

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

Sunny, dead, flat calm and any wind light and variable. Macrophytes growing toward and on surface with filamentous algae attached. Motorboat slop. Variety of visible blue-green algae scattered down several inches below lake surface – especially in East - and along shore. Not a “bloom”.

Floating mats of macrophytes, seed filaments, insects, and green filamentous algae includes *Zygnema*, *Spirogyra*, *Mougeotia*. Attached to many submersed aquatic plants are large clumps & webs of green filamentous alga sp. *Rhizoclonium* as well as small quantities of the above green algae.

**CUSTER COLORS**

STATIONS	TIME	SECCHI (FT)	SURFACE TEMP (F)	½ SECCHI & ½ M		LAKE OBSERVATIONS
<u>WEST</u>	1:20	<b>29.0</b> Ft	77 F	4.0	1.5	Clear & green
<u>EAST</u>	2:00	<b>16.5</b> Ft.	80 F	4.0	2.0	Murky & green/brown

AIR TEMP: 84 F

My perception of Green Lake today = 3. “Swimming and aesthetic enjoyment slightly impaired.” (Floating and attached aquatic plants. Plankton – especially blue-greens – are distributed down a bit from surface of lake).

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:

	<u>Very Abundant</u>	<u>Abundant</u>	<u>Infrequent</u>	<u>Present</u>
<u>Blue-green:</u>	<i>Microcystis</i>	<i>Gleotrichia</i>	<i>Anabaena</i> <i>Aphanocapsa</i>	<i>Gomphosphaeria</i> <i>Gleocystis</i> , <i>Gleocapsa</i>
<u>Green</u>	<i>Sphaerocystis</i>	<i>Botryococcus?</i> (very green!) Little green balls <i>Oocystis</i>	<i>Pediastrum</i> <i>Spirogyra</i>	<i>Protoderma</i> <i>Quadrigula</i> <i>Radiococcus</i>
<u>Dinoflag. &amp; Protozoa:</u>	<i>Ceratium</i>		<i>Vorticella</i> <i>Stentor</i>	very small flagellates
<u>Diatoms:</u>	<i>Fragilaria</i>	<i>Meridium ?</i>		<i>Asterionella?</i>
<u>Desmids &amp; “Golden”:</u>	<i>Staurostrum =</i> (some with no contents & with attached organisms)		<i>Dinobryon</i>	<i>Closterium</i>
<u>Zooplankton:</u>	Cyclopoids (eggs) Daphnidia (Total 6 <i>Ephippia</i> at east & west) Nauplii	Immature zebra mussels		<i>Ascomorpha?</i>
<u>Metazoans &amp; Rotifers:</u>		<i>K. cochlearis</i> (eggs)	<i>Conochilus unicornis</i> <i>K. quadrata</i> (eggs)	<i>Polyarthra</i>
<u>Others:</u>	Pieces of plants & animals! Filaments and fibers		Dead Insects & Debris Clear, sharp & long.	

Mary Jane Bumby, Volunteer Monitor, Green Lake, WI

Seventh Report: July 11, 2013

**July 11: HYDROLAB READINGS COMPARING WEST AND EAST DEEP-WATER STATIONS, GREEN LAKE, WI**

DEPTH M	West	East	West	East	West	East	West	East	West	East	West	East	West	East
	TEMP C	TEMP C	DO %	DO %	DO mg/l	DO mg/l	SPC	SPC	TDS mg/l	TDS mg/l	pH	pH	Turbidity NTU	Turbidity NTU
2	24	25	81	94	6.5	7.4	486	480	31.1	30.7	8.6	8.7	2.5	1.8
5	24	24	82	108	6.7	8.6	486	474	31.1	30.5	8.6	8.7	2.7	2.6
10	15	15	63	80	6.0	7.8	490	481	31.5	30.7	8.2	8.1	1.8	1.5
15	8	9	59	102	7.0	10.6	487	484	31.3	30.8	7.8	7.7	0.9	0.5
20	6	7	63	70	7.6	8.8	488	483	31.2	31.0	7.7	7.6	0.4	0.2
25	5	6	64	71	7.7	8.2	487	484	31.2	31.0	7.7	7.6	0.3	0.0

Both batteries checked after these readings: One replaced July 16 and one had been replaced 2012 by HACH. Omitted Pycocyanine and Chlorophyll this time; will provide if requested.