Aquatic Invasive Species Early Detection Monitoring Protocol

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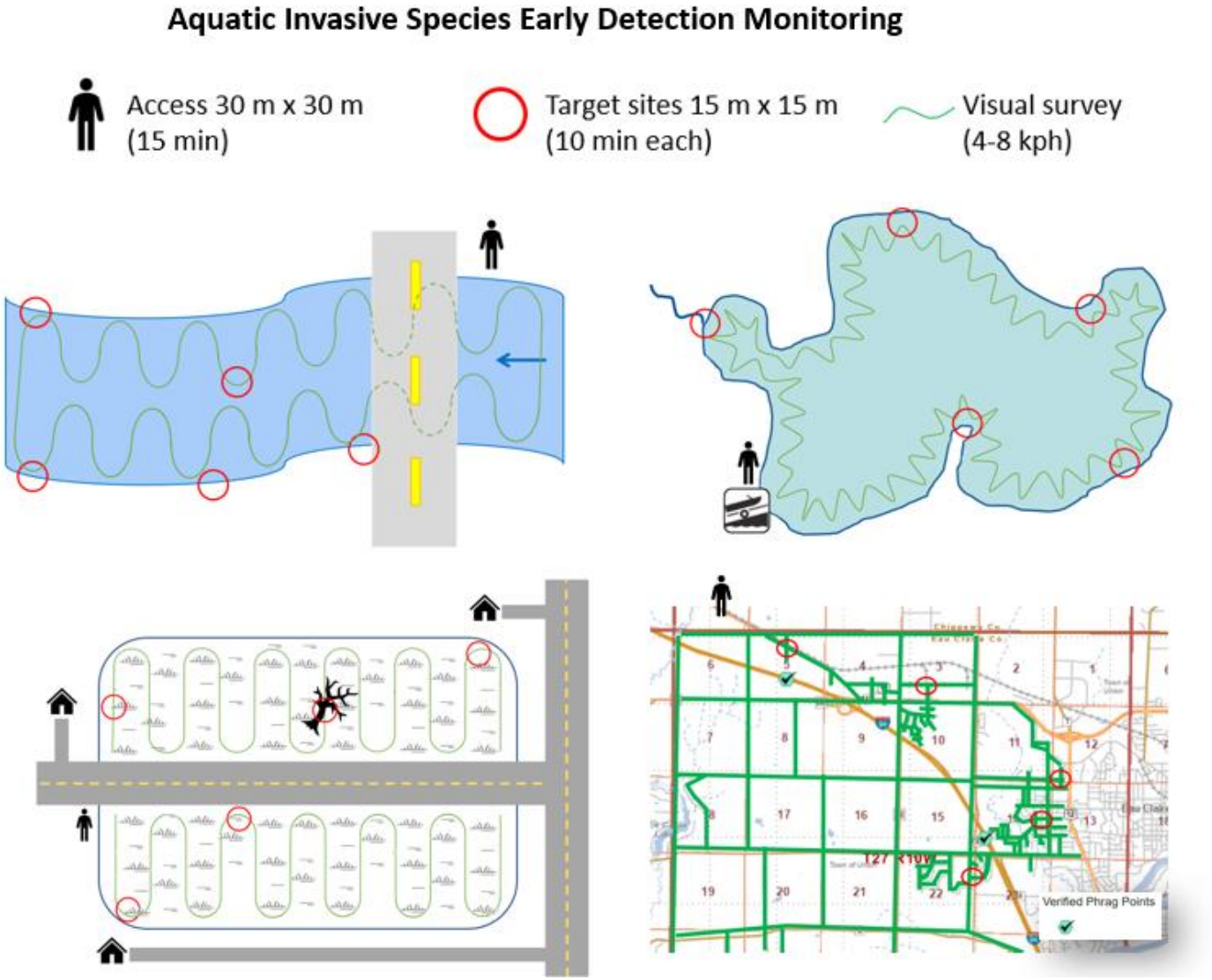
Statewide AIS Monitoring Lead

Scope

Details preparation, site considerations, equipment, and monitoring procedures involved with aquatic and wetland invasive species monitoring along lake shorelines, wadable and non-wadable streams, wetlands, and roadsides

Consult NR40 for species targeted with emphasis on Prohibited

Network of DNR staff & partners



Design

- Access searches 30m x 30m for 15 minutes
- Target searches 15m x 15m for 10 minutes
- Meander searches at a slow pace (~0.0001-8 kph) between search sites targeting suitable habitats or pathways.

Design

Lake Shoreline Distance (km) (Lakes, ROW, SWDV, Latzka 2015)	Wetland Area (km^2) (SWDV, DNR 2016)	Wadable Mean Stream Width (length) (m) (Lyons et al. 1992, DNR 2002, DNR 2015a, DNR 2015b)	Non-Wadable Stream length (km) (DNR 2016)	Roadside Distance (km) (DNR 2018)	# Target Sites	Estimated Survey Time (hours)
<1.6	<0.25	<2.9 (105 m)		1-2	4	1
1.6-4.8	>0.25-1	>2.9-5.7 (106-200)		>2-3	5	2
>4.8-6.4	>1-3	>5.7-11.5 (201-400)		>3-4	6	3
>6.4-8	>3-5	>11.5-17.1 (401-600)		>4-5	7	4
>8-9.6*	>5-10*	>17.1-23* (601-800)	3.0*	>5-6*	8*	5*

**Larger areas may be surveyed. Target site count and time spent will be estimated based on the provided estimates.*

Desktop Prep

- Become familiar with target species

Desktop Preparation

Monitors should be familiar with the identification of species regulated under Chapter NR 40 and their preferred habitat. Review Appendix A to understand species parts to be familiar with while monitoring. The DNR AIS Team identified a list of species that will be tracked in SWIMS: https://apps.dnr.wi.gov/swims/Documents/DownloadDocument?id=359904256. This spreadsheet includes links to factsheets which contain guidance for identification, distribution, and control for each aquatic and wetland species. Additional identification and distribution resources are available on the following website: {https://dnr.wisconsin.gov/topic/Lakes/AIS/Monitoring.html}

Location Name	SWIMS Station ID	County	Collector(s)	Date	Start Time	End Time

Survey Area Type	Wetland ○ Lake ○ Wadable Stream ○ Non-Wadable Stream ○ Roadside ○	AIS Sign Present	Paid Hours (Hrs x PPL)	Volunteer Hours (Hrs x PPL)

Pathway See the DNR AIS Management Plan for information on pathways.	Natural ☐	Trade ☐	Rec ☐	Canal, Dam, Div ☐	Road & Trans ☐	Monitoring ☐	Maritime ☐	○ Yes ○ No ○ N/A		

STEP 1:

Review species factsheets to become familiar with aquatic and wetland invasive species: species tracked in SWIMS.

Did you look for all the species on the list? ○ Yes ○ No

Be aware of known AIS at the monitoring site to sample from least to most invaded and use appropriate disinfection method:

Use this space to list known species: _____

Category	Common Name	Scientific name	NR40 Regulated	NR40 Added	Habitat
Animal	Asian clam	Corbicula fluminea	Prohibited	09/01/2009	A
Animal	Eastern mosquitofish	Gambusia holbrooki	Restricted	09/01/2009	A
Animal	Faucet snail	Bithynia tentaculata	Prohibited	09/01/2009	A
Animal	Goldfish *(3)	Carassius auratus	Restricted	09/01/2009	A
Animal	Koi carp *(3)	Cyprinus rubrofuscus	Restricted	09/01/2009	A
Animal	New Zealand mud snail	Potamopyrgus antipodarum	Prohibited	09/01/2009	A

Desktop Prep

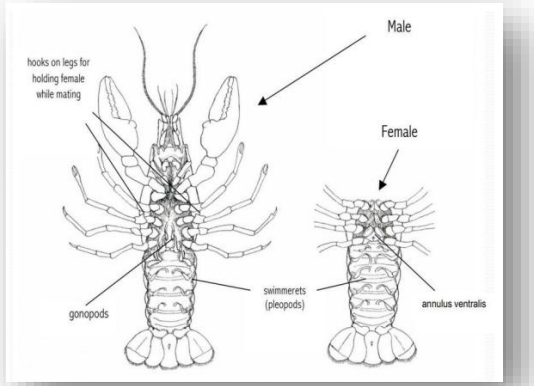
APPENDIX A: Aquatic Invasive Species Occurrence Documentation Guidelines

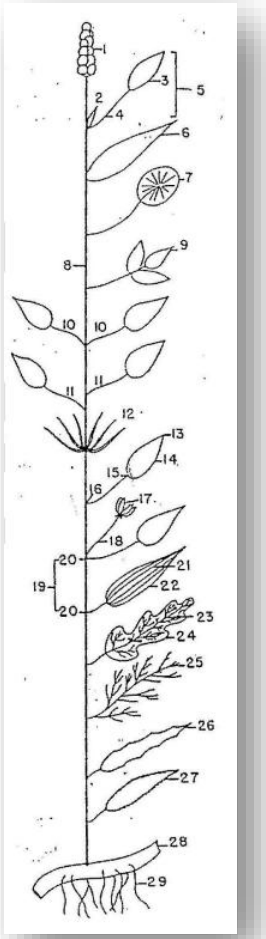
Wisconsin Department of Natural Resources

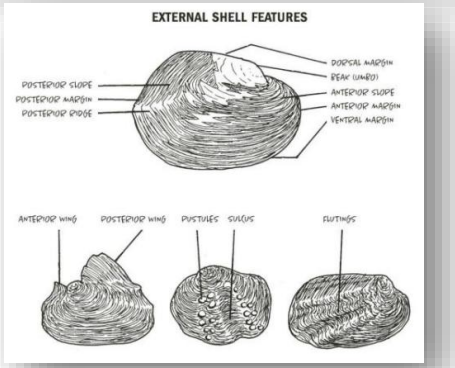
All monitors should become familiar with basic identification of NR 40 listed species and carefully review the following diagrams on identify species parts. When aquatic invasive species are detected, they should be photographed per the following guidance. Specimens of NR 40 Prohibited species will be collected and submitted for vouchering. Do not attempt to delineate the population and continue the survey. A follow-up survey to delineate populations will occur if management is planned.

