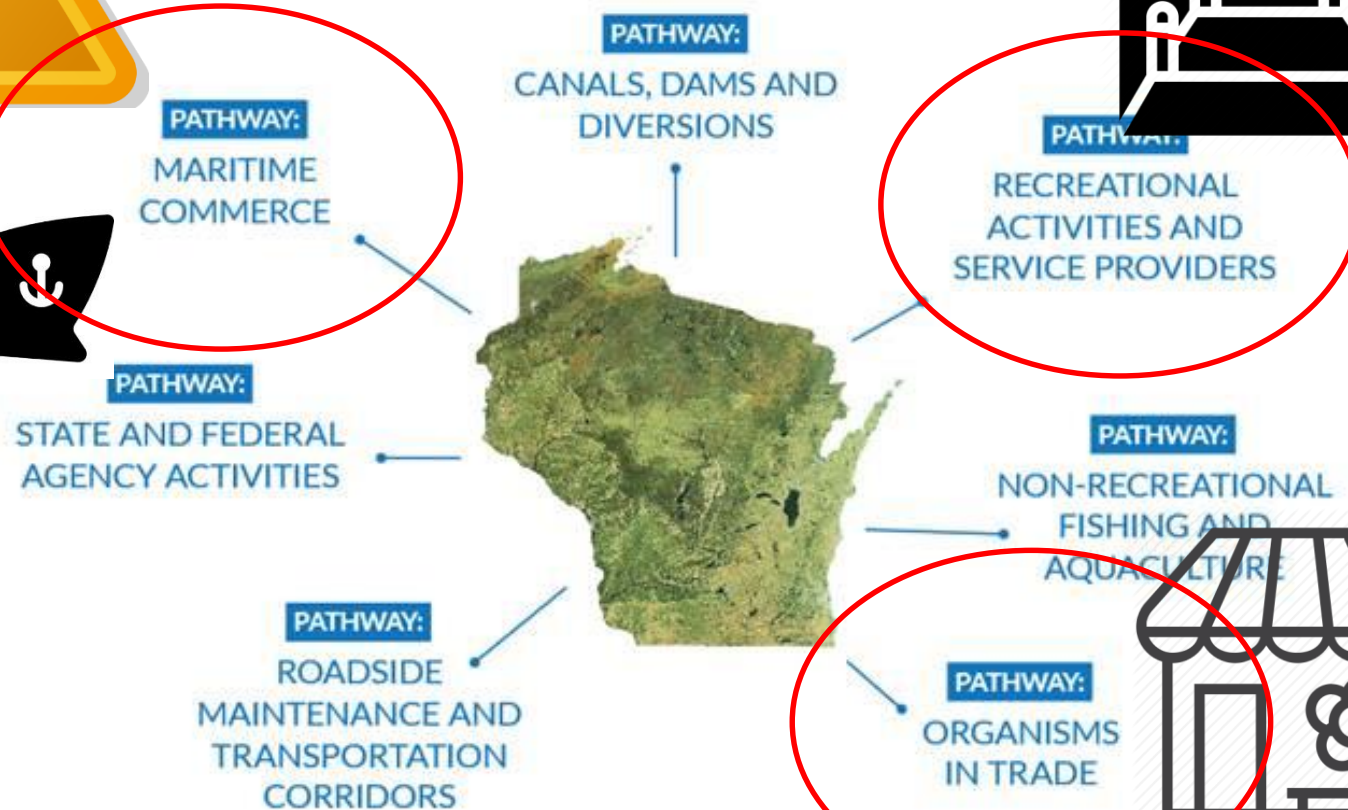
Monitoring Projects



Monitoring Projects



AQUATIC INVASION PATHWAYS:





Report

- Enter monitoring data:
 - Planned fieldwork – enter data to SWIMS
 - Unplanned fieldwork - submit Incident Report

SWIMS entry

← → ↻ 🏠 🔒 prodoasint.dnr.wi.gov/swims/login.jsp 🔍 ☆ Ⓢ ⋮

Wisconsin Department of Natural Resources

Surface Water Integrated Monitoring System (SWIMS)

Welcome to SWIMS

The Surface Water Integrated Monitoring System (SWIMS) is a water data system designed to ensure that staff and management have access to high quality surface water, sediment and aquatic invasives data in an accessible format.

