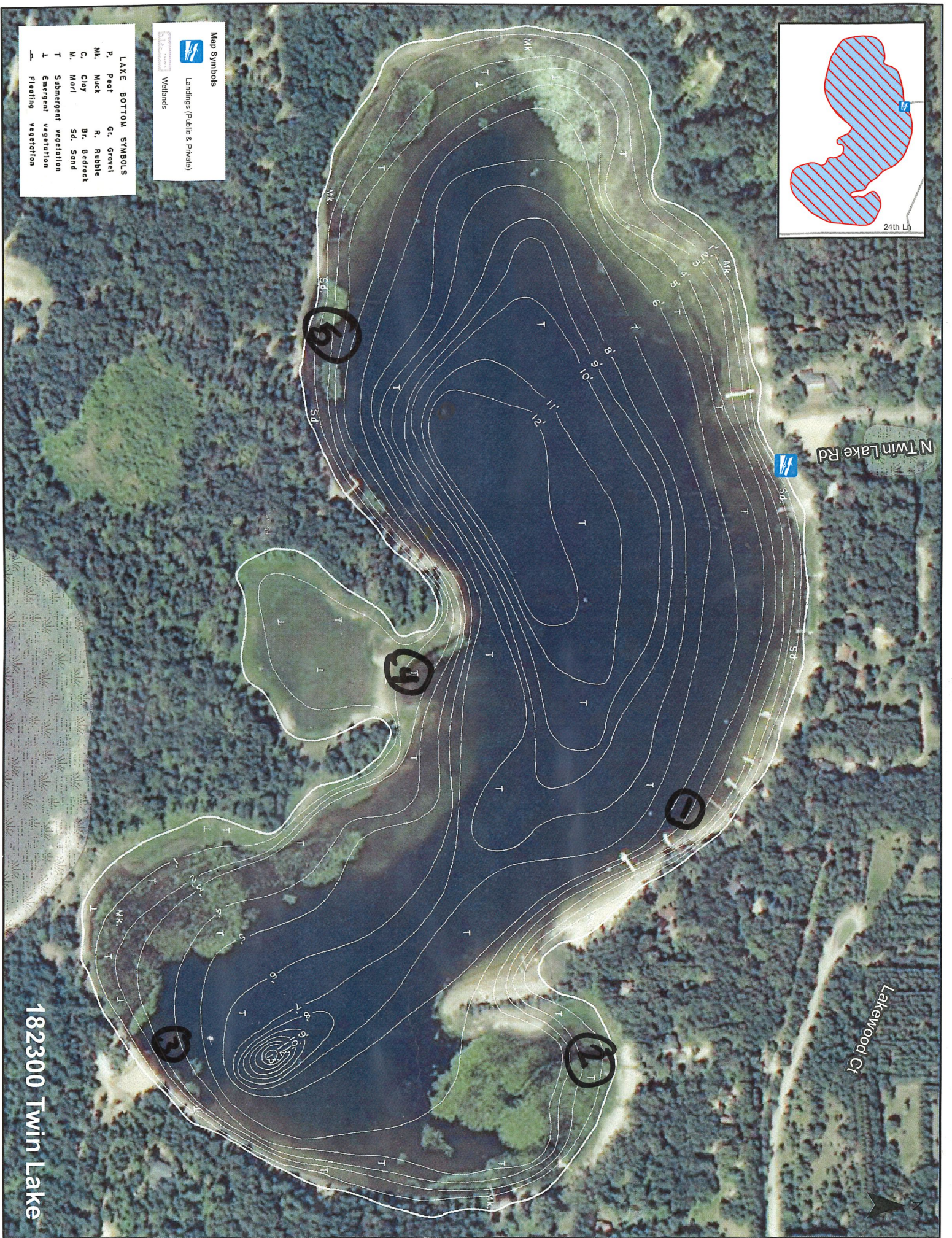


OFFICIAL_NAME	Twin Lake
WBIC	182300
Lead	
COUNTY	Waushara
SIZE(ACRES)	93
Latitude	44.2359
Longitude	-89.1403
MAX_DEPTH (FEET)	13
WATERBODY_TYPE_CODE	ED Lake Survey
LANDINGCOUNT	1
Beach/Public/Park Count	
Secchi Depth (Ft)	2012 - 8
AIS Present	Banded Mystery Snail, Eurasian Water-Milfoil, Phragmites (non-native), Purple Loosestrife
Needed Vouchers	Phrag
Boating Ords	Wake Restrictions
Last Monitoring Event	2014
Notes	
Volunteers	7/25/17



Map Symbols			
	Landings (Public & Private)		
	Wetlands		
LAKE BOTTOM SYMBOLS			
P.	Peat	Gr.	Gravel
Mk.	Muck	R.	Rubble
C.	Clay	Br.	Bedrock
M.	Mud	Sd.	Sand
T	Submerged vegetation		
L	Emergent vegetation		
	Flooding	vegetation	