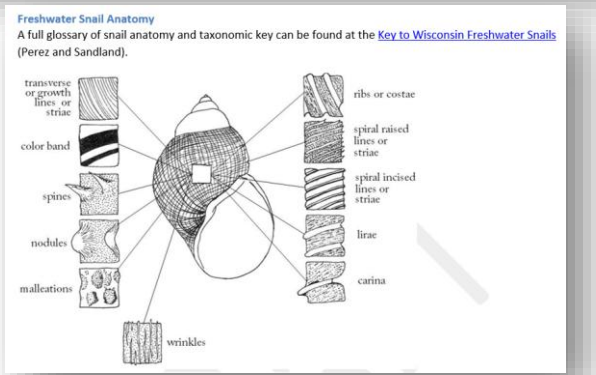
Diagrams of species parts

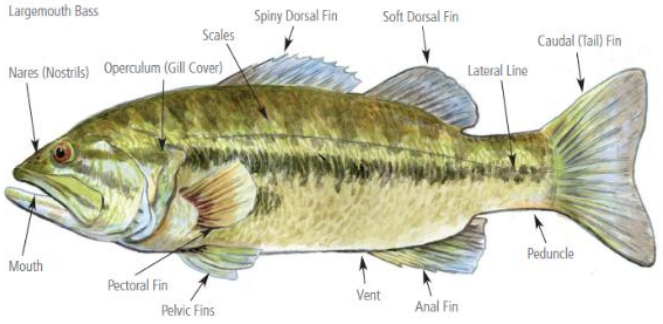
The following pages includes diagrams and descriptions of the various species groups. This is to offer guidance on specific parts to photograph. If needed, glossaries can be found in the cited references.





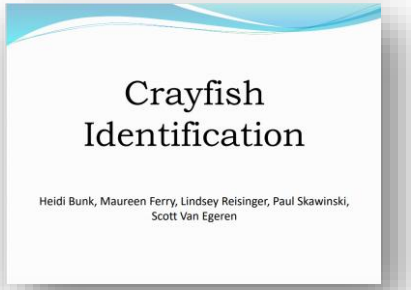


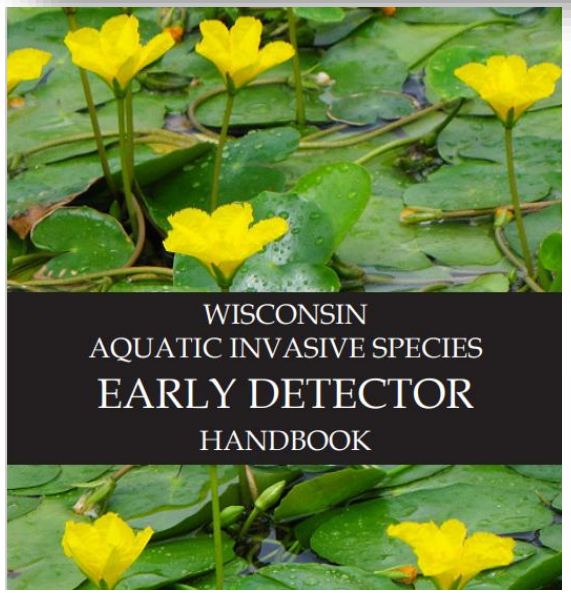


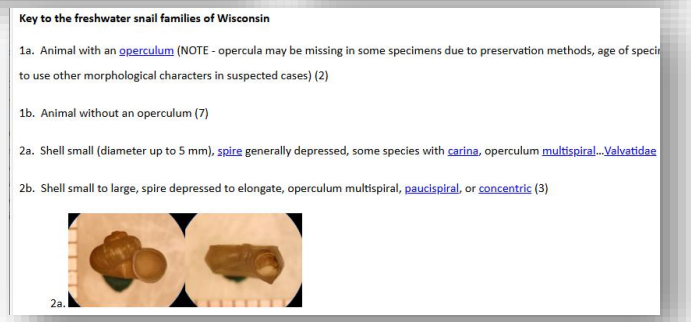


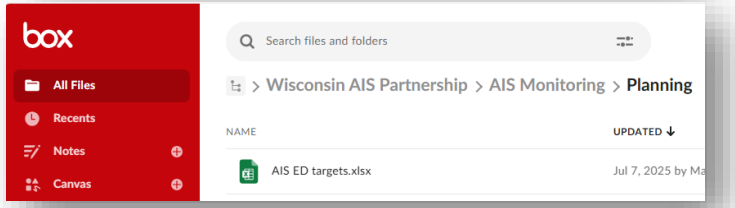
Desktop Prep

- Become familiar with target species





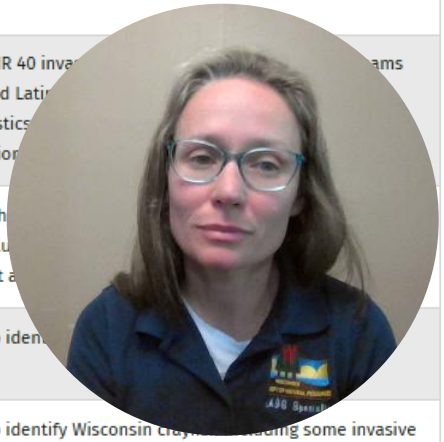




Identification

This section includes documents and webpages to help volunteers and professionals identify aquatic and wetland invasive species in Wisconsin.

Title	Description
Chapter NR 40, Wis. Adm. Code	Wisconsin Administrative Code chapter concerning invasive species identification, classification and control rule.
Understanding Invasive Species	This page includes links to learn more about aquatic, wetland and terrestrial invasive species. Within those pages you can find information on plants and animals regulated under NR 40 including NR40 Classification; common and scientific name; factsheets; photos; literature reviews; Species Assessment Group form; and NR 40 listing date. Identification information is found in the factsheet. Brochures can be found in the Resources tab.
Aquatic Invasive Species Identification Webinar Resources	Complete webinar recording covering all species (May 27, 2020) [Video Length 01:51:28] Presentation Slides [PDF] For ease of viewing, segments for different species groups covered in the complete webinar have been broken out below: Submersed plants [Video Length 00:42:01] Aquatic animals [Video Length 00:23:24] Riparian plants [Video Length 00:25:42] Nearshore upland plants [Video Length 00:18:32]
Wisconsin Aquatic Invasive Species Early Detection Handbook [PDF exit DNR]	Handbook for Citizen Lake Monitoring Network AIS monitors. Includes photos and descriptions for identification.
Aquatic and Wetland Invasive Species Identification Guide (multi-page) [PDF]	Multi-page identification guide to NR 40 inva... ...ams and wetlands. Includes common and Lati... highlight key identifying characteristics... Maps are current as of the publicatio...
Aquatic and Wetland Invasive Species Identification Guide (one-page) [PDF]	One-page identification guide for Ch... in lakes, streams and wetlands. Inclu... distribution maps. Maps are current a...
Key to Wisconsin Freshwater Snails [exit DNR]	Taxonomic key with photographs to iden...
Wisconsin Crayfish Photo ID	Taxonomic key with photographs to identify Wisconsin cray... ...ding some invasive

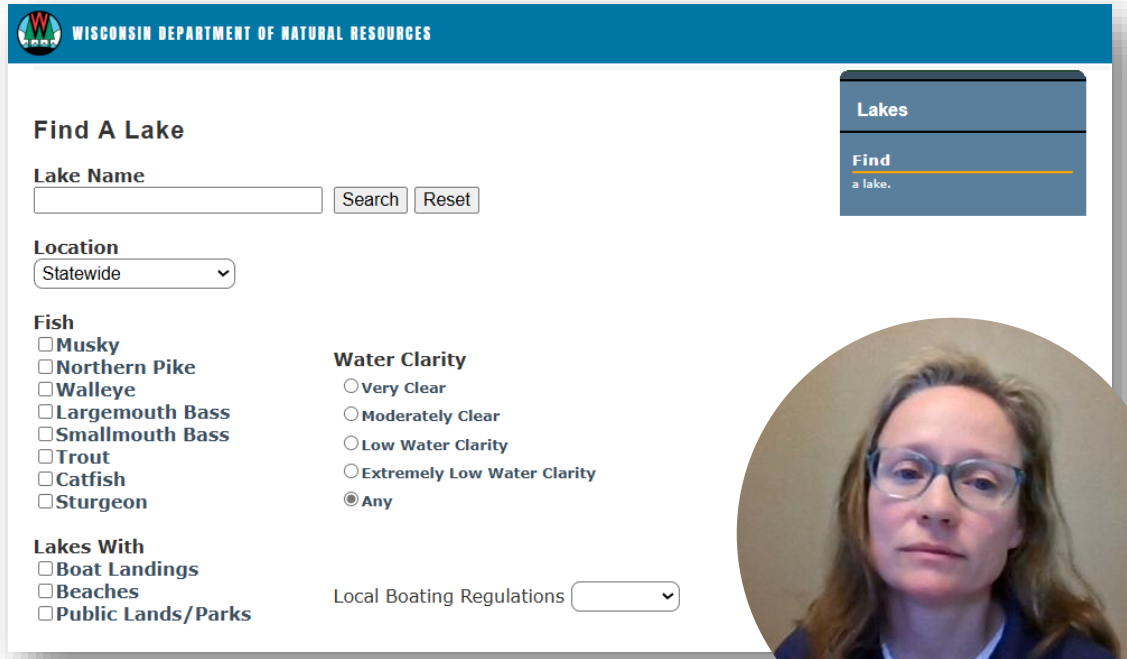


Desktop Prep – Identify Monitoring Locations

- Surface Water Integrated Monitoring Systems
  https://dnrmaps.wi.gov/H5/?viewer=SWDV

