

Phase II: Zebra Mussel Monitoring Report - Art. Subst.

Personal Data

Name: TEO PETERS - GLEA
 Address: P.O. Box 200
 City: FONTANA State: WI Zip: 53125
 Phone Number: 414-278-6310

Monitoring Location

Date: 10/11/96 Time: 1130 CST
 County: WALWORTH City: _____
 Body of Water: GENEVA LAKE
 Nearest Landmark (town, highway, boat ramp, bridge): L. GENEVA YACHT CLUB PER

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

Water Quality Parameters

Temperature: 14°C Secchi Depth: 3.5M

Sampler Information

Total Water Depth: 2.2M Depth of Sampler: 0.5M
 Length of time sampler was in place (Days): 44 days

Monitoring Results

Number of mussels found: # on Top side of Plates: 4
 # on Bottom side of Plates: 3
 Total: 7

Size of the largest mussel (in mm): 10mm
 Size of the smallest mussel (in mm): 3mm
 Density of mussels on sampler: 15/m² = $\frac{(7)(10,000)}{(2219 + 2219)}$

Density of mussels(N/M²) = $\frac{\text{Number counted (N)} \times 10,000}{\text{Area Counted (cm}^2\text{)}}$

Area conversions for the plate sampler described in this document:

Plate Size	Area (in. ²)	Area(cm ²)
6" x 6"	36	232
8" x 8"	64	413
10" x 10"	100	645
12" x 12"	144	929
Total (4 plates):	344	2219

If greater than 20 mussels are found measure 20 mussels chosen
 If less than 20 mussels are found measure all mussels found.
 given on next page.

12" x 12" = 4 TOP, 3 BOTTOM

ALL TRAPS
 REMOVED
 10-11-96
 1 MISSING
 LAKE GENEVA

Length of Zebra Mussels

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

TE: All samples should be placed in isopropyl or rubbing alcohol until verification is gained.

12" x 12" PLATE

$$\frac{7 \times 10000}{(929) + (929)} = 38/m^2$$

Phase II: Zebra Mussel Monitoring Report

Personal Data

Name: TED PETERS
 Address: P.O. Box 200
 City: FONTANA State: WI Zip: 53125
 Phone Number: 414-275-6310

Monitoring Location

Date: 10/11/96 Time: 1200CDT
 County: WAL City: _____
 Body of Water: GENEVA LAKE
 Nearest Landmark (town, highway boat ramp, bridge): HILLSIDE RD BIAT PIER
TOWN OF LINN
 Distance from nearest landmark: _____
 Habitat Type: River/Stream _____ Natural Lake/Pond X Marsh/Swamp _____
 Canal/Ditch _____ Man Made Reservoir _____ Estuary/Bay _____

Water Quality Parameters

Temperature: 15' Secchi Depth: 3.5m

Sampler Information

Total Water Depth: 2.4m Depth of Sampler: 1.1m
 Length of time sampler was in place (Days): 44 days

Monitoring Results

Number of mussels found: # on Top side of Plates: 10 SPACER 1
 # on Bottom side of Plates: 3
 Total: 61 SAMPLE DENSITY PLATE 42
 Size of the largest mussel (in mm): 10mm
 Size of the smallest mussel (in mm): 1mm
 Density of mussels on sampler: 41/m² (18)(10,000)
4438
 Density of mussels (N/M²) = Number counted (N) X 10,000
Area Counted (cm²)

Area conversions for the plate sampler described in this document:

Plate Size	Area (in. ²)	Area (cm ²)
6" x 6"	36	232
8" x 8"	64	413
10" x 10"	100	645
12" x 12"	144	929
Total (4 plates):	344	2219

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 given on next page.