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

Location Name	WBIC	County	Date(s)	AIS sign?	Secchi (ft or m)	Conductivity (ZM ≥ 99 umhos/cm)	Collector(s)	Start Time	End Time	Total Hours (hrs x # ppl)
Twin Lake	18300	Waukegan	7/25/17	N		-	Amy Cretlow Alex Sells	3:30pm	5:00pm	5

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

AQUATIC PLANTS/ALGAE	European frogbit	Parrot feather	Water chestnut	Phragmites	Japanese hop	New Zealand mudsnails	Faucet snails
Starry stonewort	Hydrilla	Water hyacinth	Didymo	Purple loosestrife	INVERTEBRATES	Chinese/Banded mystery snails	Other
Yellow floating heart	Curly leaf pondweed	Water lettuce	RIPARIAN PLANTS	Yellow flag iris	Zebra/quagga mussels	Rusty/red swamp crayfish	
Brazilian waterweed	Fanwort	Eurasian water milfoil	Flowering rush	Japanese knotweed	Asian clam	Spiny/fishhook waterflea	

STEP 2: Record locations of sampling sites (in decimal degrees). While snorkeling is optional, please indicate whether snorkeled or why not. List AIS found and density at each site or record none. Collect photographs and samples of any new AIS found. Include internal and external labels with WBIC, name of lake, county, sample date, and collector. Legibility is appreciated. If needed, preserve with adequate ethanol.

Site*	Latitude	Longitude	Snorkel (Y/N)	If no, indicate why†	Species name, density (1-5)‡, and live (L) or dead (D)§	Sample (Y/N)	Photo (Y/N)	No AIS	Comments
1	44.23757	89.13840	N	3rd lake no clear gear	PL(L)				
2	44.23664	89.13589	↓		PL(L)				
3	44.23315	89.13578	↓		Phrag (L) can be seen at this site				old campground
4	44.23508	89.14006	↓						
5	44.23452	89.14349	↓		EDM(L) - possible Hybrid				
I	44.23105	89.14667			Phrag (a) 5m x 10m Patch				Sample taken for hybrid test

*boat landing (BL), target site (TS), meander survey (MS).

†Strained water, turbid water, blue-green bloom, chemical treatment, other (please describe).

‡Density ratings: 1-a few plants or invertebrates, 2-one or a few plant beds or colonies of invertebrates, 3-many small beds or scattered plants or colonies of invertebrates, 4-dense plant, snail, or mussel growth in a whole bay or portion of the lake, or 5-dense plant, snail or mussel growth covering most shallow areas.
§Live (L) animals will contain flesh and live plants will generally be rooted. Dead (D) animals will not contain flesh and dead plants include sterile fragments.

sample did not stay fresh enough for test.

STEP 3: Regional verifier examination specimen(s) and photographs and provide identification results. Submit to next verifier. Create ROI and attach documents.

Species	Specimen (Y/N)	Photo Name	Sent to	Date sent	Comments	This section is completed by the verifier(s)				
						Verifier #1	Date	ID	Verifier #2	Date

STEP 4: For new aquatic invasive species populations, collect photographs and samples. Provide photos, preserved specimens, and copies of the datasheet to the regional DNR verifier. Name photos with the SPSCODE_YYYYMMDD_WBIC or STATIONID or LAT LONG_COLLECTOR.

STEP 5: Data was entered into SWIMS on 8/16/17 by Alex Selk

Once data is entered, send scans of data sheets to central office (Maureen.Ferry@Wisconsin.gov):

STEP 6: Data was proofed on 10/23/2017 by Amy Kestlow

The purpose of this form is to track the presence/absence of spiny or fishhook water fleas collected using a plankton net during AIS monitoring.

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 Open Records laws, ss. 19.32 - 19.39, Wis. Stats.

Primary Data Collector			
Name	Phone Number	Email	
Amy Kretlow	920-893-8552	Amy.Kretlow@wi.gov	
Monitoring Location			
Waterbody Name	WBIC	County	Township Name
Twin Lake	182300	Waushara	Springwater
Date and Time of Monitoring			
Start Date	Start Time	End Date (= Start Date)	End Time
8/17/17		8/17/17	
Monitoring Results			
Method used: <input type="checkbox"/> horizontal tows (near surface) <input type="checkbox"/> oblique tows (thermocline to surface) <input checked="" type="checkbox"/> vertical tows (bottom to surface) <i>Eckman Dredge</i>			
Diameter of plankton net opening 30cm 50cm <u>other</u> (circle one) <i>Eckman Dredge</i>			
Site 1: Latitude (optional):	Longitude (optional):	<input type="checkbox"/> Preservative Added	
44.28777	89.18124		
Secchi depth (m) <u>10ft</u> (optional)	Depth sampled (if vertical or oblique tow) <u>13</u> ft/m circle one		
Site 2: Latitude (optional):	Longitude (optional):	<input type="checkbox"/> Preservative Added	
Secchi depth (m) _____ (optional)	Depth sampled (if vertical or oblique tow) _____ ft/m circle one		
Site 3: Latitude (optional):	Longitude (optional):	<input type="checkbox"/> Preservative Added	
Secchi depth (m) _____ (optional)	Depth sampled (if vertical or oblique tow) _____ ft/m circle one		
<input type="checkbox"/> Have you consolidated all of your samples into one composite bottle?			
<input type="checkbox"/> Have you sent your samples to the DNR Plymouth Service Center?			
During this monitoring trip, did you find what you suspect are Spiny or Fishhook Waterfleas in this waterbody? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Voucher Sample			
If you found Spiny or Fishhook Water fleas, did you collect a voucher specimen and bring it to your local DNR office? If so, which office?			
<input type="checkbox"/> Rhinelander	<input type="checkbox"/> Spooner	<input type="checkbox"/> Green Bay	<input type="checkbox"/> Oshkosh <input type="checkbox"/> Did not take sample to a DNR office
<input type="checkbox"/> Fitchburg	<input type="checkbox"/> Waukesha	<input type="checkbox"/> Eau Claire	<input type="checkbox"/> Superior <input type="checkbox"/> Other Office: _____