  Known AIS ⟶ Resources of Interest ⟶ Waterbody Name
  Last monitoring efforts ⟶ Fieldwork ⟶ Station ID

- DNR Lakes pages Find A Lake Facts & Figures tab:
  - Verified invasive species
  - Area, max & mean depth, waterbody type, hydrological lake type, county, lat, long
  - Contour maps, historical structures, and alkalinity
  - Lake orgs
  - Recreation



Desktop Prep

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

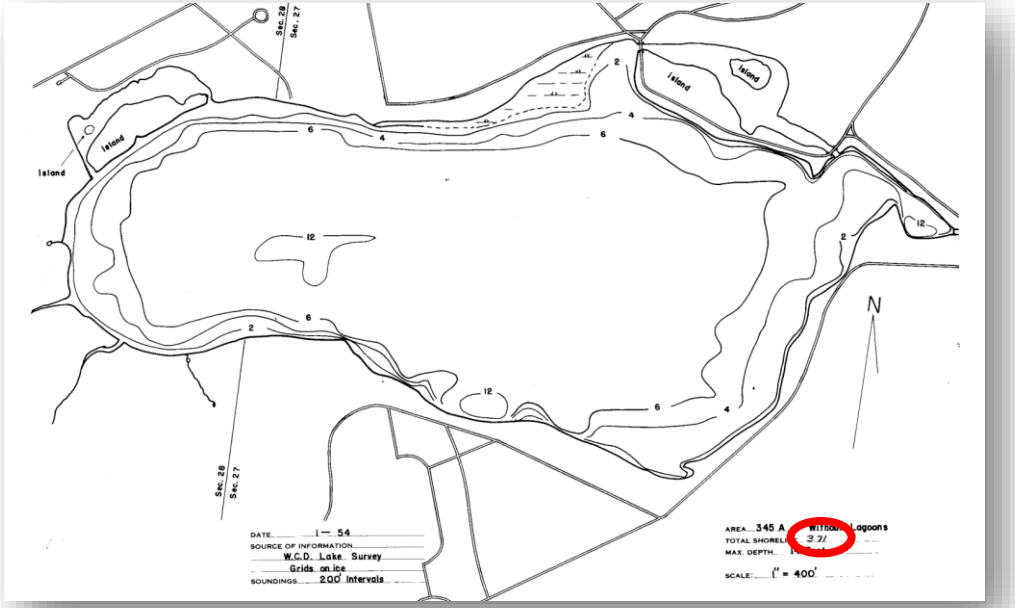
Find A Lake > Dane County > Lake Wingra

Lake Wingra

Overview | Map | Facts & Figures | More

Facts & Figures

Name	Lake Wingra
Waterbody ID (WBIC)	805000
Area	336 ACRES
Maximum Depth	14 feet
Bottom	5% sand, 10% gravel, 0% rock, 85% muck
Waterbody Type	lake
Hydrologic Lake Type	DRAINAGE
County	Dane
Region	SC
Latitude, Longitude	43.0535033, -89.4194465
Contour (Bathymetric) Map	Contour Map
Interactive Map	Interactive Map
Lake Management	
Lake Organizations	Friends Of The Arboretum [exit DNR]
Recreation	
Beaches	1
Boat Landings	1



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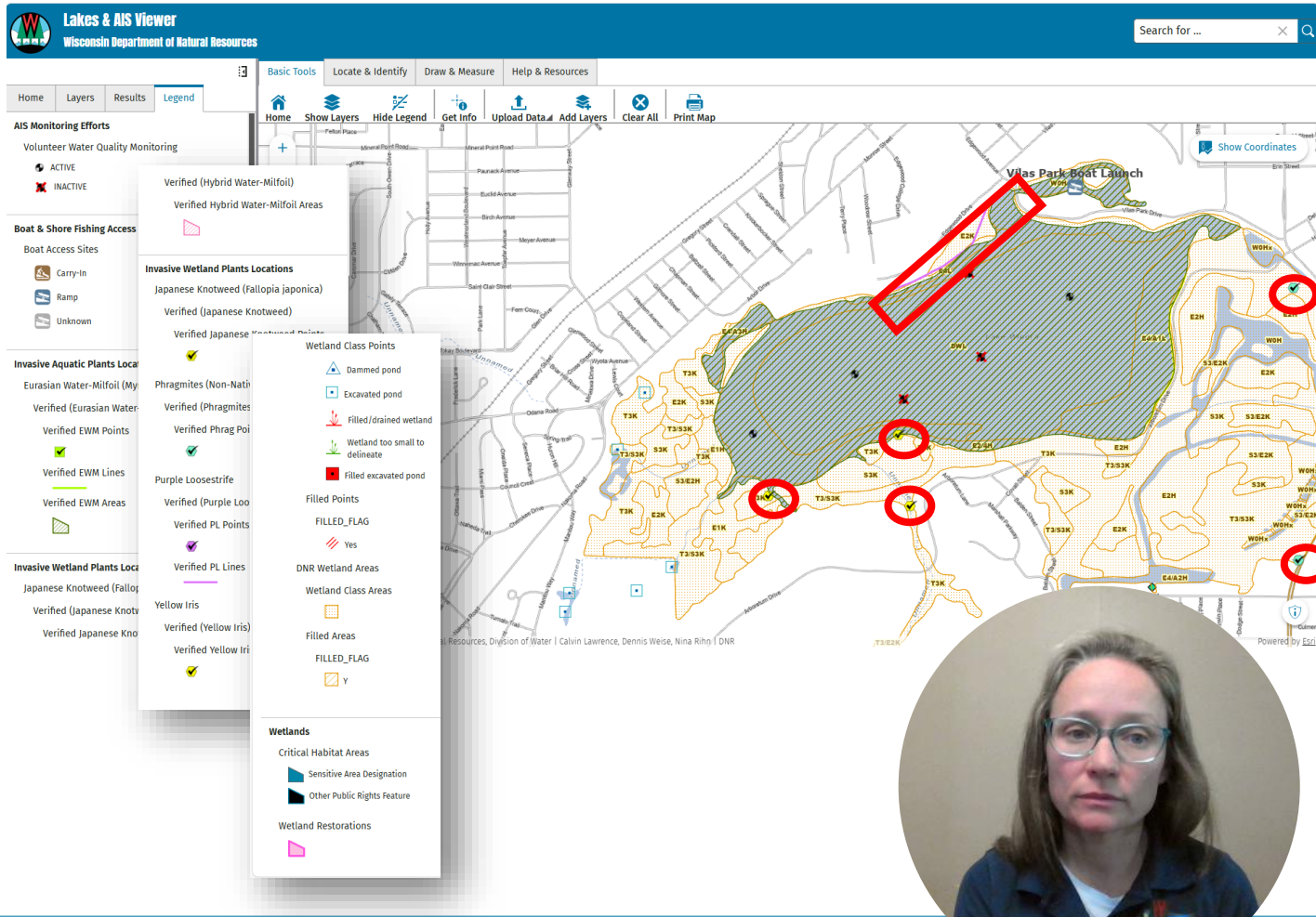
>4.8-6.4	>1-3	>5.7-11.5 (201-400)		>3-4	6	3