For more information or to obtain access, please contact the SWIMS Help Team.

SWIMS Intranet Homepage (DNR staff)



Enter your User ID and Password to sign in

User ID

Password

DNR Staff:
Log in with your Oracle ID and Password

Volunteers and Others:
Our log-in screen has changed. Log in with your Wisconsin User ID and Password above.

Forgot your password?
Get a Wisconsin User ID and Password





The Official Internet site for the Wisconsin Department of Natural Resources
101 S. Webster Street . PO Box 7921 . Madison, Wisconsin 53707-7921 . 608.266.2621
dnr.wi.gov

SWIMS entry

The screenshot displays the SWIMS web application interface. The browser address bar shows the URL `prodoasint.dnr.wi.gov/swims/login.jsp`. The page header identifies the user as being in the **Wisconsin Department of Natural Resources** **Surface Water Integrated Monitoring System (SWIMS)**. A navigation menu includes **My Projects**, **Find Data**, **Submit Data**, **Stations**, **Forms**, **Reports, Maps, and Documents**, and **Manage Data**. The **Submit Data** section is active, showing a **Monitoring Data** area with four buttons: **View List**, **Add New** (highlighted with a red box), **Submit Biological Data**, and **Generate Labslip**. The **Add New** button is associated with the text: "Add new monitoring data. This option will add a new 'Fieldwork Event' (date/time, station, etc.), which you can then add field results to." The **Submit Biological Data** button is associated with: "Add new macroinvertebrate data. This option will collect taxa, habitat, and metrics data for macroinvertebrate data." The **Generate Labslip** button is associated with: "Create a printable labslip (inorganic, organic, etc.), with much of the information pre-printed about the scheduled monitoring." A sidebar on the left contains a "Welcome to SWIMS" message and a "DNR Logo" with the text "The Official Internet site for the Wisconsin Department of Natural Resources".

SWIMS entry

The screenshot displays the SWIMS web application interface. The main navigation bar includes 'My Projects', 'Find Data', 'Submit Data', 'Stations', 'Forms', 'Reports, Maps, and Documents', and 'Manage Data'. The 'Submit Data' section is active, showing a 'Monitoring Data' sidebar with buttons for 'View List', 'Add New', 'Submit Biological Data', and 'Generate Labslip'. The 'Add New' button is highlighted with a red box. The 'Create Monitoring Data' form is shown with the following fields and values:

- Project ***: Aquatic Invasive Species Early Detection 2020
- Data Collectors ***: SARAH FANNING
- Station ***: 10005284, Storrs Lake
- Start Date ***: 06/24/2020
- Form ***: Aquatic Invasive Species (AIS) Early Detection Monitoring Form [2019]
- Optional Fields**:
 - I want to enter latitude and longitude on the next page (optional)
 - End Date**: 6/24/2020
 - Time**: 11:59 PM
 - Comments**: This is an example Early Detection Survey.

At the bottom of the form, there are buttons for 'Save and Return', 'Save', and 'Next'. A note at the bottom of the form states: 'Fill in the weather here, lake or streamside observations, wildlife spotted, names of additional helpers etc..'

SWIMS entry

prodoasint.dnr.wi.gov/swims/login.jsp

Wisconsin Department of Natural Resources Surface Water Integrated Monitoring System (SWIMS)

Welcome to SWIMS

The Surface Water Integrated Monitoring System (SWIMS) is a water data system designed to ensure that staff and management have access to high quality surface water, sediment and aquatic invasives data in an accessible format.

For more information or to obtain access, please contact the SWIMS Help Team.

SWIMS Intranet Homepage (DNR staff)



The Official Internet site for the Wisconsin Department of Natural Resources
101 S. Webster Street · PO Box 286

dnr.wi.gov

Wisconsin Department of Natural Resources Surface Water Integrated Monitoring System (SWIMS)

My Projects Find Data Submit Data Stations Forms Reports, Maps, and Documents Manage Data

Submit Data

Monitoring Data

[View List](#)

[Add New](#)

[Submit Biological Data](#)

[Generate Labslip](#)

View who is also at
Add new results to
Add new
Create a

Wisconsin Department of Natural Resources Surface Water Integrated Monitoring System (SWIMS)

My Projects Find Data Submit Data Stations Forms Reports, Maps, and Documents Manage Data

Create Monitoring Data

Fields denoted with an asterisk (*) are REQUIRED.