8" - 10" SPACER 1 mussel

6" x 6" = 1 TOP
 8" x 8" = 3 TOP, 2 BOTTOM
 10" x 10" = 3 TOP, 4 BOTTOM
 12" x 12" = 3 TOP, 2 BOTTOM

Length of Zebra Mussels

Number	Length (mm)	Number	Length (mm)
1	10 mm	11	3 mm
2	2 mm	12	1 mm
3	2 mm	13	2 mm
4	2 mm	14	5.5 mm
5	1.5 mm	15	2 mm
6	8 mm	16	1.5 mm
7	4.5 mm	17	2.5 mm
8	1 mm	18	3 mm
9	1 mm	19	
10	1 mm	20	

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

DENSITY / PLATE

$$12" \times 12" \text{ PLATE } \frac{1 \times 10,000}{929 + 929} = 5 / \text{mm}^2$$

$$10" \times 10" \text{ PLATE } \frac{5 \times 10,000}{645 + 645} = 39 / \text{mm}^2$$

$$8" \times 8" \text{ PLATE } \frac{7 \times 10,000}{413 + 413} = 85 / \text{mm}^2$$

$$6" \times 6" \text{ PLATE } \frac{5 \times 10,000}{232 + 232} = 108 / \text{mm}^2$$

Phase II: Zebra Mussel Monitoring Report

Personal Data

Name: TED PETERS
 Address: P.O. Box 200
 City: FONTANA State: WI Zip: 53125
 Phone Number: 414-275-6310

Monitoring Location

Date: 10/11/96 Time: 1345 CDT
 County: WALWORTH City: WILLIAMS BAY
 Body of Water: GENEVA LAKE
 Nearest Landmark (town, highway, boat ramp, bridge): MUNICIPAL PIER AT PUBLIC LAUNCH
 Distance from nearest landmark:
 Habitat Type: River/Stream Natural Lake/Pond X Marsh/Swamp
 Canal/Ditch Man Made Reservoir Estuary/Bay

Water Quality Parameters

Temperature: 15 ° Secchi Depth: 3.5 m.

Sampler Information

Total Water Depth: 2.6 m Depth of Sampler: 1 m
 Length of time sampler was in place (Days): 44 days

Monitoring Results

Number of mussels found: # on Top side of Plates: 5 SPACERS - 3
 # on Bottom side of Plates: 10
 Total: 15
 Size of the largest mussel (in mm): 12 mm
 Size of the smallest mussel (in mm): 0.3 mm
 Density of mussels on sampler: 34/m² ← $\left(\frac{15 \times 10,000}{4438} \right)$

Density of mussels (N/M²) = $\frac{\text{Number counted (N)} \times 10,000}{\text{Area Counted (cm}^2\text{)}}$

Area conversions for the plate sampler described in this document:

Plate Size	Area (in. ²)	Area (cm ²)
6" x 6"	36	232
8" x 8"	64	413
10" x 10"	100	645
12" x 12"	144	929
Total (4 plates):	344	2219

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 given on next page.

- 6" x 6" = 2 Bottom, 0 Top
- 8" x 8" = 2 Bottom, 2 Top
- 10" x 10" = 6 Bottom, 0 Top
- 12" x 12" = 0 Bottom, 3 Top
- 6"-8" SPACER = 2 mussels
- 10"-12" SPACER = 1 mussel

Length of Zebra Mussels

Number	Length (mm)	Number	Length (mm)
1	12	11	1.3
2	3	12	1.5
3	3	13	2.3
4	2.4	14	5.0
5	6	15	1.0
6	2	16	6.1
7	2.5	17	3.7
8	1	18	4.3
9	1	19	
10		20	

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

12" x 12" PLATE

$$\frac{3 \times 10,000}{929 + 929} = 16 / \text{mm}^2$$

10" x 10" PLATE

$$\frac{6 \times 10,000}{645 + 645} = 47 / \text{mm}^2$$

8" x 8" PLATE

$$\frac{4 \times 10,000}{413 + 413} = 48 / \text{mm}^2$$

6" x 6" PLATE

$$\frac{2 \times 10,000}{232 + 232} = 43 / \text{mm}^2$$

Phase II: Zebra Mussel Monitoring Report

Personal Data

Name: TED PETERS
 Address: P.O. Box 200
 City: FONTANA State: WI Zip: 53125
 Phone Number: 414-275-6310