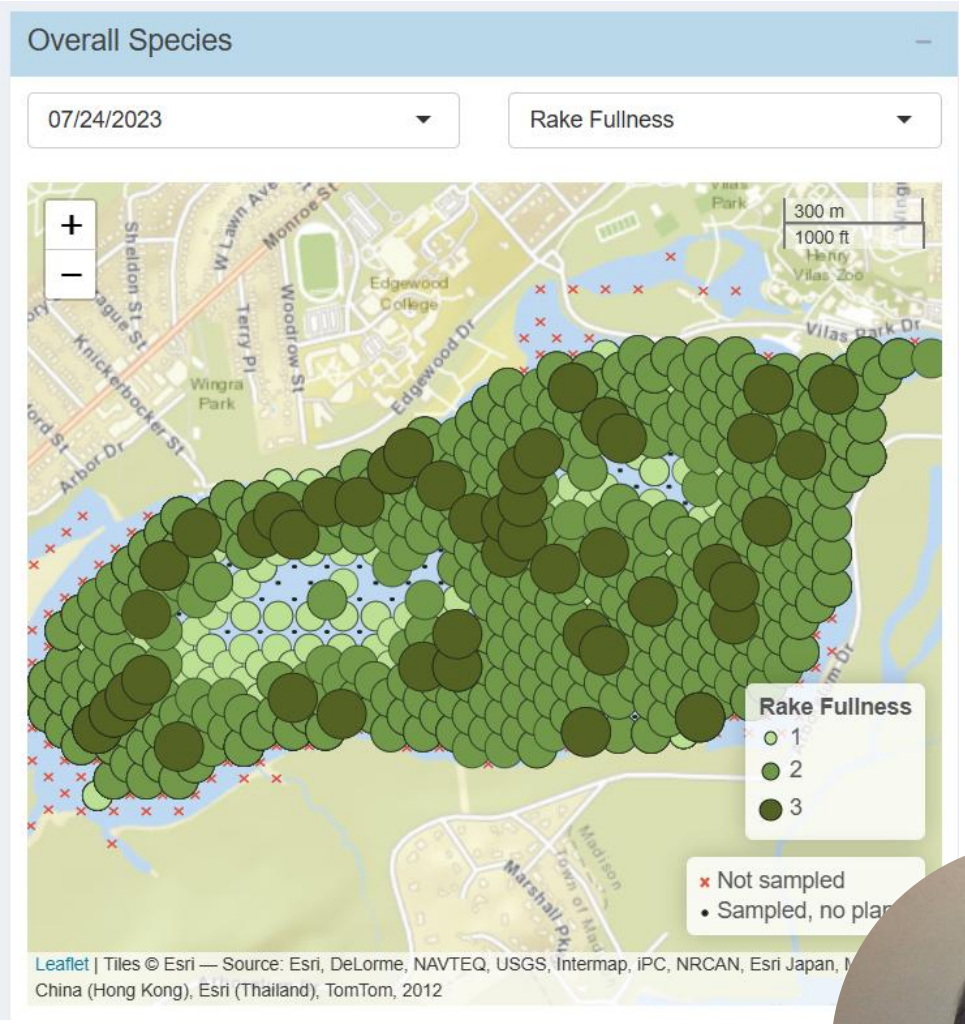
Desktop Prep – Identify Access, Target, & Meander Sites with Mapping Resources

- Layers in Lakes & AIS Viewer
  https://dnrmaps.wi.gov/H5/?viewer=Lakes_AIS_Viewer
- Inland Water Resources
  - Open Water, Watershed, Stream Order, Flow Direction
  - Wetland Inventory & Wetlands
    - Restorations and Critical Habitat
- Boat & Shore Fishing Access
- Monitoring Stations
- AIS Monitoring efforts
  - Project RED, CLMN, Early Detection
- Invasive Species Locations



Desktop Prep

- Become familiar with target species
- Identify monitoring locations
- Identify access & target sites apriori using data resources
- Identify access & target sites apriori using mapping resources



Field Monitoring Equipment

Table 2. Equipment list for completing early detection surveys on lakes, streams, wetlands, and roads. Equipment with a lighter shade of blue is optional.

EQUIPMENT	Lakes	Wadable Streams	Non-wadable streams	Wetlands	Roadsides
FIELD MONITORING EQUIPMENT					
Field identification guides	■	■	■	■	■
Aquatic Invasive Species Monitoring Form (3200-154 R 04/2025) [PDF] printed on waterproof paper for each site	■	■	■	■	■
Pencils	■	■	■	■	■
Stopwatch	■	■	■	■	■
Maps (i.e., contour/topographic, aerial imagery or orthophotos, georeferenced imagery uploaded to Smartphone Gazetteer)	■	■	■	■	■
GPS	■	■	■	■	■
Boat/kayak	■		■		
Anchor	■		■		
Waders/hip boots		■		■	■
50 m tape measure	■	■	■	■	■
Binoculars	■	■	■	■	■
Camera	■	■	■	■	■
Aquatic plant rake on a rope and pole (*Recommended Baseline Monitoring of Aquatic Plants in Wisconsin*)	■	■	■		
Stainless steel sand scoop	■	■	■		
Ewoldt clam rake	■	■	■		
D-frame 500- or 600-micron mesh kick net about 12" W x 10" L x 22" D. Handle about 52" L x 1-1/4" diameter	■	■	■		
White sorting trays for plants and invertebrates	■	■	■	■	■
Forceps	■	■	■	■	■
Sieves ranging 150 to 500-micron pore sizes	■	■	■	■	■
Hand lens	■	■	■	■	■
Polarized sunglasses	■	■	■	■	■
Boat ladder	■		■		

Field Monitoring Equipment

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EQUIPMENT	Lakes	Wadable Streams	Non-wadable streams	Wetlands	Roadsides
FIELD MONITORING EQUIPMENT					
Field identification guides					
Aquatic Invasive Species Monitoring Form (3200-154 R 04/2025) [PDF] printed on waterproof paper for each site					
Pencils					
Stopwatch					
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GPS					
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Hand lens					
Polarized sunglasses					
Boat ladder					

Stainless steel sand scoop

Ewoldt clam rake

Safety

- A two-person crew is recommended.
- Use a stable boat and wear a personal flotation device (PFD) if sampling on lakes or non-wadable streams.
- Do not enter water with blue-green algae.
- Use appropriate footwear when traversing wetlands (knee boots) and wadable streams (waders).
- Reflective vest must be worn when outside of the vehicle.
- Vehicles must be marked with orange safety cones.
- Cold weather carries the risk of hypothermia, and hot weather risk of dehydration and heat stroke.
- Prepare with appropriate clothing, sun protection, drinking water, and insect repellent.
- Carry a fire extinguisher, cellular phone, or portable radio, and a first aid kit that includes materials for cleaning wounds (antibacterial soap and clean water or ethyl alcohol).
- Be aware of the forecast and weather conditions.
- Federally controlled/regulated waters also must comply with United States Coast Guard regulations for flares, vessel shut-off, and noise makin

Permissions

- Landowner permission must be requested. Consult the county resources list found in the protocols.
- A free permit is required from WisDOT to work on state managed roadsides.
- If you stay within the right of way (ROW), you do not need to contact adjacent landowners for permission. How far a ROW extends from the centerline of a road depends on road width and can vary greatly.

County_Contacts_and_Websites • 06/27/25

Light Gray Text = URL repeats from a previous column

County Website Link	GIS Webmapping Application(s) Link	GIS Download Link (also see GeoData@Wisconsin)	Lidar Download Link (Inventory Map)	Real Property Lister Link	Register of Deeds Link	LIO – Click for Email	LIO Phone
	Adams County GIS	Adams GIS Download	Adams Lidar	Adams RPL	Adams ROD	Sam Bortz	608-339-4206
	Ashland County GIS	Ashland GIS Download	Ashland Lidar	Ashland RPL	Ashland ROD	BrittanyGoudos-Weisbecker	715-685-2002
	Barron County GIS		Barron Lidar	Barron RPL	Barron ROD	David Gifford	715-537-6375
	Bayfield County GIS	Bayfield GIS Download	Bayfield Lidar	Bayfield RPL	Bayfield ROD	Scott Galetka	715-373-6156
	Brown County GIS	Brown GIS Download	Brown Lidar	Brown RPL	Brown ROD	Jeff DuMez	920-448-6480
	Buffalo County GIS	Buffalo GIS Download	Buffalo Lidar	Buffalo RPL	Buffalo ROD	Nathan Machula	608-685-6285
	Burnett County GIS		Burnett Lidar	Burnett RPL	Burnett ROD	Jason Towne	715-349-2109
	Calumet County GIS	Calumet GIS Download	Calumet Lidar	Calumet RPL	Calumet ROD	Andy Hess	920-849-1442x260
	Chippewa County GIS		Chippewa Lidar	Chippewa RPL	Chippewa ROD	Doug Clary	715-726-7941
	Clark County GIS		Clark Lidar	Clark RPL	Clark ROD	Derek Weyer	715-743-5131
	Columbia County GIS	Columbia GIS Download	Columbia Lidar	Columbia RPL	Columbia ROD	John Grams	608-742-9882
	Crawford County GIS		Crawford Lidar	Crawford RPL	Crawford ROD	Gigi Collins	608-326-0221
	Dane County GIS	Dane GIS Download	Dane Lidar	Dane RPL	Dane ROD	Todd Violante	608-266-4021
	Dodge County GIS		Dodge Lidar	Dodge RPL	Dodge ROD	Dave Addison	920-386-3773
	Door County GIS		Door Lidar	Door RPL	Door ROD	Zakry Schwartz	920-746-2391
	Douglas County GIS	Douglas GIS Download	Douglas Lidar	Douglas RPL	Douglas ROD	Zach DeVoe	715-395-1386
	Dunn County GIS		Dunn Lidar	Dunn RPL	Dunn ROD	Rachel Wells	715-231-6514
	Eau Claire County GIS	Eau Claire GIS Download	Eau Claire Lidar	Eau Claire RPL	Eau Claire ROD	Zach Felling	715-839-7219
	Florence County GIS		Florence Lidar	Florence RPL	Florence ROD	Donna Liebergen	715-528-3204
	Fond du Lac County GIS	Fond du Lac GIS Download	Fond du Lac Lidar	Fond du Lac RPL	Fond du Lac ROD	Terry Dietzel	920-929-3135

Communication

- Prior to beginning a survey, lead monitors will notify stakeholders. This notification can be done via email. Lead monitors will notify the following stakeholders:
- Regional DNR AIS Biologists – Regional DNR AIS Biologist will then inform DNR lake, fish, stream, and wetland biologists.
- LMPN staff, County AIS, or Land and Water Coordinator, Lake Association or friends' group.
- CLMN, WAV, Project RED volunteer program coordinators.

Volunteers

Volunteers and partners are encouraged to assist with the survey if time allows, as local knowledge of the survey site can improve AIS monitoring in many ways.