Project * Aquatic Invasive Species Early Detection 2020

Data Collectors * SARAH FANNING

Station * 10005284, Storrs

Start Date * 06/24/2020

Time

Form * Aquatic Invasive

Optional Fields

I want to enter lat

End Date 6/24/2020

Time 11 59 P

Comments This is an exam

Fill in the weather

[Save and Return](#) [Save](#) [Next](#)

AIS Early Detection (R 4/19) - Site 1				
	Parameter	Result	Units	Method
Site Location Information:				
	Site	Boat Landing 1		AIS_EDD_2019
	Latitude (i.e. 43.1234)	42.778284		AIS_EDD_2019
	Longitude (i.e. -89.4567)	-88.916905		AIS_EDD_2019
Species 1:				
	Species	Eurasian Water-Milfoil		AIS_EDD_2019
	Gross Area	15	METERS SQUARE	AIS_EDD_2019
	Cover	3: 25-50%		AIS_EDD_2019
	Infested Area	5	METERS SQUARE	AIS_EDD_2019
	Live:Dead Class	1: 100:0 L:D		AIS_EDD_2019
Species 2:				
	Species	Banded Mystery Snail		AIS_EDD_2019
	Gross Area	5	METERS SQUARE	AIS_EDD_2019
	Cover	4: 50-75%		AIS_EDD_2019
	Infested Area	5	METERS SQUARE	AIS_EDD_2019
	Live:Dead Class	6: 5:95 L:D		AIS_EDD_2019

dnr.wi.gov search "invasive"



HUNT

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

LICENSES NEWS ABOUT CONTACT

REPORT INVASIVE SPECIES

We are working to keep invasive species out of Wisconsin. Early reporting and control of invasive species before they spread into new areas. So you have found.

Aquatic, Shoreline and Wetland

Terrestrial

NR40 species

AQUATIC, SHORELINE AND WETLAND

Check to see if the suspected invasive species has been reported. Search [waterbody](#) or [species](#) lists or refer to AIS [mapping tool](#) if the invasive species is not known to occur in the waterbody or wetland.

[Regional DNR Aquatic Invasive Species Coordinator](#)

by following the steps below. Report every suspected wetland invasive species not associated with a waterbody, except reed canary grass (unless the latter is a new, small stand adjacent to a un-infested, natural wetland).

Aquatic Invasive Species Contacts - Aquatic Invasive Species - Regional Coordinator

Location:

Contact	Organization	Location/Comments	Work Phone	Email
SHERBY ADLER	Wisconsin DNR	Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk	608-275-3283	✉
Chris Kolesinski	Wisconsin DNR	Brown, Calumet, Door, Fond du Lac, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Waupaca, Waushara, Winnebago		✉
Amy Kostlow	Wisconsin DNR	Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, Waukesha	920-893-8552	✉
TYLER MESALK	Wisconsin DNR	Ashland, Bayfield, Burnett, Douglas, Sawyer, Washburn	715-635-4227	✉

Invasive Species

[Learn More](#)

[Report an Invasive](#)

[Prevent the Spread](#)

[Control Measures](#)

[Rules and Regulations](#)

[Wisconsin Invasive Species Council](#)

[AIS Efforts](#)

[Publications](#)



Verification Process

- DNR trained and tested staff around the state
- Regional DNR AIS coordinator will confirm ID with 2 verifiers
- Once 2 verifiers agree, regional DNR AIS coordinator will create record in SWIMS for tabular and spatial website



Lakes, Rivers, and Wetlands with Aquatic Invasive Species

Aquatic Invasive Species

Location:

Aquatic invasive species (AIS) records are assigned statuses of "verified", "observed", or "no longer observed" based on AIS Status Guidance. In general, "verified" populations are established and have been verified by a taxonomic expert. Populations with the "observed" status have not been verified by a taxonomic expert or do not have established populations. Populations with the "no longer observed" status include populations where a reproducing population did not establish. Our inventories are not necessarily exhaustive so it is important to report occurrences. To report new discoveries visit: <http://dnr.wi.gov/topic/Invasives/report.html>. See the Aquatic Invasive Species Guidance for information on how statuses are assigned. Personally identifiable information on data collection forms may be provided to requesters to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

To Excel

< First	< Prev	Page 1 of 99	Next >	Last >
Waterbody Name	Waterbody ID Code (WBIC)	Invasive Species		
Adams County (28)				
Arkdale Lake	1374300	Chinese Mystery Snail, Curly-Leaf Pondweed, Eurasian Water-Milfoil, Purple Loosestrife, Rusty Crayfish, Water Hyacinth		
Big Roche A Cri Creek	1374100	Japanese Knotweed, Rusty Crayfish, Water Hyacinth, Zebra Mussel		
Big Roche a Cri	1374800	Chinese Mystery Snail, Curly-Leaf Pondweed, Eurasian Water-		

Co
For
con

[W](#)
[D](#)
[B](#)

[A](#)
[C](#)



Species Locations

Asiatic Clam (Corbicula)

Select Another Location:

Statewide

Total Locations: 23

Total Lakes and Rivers: 24 *

Disclaimer: Aquatic invasive species (AIS) records are assigned statuses of "verified", "observed", or "no longer observed" based on AIS Status Guidance. In general, "verified" populations are established and have been verified by a taxonomic expert. Populations with the "observed" status have not been verified by a taxonomic expert or do not have established populations. Populations with the "no longer observed" status include populations where a reproducing population did not establish. Our inventories are not necessarily exhaustive so it is important to report occurrences. To report new discoveries visit: <http://dnr.wi.gov/topic/Invasives/report.html>. See the Aquatic Invasive Species Guidance for information on how statuses are assigned. Personally identifiable information on data collection forms may be provided to requesters to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stat. 19.31-19.39].

[By County](#) | [By Waterbody](#) | [By Species](#) | [By Year](#) | [Open In Excel](#)

Waterbody	Status	Waterbody ID Code (WBIC)	County
Bohners Lake	Verified and Vouchered	750800	Racine
Browns Lake	Verified and Vouchered	750300	Racine
Eagle Spring Lake	Verified and Vouchered	768600	Walworth, Waukesha
Fox River - CTH E	Verified and Vouchered	742500	Waukesha
Lake Andrea	Verified and Vouchered	733850	Kenosha

Aquatic Invasive Species

Contact information

For information on Lakes in Wisconsin, contact:

[Wisconsin DNR Lakes](#)

Division of Water

Bureau of Water Quality

[Aquatic Invasive Species](#)

[Contacts](#)



Aquatic Invasive Species Locations




- [All - New 2016](#)
- [All - New 2017](#)
- [Asiatic Clam \(Corbicula\)](#)
- [Banded Mystery Snail](#)
- [Bighead Carp](#)
- [Brittle Waternymph](#)
- [Chinese Mystery Snail](#)
- [Curly-Leaf Pondweed](#)
- [Eurasian Water-Milfoil](#)
- [Faucet Snail](#)
- [Fishhook Waterflea](#)
- [Flowering Rush](#)

Lakes & AIS Mapping Tool


Bureau of Water Quality, Environment Management Division





Search... 

