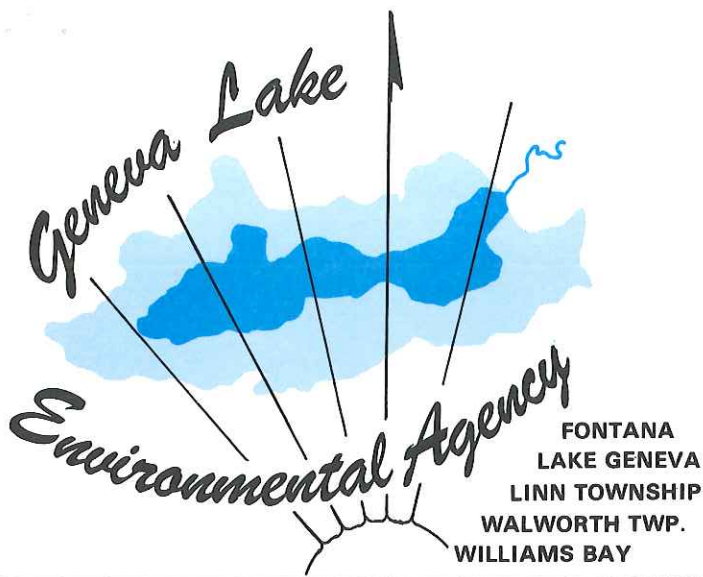
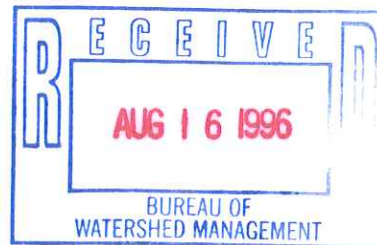


HIGHWAY 67
P.O. BOX 200
FONTANA, WI 53125
PHONE 1-414-275-6310
FAX 1-414-275-1134



August 8, 1996

Ron Martin
Department of Natural Resources
P.O. Box 7921
Madison, WI 53707



Ron:

Here are the artificial substrate sampler monitoring sheets for the two checks I have done this year (July 9 & Aug. 7). As you can see, as of July 9, none of the five samplers had visible zebra mussels. But the Aug. 7 check revealed a much different result. Two of the five substrates had zebra mussels colonized on them. They were all small mussels, from 1mm or less, to 4mm or so.

Other data that I have that may interest you is that veliger sampling done on June 19 came back as the following: West Basin: negative; Narrows: zero positive; East Basin: 11 per cubic meter. Another sample was taken July 10, but the results are not yet in.

I have also enclosed a map of Geneva Lake on which I have indicated substrate locations and where the zebra mussels have been discovered this summer, along with the veliger sampling locations.

I believe that these discoveries are of great interest to professionals researching zebra mussels. From my summer research, Geneva Lake seems to have an established population of zebra mussels, with both adults, and veligers. The interesting and unique thing I find is that this only seems to be in the eastern basin (east of narrows). I believe that Geneva Lake's zebra mussel population provides an interesting opportunity to study colonization, and colonization impacts on an inland lake. I only wish that I had more time than just this summer internship to do so. I hope you would consider Geneva Lake as a possible area for further zebra mussel research.

Finally, would it be possible to get five more of the substrate samplers? As the map indicates, there is a large gap around the narrows where we were unable to place samplers. Locations in this area would give some valuable information about the extent of the zebra mussel infestation westward. Please call and let me know if this is possible. Thank You!