VOLUNTEER MONITORING JOB ASSIGNMENTS
Volunteer and monitor lead decide based on capabilities and experience of the volunteers: • Serve as a weather observer. • Share information about AIS with inquiring observers. • Assist in launching and loading the boat and placing cones when parked on the road. • Serve as a surface observer for snorkelers, if snorkeling. • Data recorder - use GPS, record observations of plants and animals found. • Collect photos of crew while sampling. • Utilize plant rake, D-net/scoop, binoculars, etc. • Ensure boaters remain at least 100 feet away from the diver-down flag, in snorkeling. • Assist by watching roadside/shoreline while driver in motion. • Assist in plant/animal ID.

Field Data Collection & Management

Aquatic Invasive Species Monitoring Data

Form 3200-154 (R 04/2025) 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: Lakes and Rivers with Aquatic Invasives
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.

Location Name	SWIMS Station ID	County	Collector(s)	Date	Start Time	End Time

Survey Area Type	Wetland ◯	Lake ◯	Wadable Stream ◯	Non-Wadable Stream ◯	Roadside ◯	AIS Sign Present	Paid Hours (Hrs x PPL)	Volunteer Hours (Hrs x PPL)

Pathway See the DNR AIS Management Plan for information on pathways.	Natural ☐	Trade ☐	Rec ☐	Canal, Dam, Div ☐	Road & Trans ☐	Monitoring ☐	Maritime ☐	◯ Yes ◯ No ◯ N/A		

STEP 1:

Review species factsheets to become familiar with aquatic and wetland invasive species: species tracked in SWIMS.

Did you look for all the species on the list? ◯ Yes ◯ No

Be aware of known AIS at the monitoring site to sample from least to most invaded and use appropriate disinfection method:

Use this space to list known species: _____

Access Sites (15 minutes)

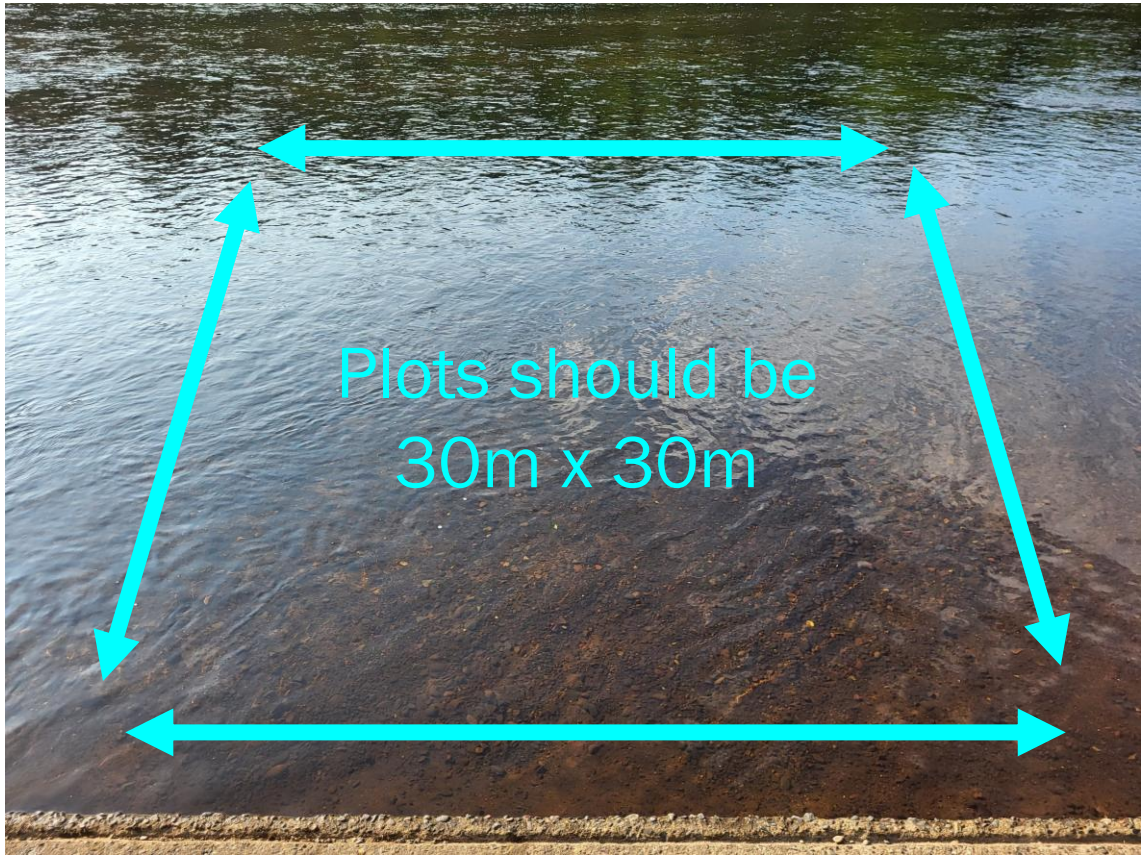
1. Visually assess emergent vegetation (2 minutes)

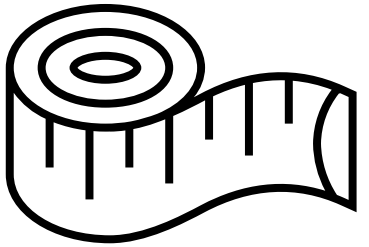
2. Visually assess low-lying & submersed vegetation (2 minutes)

3. Assess plants/animals with tools (5 minutes)

4. Below water assessments (6 minutes)

Access Sites (15 minutes)





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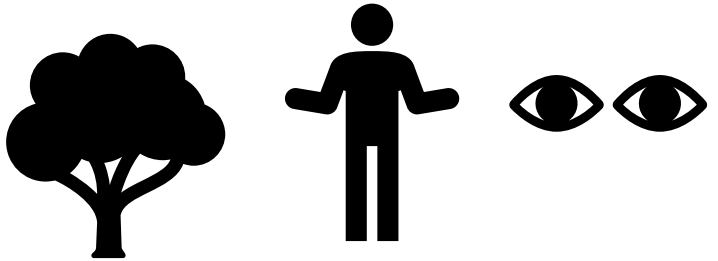
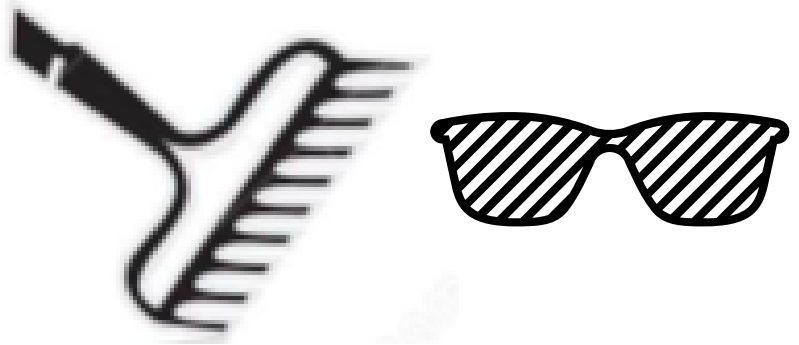


2. Visually assess low-lying & submersed vegetation (2 minutes)

3. Assess Plants/Animals with Tools (5 minutes)



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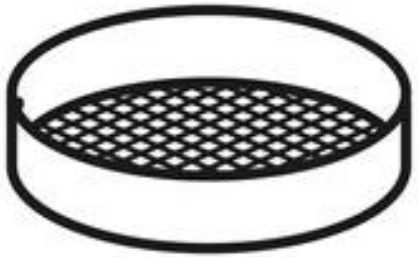
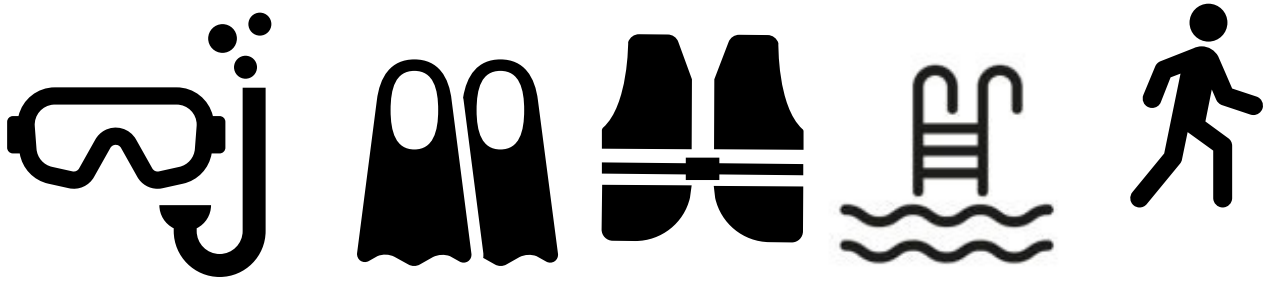
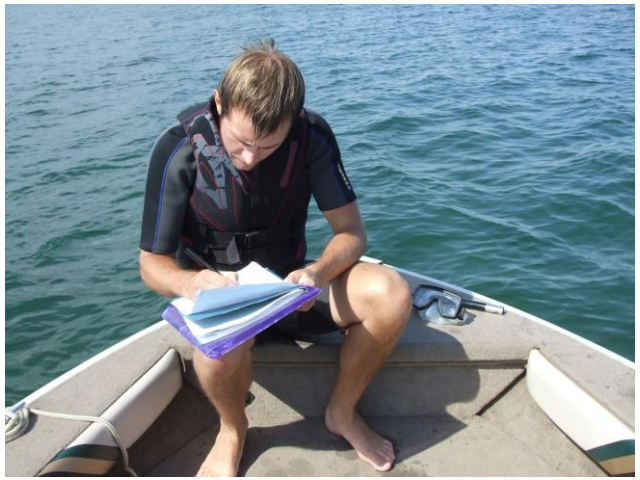