Monitoring Location

Date: 10-11-96 Time: 14/0
 County: WALWORTH City: Village-FONTANA
 Body of Water: GENEVA LAKE
 Nearest Landmark (town, highway, boat ramp, bridge): GORDY'S MARINA:
NEXT TO PUBLIC RAMP - NEXT TO WINDMILL
 Distance from nearest landmark: _____
 Habitat Type: River/Stream _____ Natural Lake/Pond X Marsh/Swamp _____
 Canal/Ditch _____ Man Made Reservoir _____ Estuary/Bay _____

Water Quality Parameters

Temperature: 15°C Secchi Depth: 3.5M

Sampler Information

Total Water Depth: 2.5M Depth of Sampler: 1M
 Length of time sampler was in place (Days): 44 DAYS -

Monitoring Results

Number of mussels found: # on Top side of Plates: 2 SPACERS - 2
 # on Bottom side of Plates: 4
 Total: 6
 Size of the largest mussel (in mm): 9mm $\frac{10 \times 10,000}{443g}$
 Size of the smallest mussel (in mm): 1mm
 Density of mussels on sampler: 23/MM

$$\text{Density of mussels (N/M}^2\text{)} = \frac{\text{Number counted (N)} \times 10,000}{\text{Area Counted (cm}^2\text{)}}$$

Area conversions for the plate sampler described in this document:

Plate Size	Area (in. ²)	Area (cm ²)
6" x 6"	36	232
8" x 8"	64	413
10" x 10"	100	645
12" x 12"	144	929
Total (4 plates):	344	2219

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 given on next page.

6" x 6" = 0 TOP, 0 BOTTOM
 8" x 8" = 1 TOP, 2 BOTTOM
 10" x 10" = 1 TOP, 2 BOTTOM
 12" x 12" = 0 TOP, 2 BOTTOM

8" - 10" SPACER - 1 mussel
 10" - 12" SPACER - 1 mussel

Length of Zebra Mussels

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

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

$$12'' \times 12'' \text{ PLATE} = \frac{2 \times 10,000}{929 + 929} = 11/\text{mm}^2$$

$$10'' \times 10'' \text{ PLATE} = \frac{3 \times 10,100}{645 + 645} = 23/\text{mm}^2$$

$$8'' \times 8'' \text{ PLATE} = \frac{1 \times 15,330}{413 + 413} = 12/\text{mm}^2$$

$$6'' \times 6'' \text{ PLATE} = 0 \quad \underline{\hspace{2cm}}$$

Phase II: Zebra Mussel Monitoring Report

Personal Data

Name: TEO PETERS - GLEA
Address: P.O. Box 200
City: FONTANA State: WI Zip: 53147
Phone Number: 414-275-6310

Monitoring Location

Date: 10-11-96 Time: 1300
County: WAL City: LAKE GENEVA
Body of Water: GENEVA LAKE
Nearest Landmark (town, highway, boat ramp, bridge): MARINA BAY BOAT RENTALS NEXT TO MUNICIPAL LAUNCH
Distance from nearest landmark:
Habitat Type: River/Stream Natural Lake/Pond Marsh/Swamp
Canal/Ditch Man Made Reservoir Estuary/Bay

Water Quality Parameters

Temperature: Secchi Depth:

Sampler Information

SAMPLER GONE-MISSING

Total Water Depth: Depth of Sampler:
Length of time sampler was in place (Days):

Monitoring Results

Number of mussels found: # on Top side of Plates:
on Bottom side of Plates:
Total:

Size of the largest mussel (in mm):
Size of the smallest mussel (in mm):
Density of mussels on sampler:

Density of mussels(N/M^2)=Number counted (N) X 10,000 / Area Counted (cm^2)

Area conversions for the plate sampler described in this document:

Table with 3 columns: Plate Size, Area (in.^2), Area(cm^2). Rows include 6" x 6", 8" x 8", 10" x 10", 12" x 12", and Total (4 plates).

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 given on next page.