PATRICK SCHMALZ

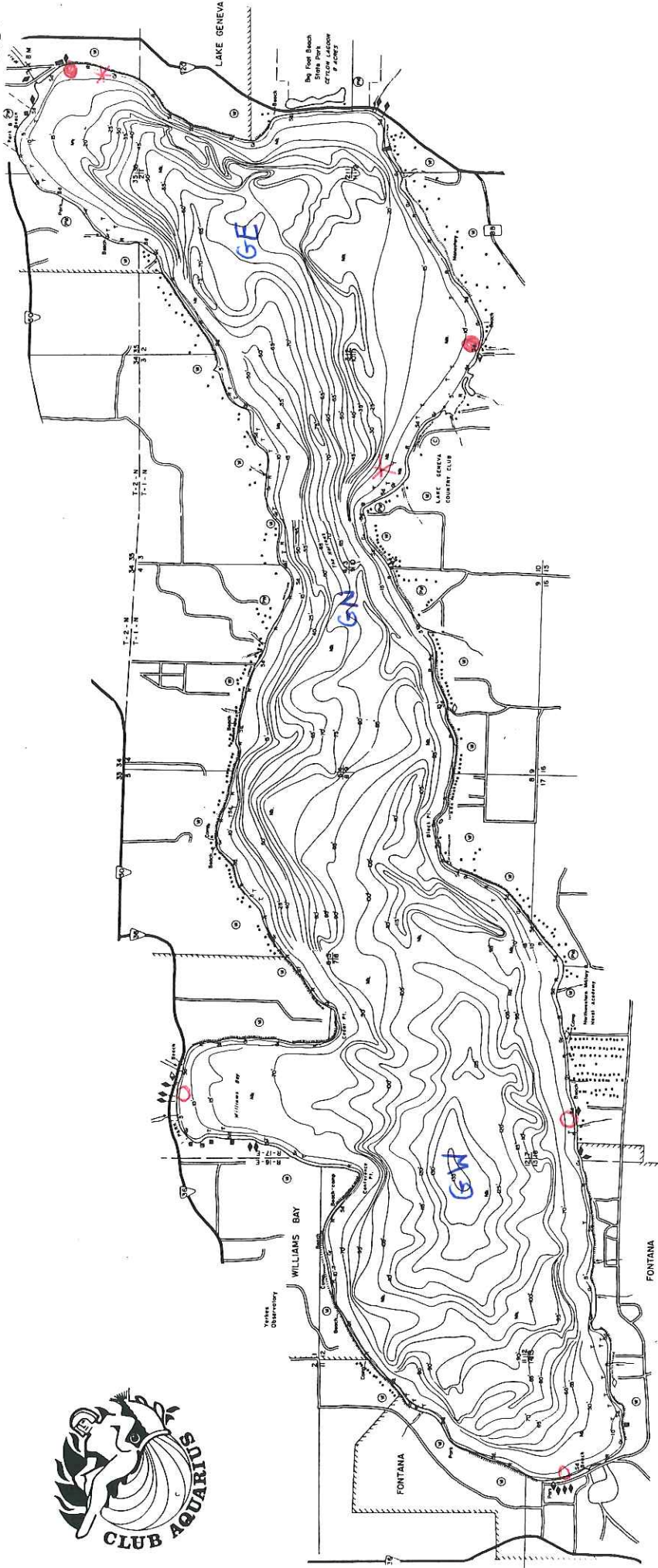
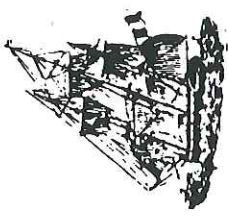
LAKE Geneva
 SECTION See below
 RANGE 16, 17 E
 TOWN Linn
 TOWNSHIP 1, 2 N
 Sections: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 To order specify Delavan & Lake Geneva
 11, 12, 13, 14, 17, 18, 35, 36

WALWORTH COUNTY
 Map No. 1441

CLARKSON MAP CO.
 Kaukauna, WI 54130
 1-414-766-3000

This is the only hydrographic map of this lake available,
 produced from original charts of Dept. of Natural Re-
 sources — Madison
 A U.S. Geological Survey Map is available from us show-
 ing the area (approx. 12 square miles) adjacent to this lake.

Delavan & Lake Geneva
 Quadrangle



SPECIES OF FISH	
Muskie	X
N. Pike	X
Walleye	X
S. White Bass	X
Pontifish	X
Trout	X

- TOPOGRAPHIC SYMBOLS**
- Brush
 - Partially wooded
 - Wooded
 - Cleared
 - Pastured
 - Agricultural
 - B.M. Bench Mark
 - Dwelling
 - Resort
 - Steep slope
 - Indefinite shoreline
 - Marsh
 - Spring
 - Intermittent stream
 - Permanent inlet
 - Permanent outlet
 - Dam
 - Access
 - Access with Parking
 - Boat Livery
- LAKE BOTTOM SYMBOLS**
- P. Peat
 - Mk. Muck
 - C. Clay
 - M. Marl
 - Sd. Sand
 - St. Silt
 - G. Gravel
 - R. Rubble
 - Br. Bedrock
 - T. Submergent vegetation
 - I. Emergent vegetation
 - Flooding vegetation

AREA 5252.4 ACRES
 UNDER 3 FT. 1 %
 OVER 20 FT. 77 %
 VOLUME 320,984.0 ACRE FT.
 TOTAL ALK. 171 P.P.M.
 SHORELINE 20.2 MILES
 MAX. DEPTH 135 FEET



Key

- Artificial Substrate Located
- Artificial Substrate where Zebra-mussels found 8-7-96

* Other 1996 Zebra mussels found
 GW = Geneva West Basin sample site GN = Geneva Narrows sample site
 GE = Geneva East Basin Sample site