If you find Spiny or Fishhook Water Fleas

Please bring a copy of this form, along with a voucher specimen and if possible, a map showing where you found the suspect waterfleas to your regional Citizen Lake Monitoring Coordinator at the DNR. All initial discoveries should be placed in rubbing alcohol until verification by an expert is obtained.

If you don't Find Spiny or Fishhook Water Fleas

If you submit your data online, that is all you need to do. Otherwise, please mail a copy to your regional DNR Citizen Lake Monitoring coordinator. <http://dnr.wi.gov/lakes/contacts>

For DNR staff to fill out	
Volume of sample that was analyzed (ml)	Date analyzed
Name of plankton sample analyst:	
Name of person or museum who identified the voucher specimen	
Was the specimen confirmed as...?	
Spiny Waterflea? <input type="checkbox"/> Yes <input type="checkbox"/> No	Fishhook Waterflea? <input type="checkbox"/> Yes <input type="checkbox"/> No
Have you entered the results of the voucher in SWIMS? <input type="checkbox"/> Yes <input type="checkbox"/> No	
DNR staff: Please enter voucher information for new AIS findings into SWIMS under the Incident Report Project for your county (Choose Incident Report Form in SWIMS). Enter date of sampling for "Start Date", Person who identified specimen as "Data Collector", and Monitoring location as "Station".	

Mussel Veliger Tow Monitoring Report

Form 3200-135 (R 02/10)

The purpose of this form is to track the presence/absence of zebra or quagga mussel larvae (veligers) collected using a plankton net during AIS surveillance monitoring.

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. Personally identifiable information collected on this form will be incorporated into the DNR aquatic invasive species database. It is not intended to be used for any other purposes, but may be made available to requesters under Wisconsin's Open Records laws, ss. 19.32 - 19.39, Wis. Stats.

Primary Data Collector			
Name <i>Amy Kretlow</i>	Phone Number <i>920-893-8552</i>	Email <i>am.kretlow@wis.gov</i>	
Monitoring Location			
Waterbody Name <i>Twin Lake</i>	WBIC <i>182300</i>	County <i>Waushara</i>	Township Name <i>Springwater</i>
Date and Time of Monitoring			
Start Date <i>8/17/17</i>	Start Time	End Date (= Start Date) <i>8/17/17</i>	End Time
Monitoring Results			
Guidelines for how many tows to collect: If Secchi depth is >4 m (13 feet) take two 2m deep tows; if Secchi depth is between 2-4 m (6.5-13 feet) take one 2m deep tow; if Secchi depth is <2 m (<6.5 feet) take one 1m tow.			
Diameter of zooplankton net opening 30cm <u>50cm</u> other _____ (circle one)			
Site 1: Latitude (optional): <i>44.28777</i>	Longitude (optional): <i>89.18124</i>	<input type="checkbox"/> Preservative Added	
Secchi depth (m) <i>10ft</i>	Number of net tows <i>3</i>	Depth of tows (m) <i>2m</i>	
Site 2: Latitude (optional): _____	Longitude (optional): _____	<input type="checkbox"/> Preservative Added	
Secchi depth (m) _____	Number of net tows _____	Depth of tows (m) _____	
Site 3: Latitude (optional): _____	Longitude (optional): _____	<input type="checkbox"/> Preservative Added	
Secchi depth (m) _____	Number of net tows _____	Depth of tows (m) _____	
<input type="checkbox"/> Have you consolidated all of your samples into one composite bottle?			
<input type="checkbox"/> Have you sent your samples to the DNR Plymouth Service Center?			
COMMENTS/OBSERVATIONS:			
For DNR staff to fill out			
Volume of sample that was analyzed (ml)		Date analyzed	
Name of plankton sample analyst			
Name of person or museum who identified the voucher specimen:			
Did the samples contain zebra mussel veligers? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Have you entered the results of the samples in SWIMS? <input type="checkbox"/> Yes <input type="checkbox"/> No			
<i>DNR staff: Please enter voucher information for new AIS findings into SWIMS under the Incident Report Project for your county (Choose Incident Report Form in SWIMS). Enter date of sampling for "Start Date", Person who identified specimen as "Data Collector", and Monitoring location as "Station".</i>			