

EAST & WEST DEEP-WATER STATIONS, GREEN LAKE, GREEN LAKE COUNTY, WI, USA.

Sunny with a light, steady wind from NE at ca. 4 mph. Many gulls. Schools of minnows – especially visible near surface in deep water at west end – probably those previously identified as MIMIC SHINERS by Steven J. Fajfar, of DNR & UW-Madison-Sea Grant. Also, Ted Johnson reported BLUNT-NOSE minnows during recent SCUBA.

In littoral zone, some filamentous algae covering macrophytes is obviously reduced in some areas when viewed from slow moving boat. Many floating Wild Celery are on surface and clearly abundant on the bottom showing through other plants in the community over much of shallower areas. At north shore pier, Eurasian milfoil (EMF) plants now looks frail and skimpy along their long stems, filamentous algae are more limited and several visible Water stargrass plants are growing in a cluster. EMF flowers appear in shallow areas near City dam. Lake level is low now with dams allowing very small flow.

STATIONS	TIME	SECCHI (FT)	SURFACE TEMP (F)	CUSTER COLORS		LAKE OBSERVATIONS
				½ SECCHI & ½ M		
WEST	1:30	16.5 Ft	68 F	4.0	2.0	Murky & green
EAST	2:25	16.5 Ft.	66 F	4.0	2.5	Murky & green

AIR TEMP: 64 F West; 66 F East.

My perception of Green Lake today = **3.** "Swimming and aesthetic enjoyment slightly impaired"- (due to floating macrophytes which are also thickly growing with some attached filamentous algae in littoral zone).

Microscopic observations of plankton samples collected at both East & West deep-water stations via 17 ft. Wisconsin Plankton Net vertical pulls. These organisms are estimated into four categories below:

	Very Abundant	Abundant	Infrequent	Present
Blue-greens:	<i>Anabaena</i>	<i>Coelosphaerium</i>	<i>Gleocapsa</i>	<i>Aphanotheca</i>
	<i>Microcystis</i>	<i>Gleotrichia</i> =	<i>Gomphosphaeria</i>	<i>Chroococcus</i>
	<i>Nodularia</i>	(only east sample)	<i>Lyngbya</i>	
Greens:		<i>Oocystis</i>	<i>Characium?</i>	Little Green Balls
			<i>Coelastrum</i>	<i>Pediastrum</i>
			<i>Gloeocystis?</i>	<i>Scenedesmus</i>
			<i>Sphaerocystis?</i>	<i>Tetraspora</i>
Dinoflag. & Protozoa:	<i>Ceratium</i> (some broken, & gr. contents released)		small ciliates & flagellates	
	<i>Vorticella</i>			"
Diatoms	<i>Fragilaria</i>	<i>Meridium?</i>		<i>Asterionella</i>
Desmids & "Golden":	<i>Dinobryon</i>	<i>Cosmarium</i>		<i>Staurastrum</i>
Zooplankton:			Cyclopoids	Bosmina (very small)
			immature zebra mussels	<i>Nauplii</i>
			Ostracoda	Daphnidia
Metazoans & Rotifers:	<i>K. cochlearis</i> (eggs)		<i>Collotheca</i>	<i>Asplanchna</i> (2)
	<i>Polyarthra</i>			<i>K. quadrata</i>
Others:	Pieces of plants & animals!	Many fibers	MANY, active, tiny "zoomers"	
	Terrestrial seeds and leaves	Debris	filamentous algae on weeds not verified	
	Several unknowns moving about (rotifers?)		Unknown glob of algal sp. (photo) & seen before.	

Mary Jane Bumby, Volunteer Monitor, Green Lake, WI

Report # 16, September 6, 2013

HYDROLAB TO 25 M on afternoon of Sunday, 9/22/2013. TIME: 1:40 - 2:50 PM. West end readings first.

DEPTH M	TEMP		DO %		DO mg/l		SPC mS/cm		pH		PCY cells/ml		CHLa u/l		TURB/NTU	
	West	East	West	East	West	East	West	East	West	East	West	East	West	East	West	East
<u>1</u>	20.1	20.1	<u>62</u>	<u>65</u>	5.4	5.7	<u>482</u>	<u>482</u>	7.3	6.9	<u>1141</u>	<u>962</u>	334	297	<u>0.7</u>	<u>0.6</u>
<u>5</u>	19.6	19.8	<u>62</u>	<u>66</u>	5.4	5.9	<u>480</u>	<u>481</u>	7.4	7.0	<u>1209</u>	<u>1097</u>	<u>448</u>	<u>424</u>	<u>1.1</u>	<u>1.1</u>
<u>10</u>	19.5	19.7	<u>60</u>	<u>66</u>	5.3	5.8	<u>480</u>	<u>480</u>	7.5	7.0	<u>1050</u>	<u>1161</u>	410	361	<u>1.1</u>	<u>1.1</u>
<u>15</u>	8.6	10.6	<u>41</u>	<u>41</u>	4.6	4.4	<u>498</u>	<u>500</u>	6.2	6.4	<u>851</u>	<u>1000</u>	319	419	<u>0.3</u>	<u>0.7</u>
<u>20</u>	6.4	7.3	<u>43</u>	<u>41</u>	5.1	4.8	<u>494</u>	<u>498</u>	6.8	6.9	<u>453</u>	<u>614</u>	169	447	<u>0.0</u>	<u>0.3</u>
<u>25</u>	5.4	5.6	<u>46</u>	<u>45</u>	5.7	5.5	<u>495</u>	<u>496</u>	7.0	7.1	<u>494</u>	<u>929</u>	184	291	<u>0.0</u>	<u>0.0</u>