Phase I: Zebra Mussel Monitoring Report

Personal Data

Name: Patrick Schmalz - Geneva Lake Envir. Agcy.
 Address: P.O. Box 200 Hwy 67
 City: Fontana State: WI Zip: 53125
 Phone Number: (414) 275-6310

Monitoring Location

Date: 8-13-96 Time: 1300
 County: Walworth City: Lake Geneva
 Body of Water: Geneva Lake
 Nearest Landmark (town, highway, boat ramp, bridge): Stone Manor (1/2 mile west of Lake Geneva city boat ramp)
 Distance from nearest landmark: 1/2 mile
 Habitat Type: River/Stream Natural Lake/Pond Marsh/Swamp
 Canal/Ditch Man Made Reservoir Estuary/Bay

Describe exactly how the zebra mussels were found (what were they attached to or other comments):
- Found attached to Milfoil while taking Eckman ^{grab} samples.
(2-4 m depth)
- Found 1 attached to Chara sp.
* Larger mussels seem to be attached to stem; smaller on leaflets

Monitoring Results

Total number of mussels found: 59
 Size of the largest mussel (in mm): 19 mm
 Size of the smallest mussel (in mm): 1 mm

If greater than 20 mussels are found measure 20 mussels chosen randomly from the sample. If less than 20 mussels are found measure all mussels found. Report results in table below.

Number	Length (mm)	Number	Length (mm)
1	5mm	11	2mm
2	2mm	12	1mm
3	13mm	13	2mm
4	3mm	14	1.5mm
5	4mm	15	1mm
6	3mm	16	1mm
7	3mm	17	2mm
8	1.5mm	18	1mm
9	2mm	19	2mm
10	2mm	20	1mm

NOTE: All samples should be placed in isopropyl or rubbing alcohol until verification is obtained.

Phase I: Zebra Mussel Monitoring Report

Personal Data

Name: Patrick Schmalz - Geneva Lake Envir. Agency
 Address: P.O. Box 200 Hwy 67
 City: Fountain State: WI Zip: 53125
 Phone Number: (414) 275-6310

Monitoring Location

Date: 8-13-96 Time: 12:00
 County: Walworth City: Lake Geneva
 Body of Water: Geneva Lake
 Nearest Landmark (town, highway, boat ramp, bridge): Gelderman's - N. shore -
W. West of city of L.G. Ramp
 Distance from nearest landmark: 1 to 1.5 miles
 Habitat Type: River/Stream Natural Lake/Pond Marsh/Swamp
 Canal/Ditch Man Made Reservoir Estuary/Bay
 Describe exactly how the zebra mussels were found (what were they attached to or other comments):
- caught in Eckman grab sample - attached to milfoil
- attached to Ruppia maritima

Monitoring Results

Total number of mussels found: 9
 Size of the largest mussel (in mm): 4 mm
 Size of the smallest mussel (in mm): 1 mm

If greater than 20 mussels are found measure 20 mussels chosen randomly from the sample. If less than 20 mussels are found measure all mussels found. Report results in table below.

Number	Length (mm)	Number	Length (mm)
1	1mm	11	
2	1mm	12	
3	4mm	13	
4	3mm	14	
5	2mm	15	
6	2mm	16	
7	3mm	17	
8	2mm	18	
9	1mm	19	
10		20	

NOTE: All samples should be placed in isopropyl or rubbing alcohol until verification is obtained.

Phase I: Zebra Mussel Monitoring Report

Personal Data

Name: Patrick Schmalz - Geneva Lake Envir. Agency
 Address: Hwy 67 PO Box 200
 City: Fontana State: WI Zip: 53125
 Phone Number: (414) 275-6310

Monitoring Location

Date: 8-13-96 Time: 11:50a
 County: Walworth City: L. Geneva
 Body of Water: Geneva Lake
 Nearest Landmark (town, highway, boat ramp, bridge): - Lake Geneva Country Club - South shore

Distance from nearest landmark: _____
 Habitat Type: River/Stream _____ Natural Lake/Pond Marsh/Swamp _____
 Canal/Ditch _____ Man Made Reservoir _____ Estuary/Bay _____

Describe exactly how the zebra mussels were found (what were they attached to or other comments):
- Found in Eckman Grab Sample

Monitoring Results

Total number of mussels found: 2
 Size of the largest mussel (in mm): 4mm
 Size of the smallest mussel (in mm): 1mm

If greater than 20 mussels are found measure 20 mussels chosen randomly from the sample. If less than 20 mussels are found measure all mussels found. Report results in table below.

Number	Length (mm)	Number	Length (mm)
1	4 mm	11	
2	1 mm	12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

NOTE: All samples should be placed in isopropyl or rubbing alcohol until verification is obtained.