3. Below Water Assessment (6 minutes)





Target Sites (10 minutes)

1. Visually assess emergent vegetation (1 minutes)
2. Visually assess low-lying & submersed vegetation (1 minutes)
3. Assess plants/animals with tools (4 minutes)
4. Below water assessments (4 minutes)

Meander Search

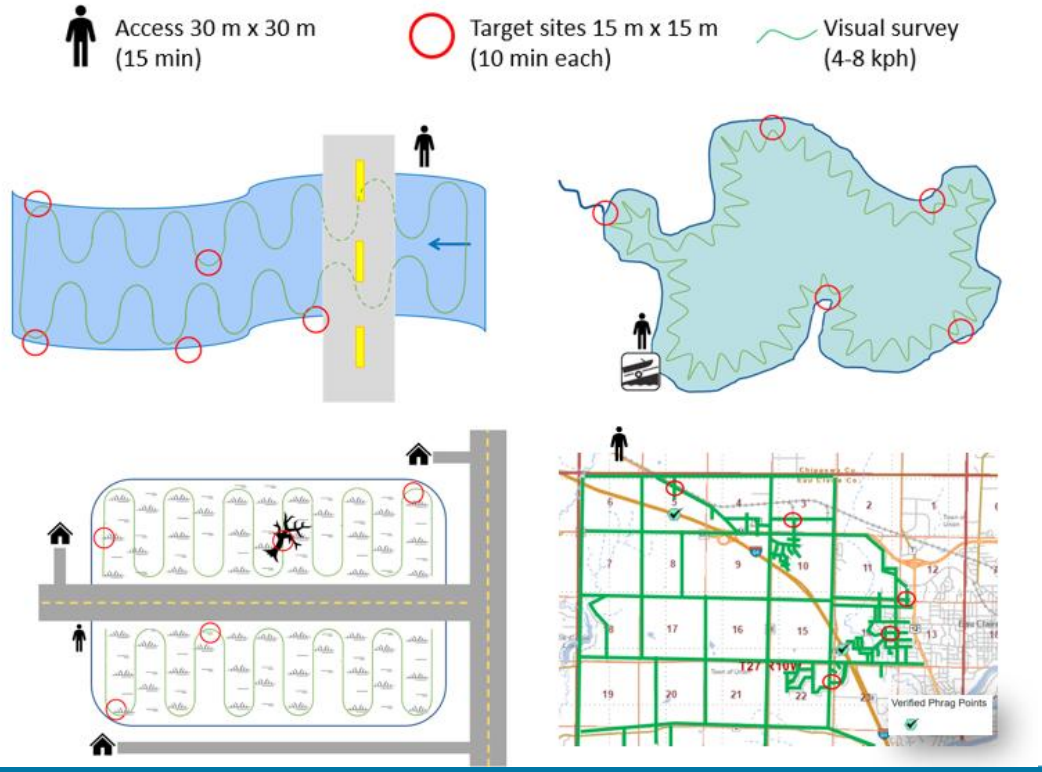
Meander slowly in a zig zag pattern between target sites surveying all habitats. In low visibility, use tools.

Lakes & non-wadable streams

Wadable streams

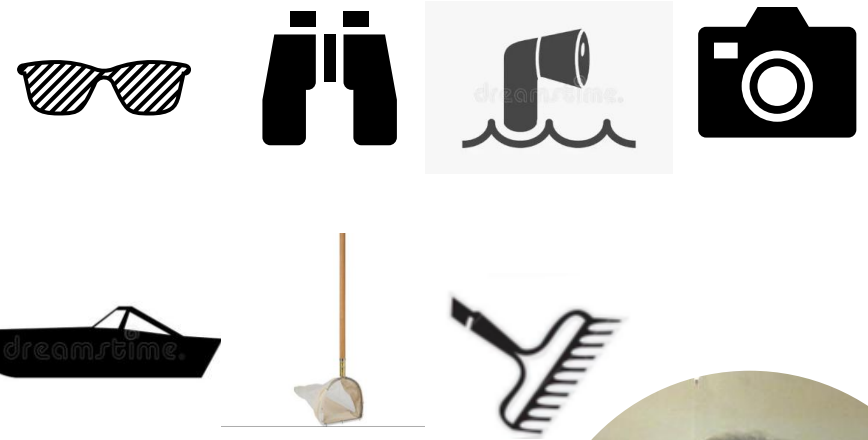
Wetlands

Roadsides



Meandering Lakes & Non-Wadeable Streams

Meander slowly in a zig zag pattern between target sites surveying all habitats. In low visibility, use tools.



4-8 kph

Meandering Wadable Streams

Meander slowly in a zig zag pattern between target sites surveying all habitats. In low visibility, use tools.

0.0001-3 kph

Meander Search

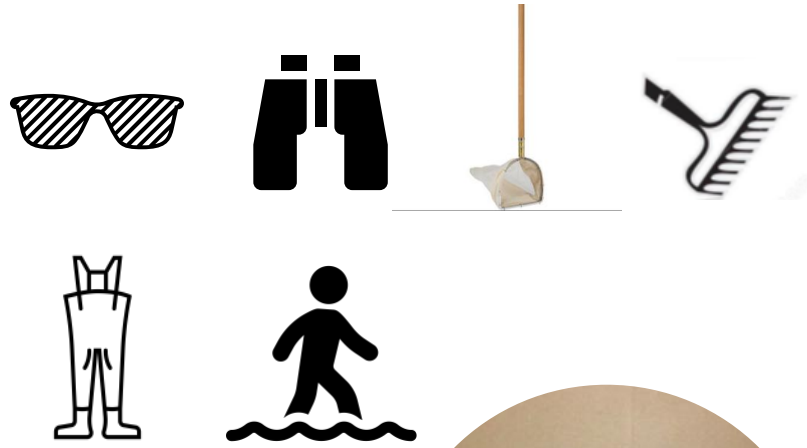
Meander slowly in a zig zag pattern between target sites surveying all habitats. In low visibility, use tools.

Lakes & non-wadable streams

Wadable streams

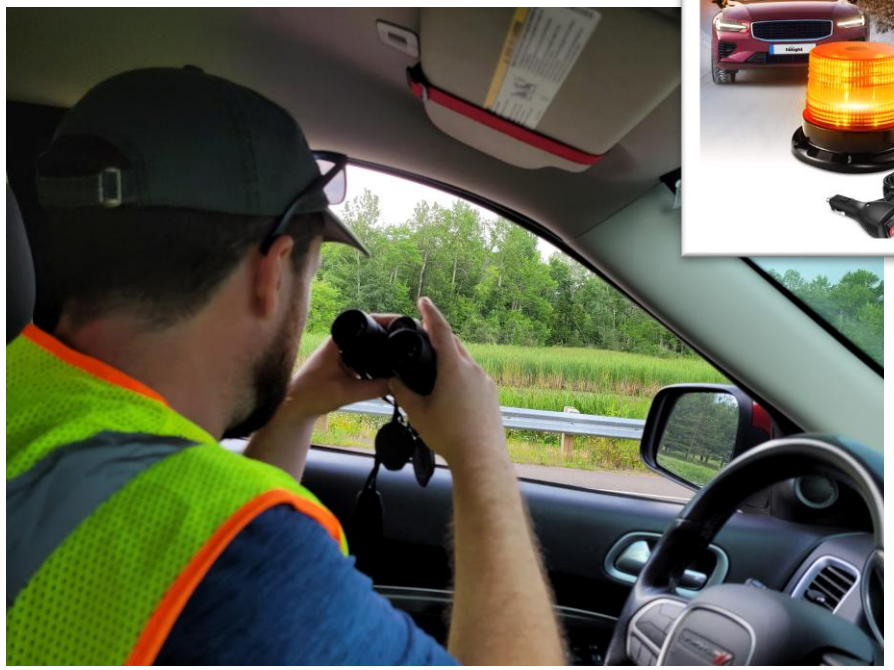
Wetlands 0.0001-3 kph

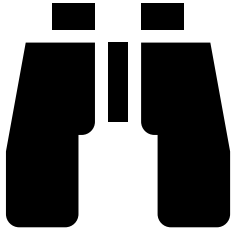
Roadsides



Meander Search

Meander slowly in a zig zag pattern between target sites surveying all habitats. In low visibility, use tools.





Roadsides

4-8 kph

Field Data Collection & Management

STEP 2: Record the following.

1 Access (A), targeted site (TS), meander/incidental site (MS).
2 Record locations in decimal degrees.
3 Record whether AIS present (Y/N).
4 Species present. List each species on a separate row.
5 Density ratings: 1 - a few individuals (1-25), 2 - many small, scattered populations (25 – 500), 3 - dense population (> 500)

6 Live specimens? (Y/N) Live animals will contain flesh and respond; live plants will have green tissue when scratched and have propagules (seeds, flowers, apical meristem, etc.). Dead animals will not contain flesh or respond and dead plants sterile fragments that won't root.
7 Indicate whether a photo was taken of the species at the site (Y/N). Photos are only mandatory when first occurrence.
8 Indicate whether a specimen was collected (Y/N). Specimens only mandatory for NR 40 prohibited species. 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.
9 Indicate how and why protocols varied from SOP. Habitat description. Any other pertinent information.