Basic Tools Identify Tools Drawing & Measuring Find Location Maps & Data Help

 Home
 Show Layers
 Show Legend

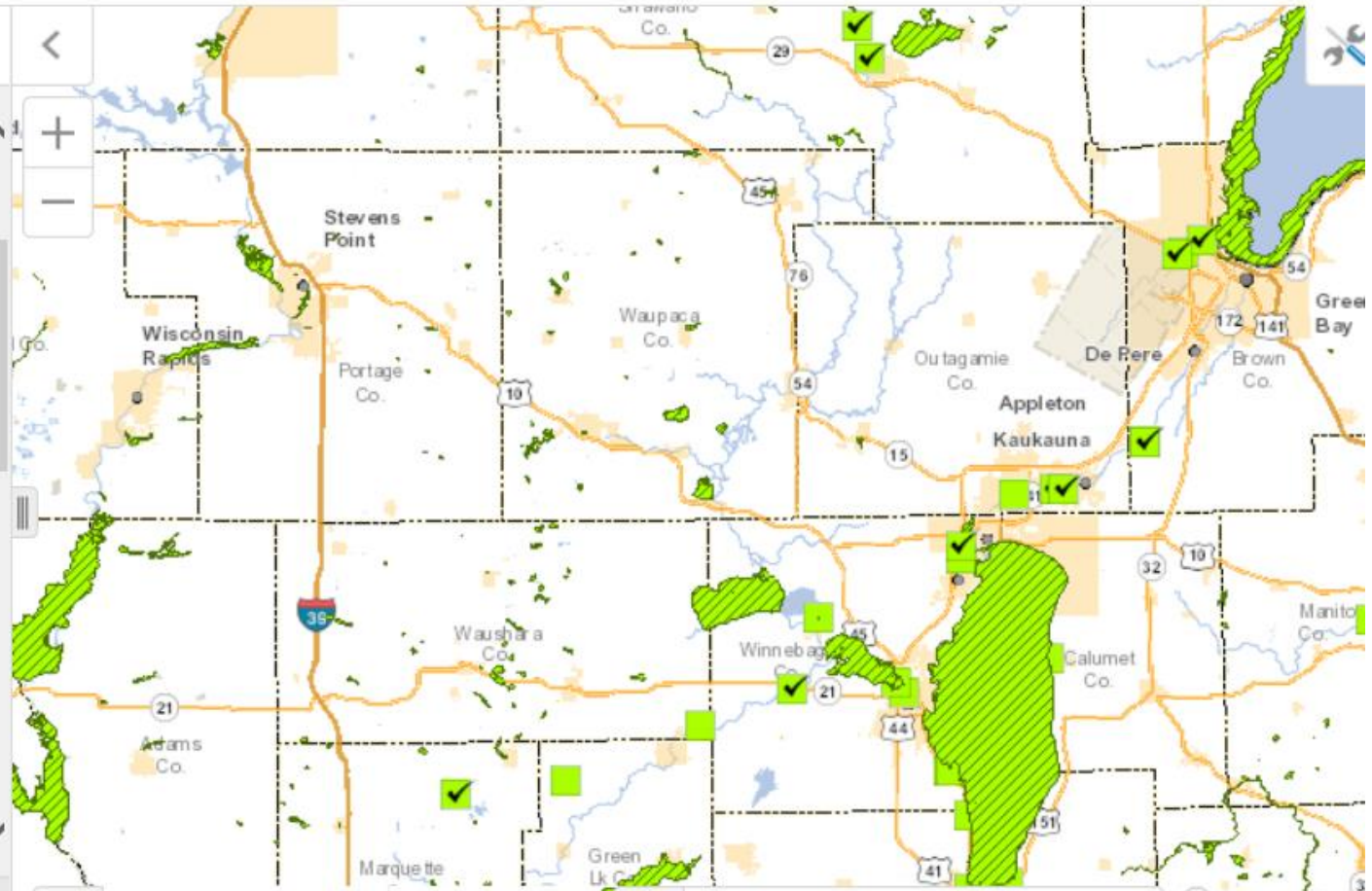
[Table of Contents](#)

 Pan
 Zoom In
 Zoom Out
 Full State
 Previous Extent
 Bookmarks

 Get Info
 Print Map
 Help
 Feedback

Layers

- Invasive Aquatic Plants
 - Brittle Waterlily (*Najas minor*)
 - Curly-Leaf Pondweed (*Potamogeton crispus*)
 - Eurasian Water-Milfoil (*Myriophyllum spicatum*)
 - Hybrid Water-Milfoil (Eurasian x Northern)
 - Java Water Dropwort (*Oenanthe javanica*)
 - Starry Stonewort (*Nitellopsis obtusa*)
 - Water Hyacinth (*Eichhornia crassipes/azurea*)
 - Water Lettuce (*Pistia stratiotes*)



Questions?