	Latitude[2]			Photo	Specimen	

1 Access (A), targeted site (TS), meander/incidental site (MS).
2 Record locations in decimal degrees.
3 Record whether AIS present (Y/N).
4 Species present. List each species on a separate row.
5 Density ratings: 1 - a few individuals (1-25), 2 - many sma
populations (25 – 500), 3 - dense population (> 500)

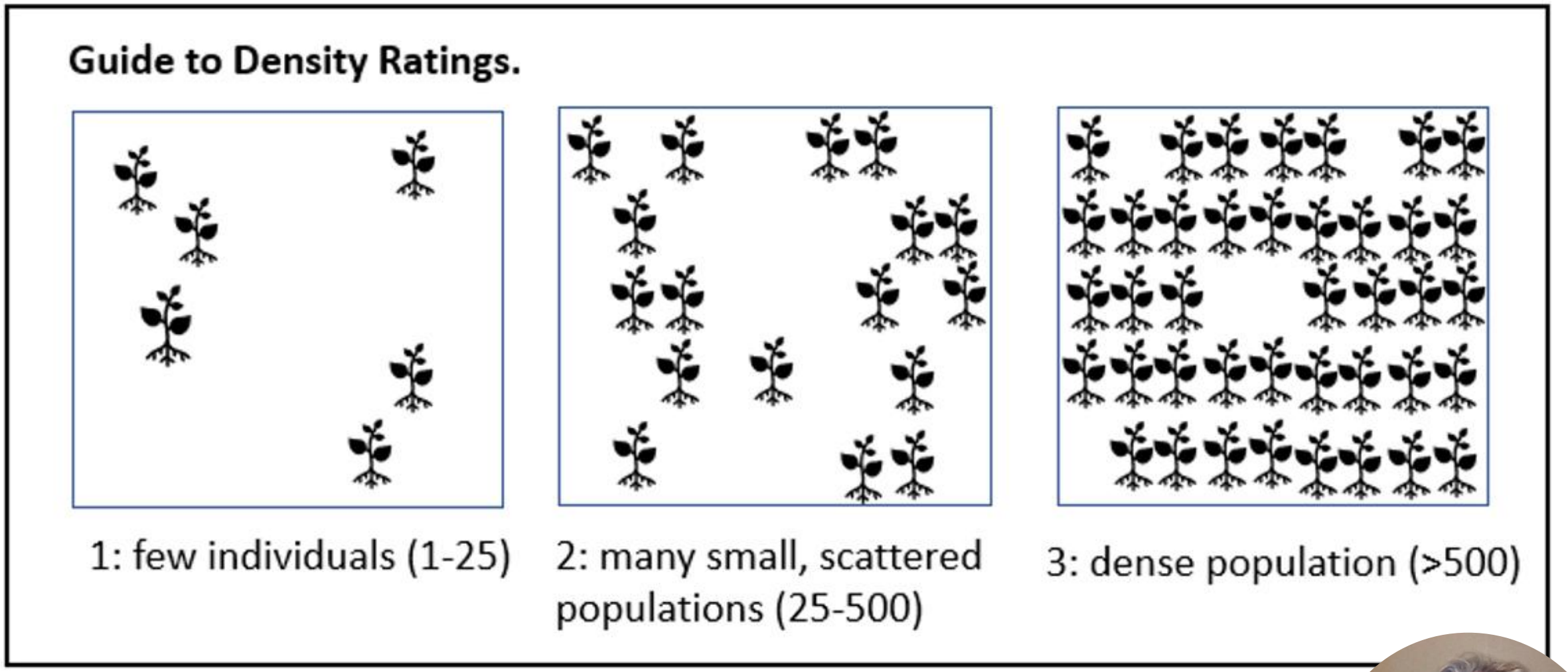


Figure 7. Diagram illustrating each density rating class in the search area for access (30 m x 30 m) and target (15 m x 15 m).

Field Data Collection & Management

STEP 2: Record the following.

1 Access (A), targeted site (TS), meander/incidental site (MS).
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9 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]	Sp…	…sity[5] (1, 2, 3)	Live?[6] (Y/N/NA)	Photo taken?[7] (Y/N/NA)	Specimen collected?[8] (Y/N/NA)	Comments[9]

6 Live specimens? (Y/N) Live animals will contain flesh and respond; live plants will have green tissue when scratched and have propagules (seeds, flowers, apical meristem, etc.). Dead animals will not contain flesh or respond and dead plants sterile fragments that won't root.
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9 Indicate how and why protocols varied from SOP. Habitat description. Any other pertinent information.

Aquatic Invasive Species Monitoring Data

Form 3200-154 (R 03/2025) 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: Lakes and Rivers with Aquatic Invasives
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.

Location Name	SWIMS Station ID	County	Collector(s)	Date	Start Time	End Time
Maunthe Lake	10002458	Fond du Lac	Maxwell Peters, Patricia Sivula	7-12-23	10:15 AM	1:00 PM

Survey Area Type	Wetland ○	Lake ◉	Wadable Stream ○	Non-Wadable Stream ○	Roadside ○	AIS Sign Present	Paid Hours (Hrs x PPL)	Volunteer Hours (Hrs x PPL)
						◉ Yes ○ No ○ N/A	5.5	

Pathway (See the DNR AIS Management Plan for information on pathways.)	Natural ☑	Trade ☐	Rec ☒	Canal, Dam, Div ☐	Road & Trans ☐	Monitoring ☐	Maritime ☐

STEP 1:
Review species factsheets to become familiar with aquatic and wetland invasive species: species tracked in SWIMS.
Did you look for all the species on the list? ◉ Yes ○ No
Be aware of known AIS at the monitoring site to sample from least to most invaded and use appropriate disinfection method.
Use this space to list known species: EWM, CLP, Phrag, ZM

STEP 2: Record the following.

1 Access (A), targeted site (TS), meander/incidental site (MS).
2 Record locations in decimal degrees.
3 Record whether AIS present (Y/N).
4 Species present. List each species on a separate row.
5 Density ratings: 1 - a few individuals (1-25), 2 - many small, scattered populations (25 – 500), 3 - dense population (> 500)
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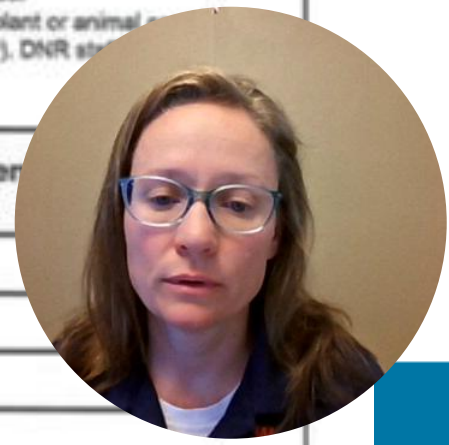
9 Indicate how and why protocols varied from SOP. Habitat description. Any other pertinent information.

Site[1]	Latitude[2] xx.xxxxx	Longitude[2] -xx.xxxxx	AIS Present[3] (Y/N)	Species[4]	Density[5] (1, 2, 3)	Live?[6] (Y/N/NA)	Photo taken?[7] (Y/N/NA)	Specimen collected?[8] (Y/N/NA)	Comme…
TS 1	43.60299	-88.18320	Y	EWM	3	Y	N	N	
				CLP	1	Y	N	N	
TS 2	43.60409	-88.19820	Y	EWM	2	Y	N	N	



Photos (Appendix A)

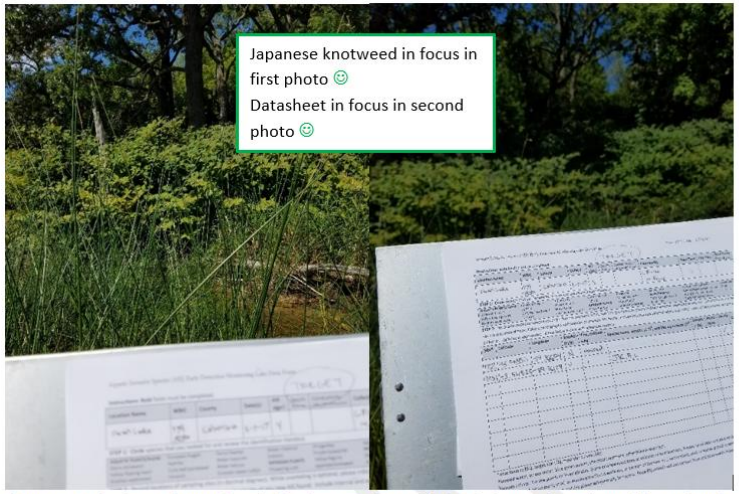
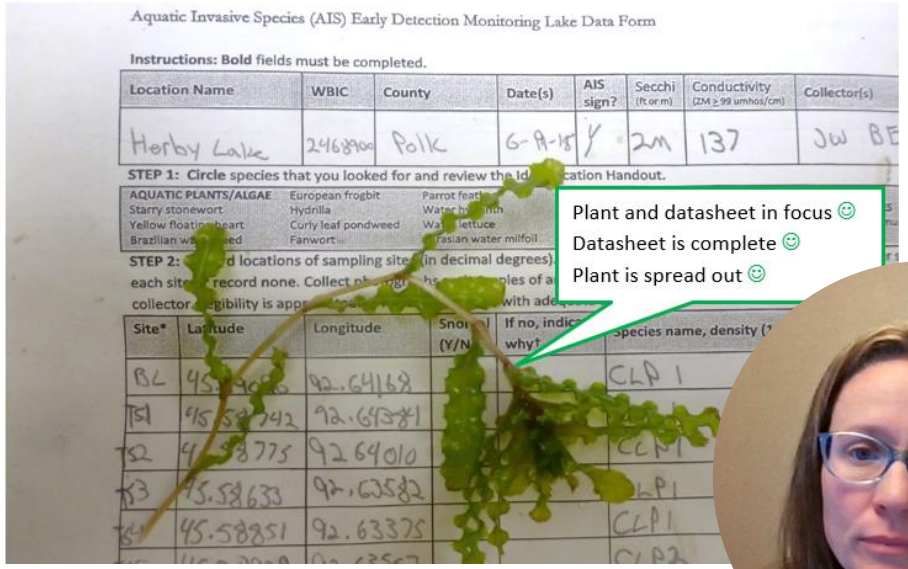


Figure C2. Two landscape photos of monitoring site – one photo with plant in focus and one photo with complete datasheet in focus.



Specimen Labels

- Appendix A
- Stand alone PDF
- Polyester paper

Species:

Station/Location Name:

County:

Latitude, longitude:

Collector(s):

Date:

Habitat:

Associated species:

PRESERVATIVE: □ Denatured ETOH □ Pure ETOH □ None
PRESERVATIVE %: □ ETOH 95% □ ETOH 70% □ ETOH ____%

My Projects | View Data | Submit Data | Search | APM | WATERS | SWDV | AIS Viewer | Help & Resources | Welcome back MAUREEN KALSCHEUR | Log off

Create Monitoring Data

← Back | Save | Next

Project*: Aquatic Invasive Species Early Detect — Find Project

Data Collectors*: Maureen (Ferry) Kalscheur, Addie Sch — Find Data Collector

Station*: Lake Wingra - Lake Wingra — Find Station

Start Date*: 05/16/2025

Start Time (HH:MM AM/PM)*: 9 : 00 AM

Form*: Aquatic Invasive Species Monitoring D — Find Form

End Date*: 05/16/2025

End Time (HH:MM AM/PM)*: 11 : 59 PM

Document: Find Document | Create Document

I want to enter latitude and longitude on the next page (optional)

Fieldwork Comment: This is an example aquatic invasive species fieldwork event data entry.

- SWIMS - Work - Microsoft Edge

https://apps.dnr.wi.gov/swims/Documents/CreateDocument?view=create_dyform_document_vi...

Create Document

Create

Document Seq No: SYSTEM GENERATED

Document Title: PL_Dane_20230516_Wingra_Kalscheur

Author Name: Maureen Kalscheur

Published Date:

Precision: Day **Date** 05/16/2025

Upload File: Choose File No file chosen

URL:

Description: Scattered patches on shoreline.

Save and Edit Header

You Are Entering Data For:

Project: Aquatic Invasive Species Early Detection 2018

Start Date Time: 05/12/2025

Station: Anderson Lake

Form Code: AIS_MON_21

	Parameter	Result	Unit	Method
	Total Paid Hours Spent			AIS_EDD_2019
	Total Volunteer Hours Spent			AIS_EDD_2019
Protocol Used:	Early Detection Protocol Used			AIS_EDD_2019
Pathway Monitored:	Maritime			AIS_EDD_2019
Pathway Monitored:	Monitoring			AIS_EDD_2019
Pathway Monitored:	Road & Transportation			AIS_EDD_2019
Pathway Monitored:	Canal, Dam, Division			AIS_EDD_2019
Pathway Monitored:	Recreation			AIS_EDD_2019
Pathway Monitored:	Organisms In Trade			
Pathway Monitored:	Natural			
AIS Sign:	AIS Sign Present?			
	Did you look for all the species on the list?			

Save | Save and Return | Site 1

Save and Edit Header

You Are Entering Data For:

Project: HORSESHOE LAKE IMPROVEMENT ASSOCIATION: Horseshoe Lake AIS Early Detection and ResponseProject, 2009-2011

Start Date Time: 05/13/2025

Station: Anderson Lake

Form Code: AIS_MON_21_1

	Parameter	Result	Unit	Method
Site Location Information:	Site			AIS_EDD_2019
Site Location Information:	Latitude (i.e. 43.1234)			AIS_EDD_2019
Site Location Information:	Longitude (i.e. -89.4567)			AIS_EDD_2019
Site Location Information:	AIS Present?			AIS_EDD_2019
Species 1:	Species			AIS_EDD_2019
Species 1:	Density			
Species 1:	Live			AIS_EDD_2019
Species 1:	Photo taken?			AIS_EDD_2019
Species 1:	Where was photo sent?			
Species 1:	When was photo sent? Enter date:			
Species 1:	Specimen Collected?			
Species 1:	Where was specimen sent?			
Species 1:	When was specimen sent? Enter date:			
Species 1:	Comments about this AIS at this site			
Species 1:	First Verifier			
Species 1:	Second Verifier			

Prevention

STOP AQUATIC HITCHHIKERS!™

Prevent the transport of nuisance species
Clean all recreational equipment.
www.ProtectYourWaters.net

BOAT, GEAR AND EQUIPMENT DECONTAMINATION AND DISINFECTION MANUAL CODE 9183.1

BEST MANAGEMENT PRACTICES

The general public is required to follow the decontamination steps identified in s. NR 40.02(44) and NR 40.07 to prevent the spread of invasive species. This webpage outlines best management practices (BMPs) for the boat, gear and equipment. The manual code for decontamination and disinfection requires all Wisconsin Department of Natural Resources employees, agents, and permittees to transport equipment between waters to take additional prevention steps. If you are unsure if you are required to follow this guidance, please review the Common Questions and Answers [PDF]. If you still have questions, contact the person who issued your contract or permit or the DNR invasive species team.

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

Invasive Species

- Learn More
- Report an Invasive
- Prevent the Spread
- Control Measures
- Rules and Regulations
- Wisconsin Invasive Species Council
- AIS Efforts
- Education and Publications

Additional Resources

- Boat Transportation and Bait Laws
- Boat, Gear and Equipment Decontamination and Disinfection
- Wake Boat and Ballast System Prevention Practices [PDF]
- Clean Boats, Clean Waters
- Invasive Species Best Management Practices

AQUATIC AND WETLAND INVASIVES SPECIES MONITORING

The Wisconsin Department of Natural Resources (DNR) Aquatic Invasive Species Monitoring program is a collaboration of citizens, partners and the DNR to find, report, map and survey invasive species. The program is guided by species identified in NR 40, Wis. Adm. Code.

This monitoring effort detects new invasive species so the DNR can be alerted and stakeholders can respond appropriately. The DNR collects this data to know what methods trained citizens and partners use when actively looking for invasive species. All records are screened by the DNR and every new invasive species occurrence is verified and appears on the DNR website (see the "Location" section below).

For surveillance monitoring, a report of "no invasive species" at a location is just as important as finding invasive species. Knowing how often our monitors are looking for species and what they are or are not finding is critical in understanding the spread of invasive species. These raw data are available in the Surface Water Integrated Management System (SWIMS) database.

Warning: Many current browsers do not open PDF forms properly:

1. From a desktop computer, download the PDF form (right-click on the link, then select "Save link as" or "Save target as")
2. Make a note of the file location and file name so you can access the file from your device.
3. Do not double-click the file. Open the Adobe Reader software then select "File > Open" then browse to the PDF file you saved on your device.

See PDF Help for additional information.

Identification +

Locations +

Reporting +

Volunteer Monitoring +

DNR Monitoring −

Below are links to protocols and forms used by DNR staff, consultants and partner organizations who participate in formal invasive species monitoring programs.

Lakes

Related Links

Find a Lake

Lakes Topics A-Z

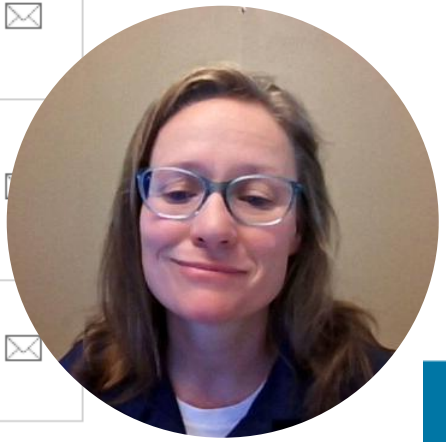
Lake Maps

Lake Water Quality Data

Aquatic Invasive Species Contacts - Aquatic Invasive Species - Regional Biologist/Point of Contact

Location: Statewide

Contact	Organization	Location/Comments	Work Phone	Email
SHELBY ADLER	Wisconsin DNR	Adams, Columbia, Crawford, Dane, Dodge, Grant, Green, Iowa, Jefferson, Juneau, La Crosse, Lafayette, Monroe, Richland, Rock, Sauk, Vernon		✉
TYLER MESALK	Wisconsin DNR	Barron, Buffalo, Chippewa, Clark, Dunn, Eau Claire, Jackson, Marathon, Pepin, Pierce, Polk, Portage, Rusk, St. Croix, Taylor, Trempealeau, Wood		✉
PATRICK SIWULA	Wisconsin DNR	Calumet, Fond du Lac, Green Lake, Kenosha, Manitowoc, Marquette, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, Waukesha, Waushara, Winnebago	920-893-8552	
AMANDA SMITH	Wisconsin DNR	Brown, Door, Florence, Forest, Kewaunee, Langlade, Marinette, Menominee, Oconto, Outagamie, Shawano, Waupaca		✉



CONNECT WITH US

Maureen Kalscheur

Maureen.Kalscheur@Wisconsin.gov
(608) 381-3231

AIS Early Detection Protocol (PDF)
AIS Monitoring webpage

@WIDNR

@WI_DNR

/WIDNRTV

"WILD WISCONSIN:
OFF THE RECORD"