

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

Sunny, hazy, partly cloudy with light SW wind ca. 4 mph. Surface has foam, molted gull feathers, floating clumps of macrophytes –sometimes looking a little like the “Sargasso Sea” - along the shore out about pier length and between neighborhood piers definitely impeding swimmers. Blue-greens near surface are *Anabaena*, *Microcystis* and *Gleotrichia*, especially the latter, showing in the East end. This variety of visible plankton, some also listed below, are scattered on and down several inches below lake surface.

Macrophytes growing thickly toward surface between and far out from piers are covered with very large quantities of attached filamentous algae. These are *Zygnema*, *Mougeotia*, *Spirogyra* & especially *Rhizoclonium*. Alga forming a fringe along rocks at lake waterline is *Cladophora*.

*Vallisneria* is appearing among other macrophytes on the bottom of the lake in the littoral zone. With boating activity, this native plant - with its small roots and long leaves and flower stalks, - is very easily pulled out, floats and becomes very messy. Their floating masses have been observed decaying on lake surface on hot, sunny days other years.

CUSTER COLORS

STATIONS	TIME	SECCHI (FT)	SURFACE TEMP (F)	½ SECCHI & ½ M		LAKE OBSERVATIONS
WEST	10:35	16.0 Ft	73 F	4.0	2.0	Murky & green
EAST	11:15	16.0 Ft.	75 F	4.0	2.0	Murky & green
AIR TEMP: 73 F west; 75 F east.						

My perception of Green Lake today = 4. “Swimming and aesthetic enjoyment slightly impaired.” (due to floating and attached aquatic plants in littoral zone and suspended blue-green algae even forming a light bloom today).

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
<b>Blue-green:</b>	<i>Anabaena</i> <i>Microcystis</i>	<i>Gleotrichia</i> <i>Coelosphaerium</i>	<i>Gloeocapsa</i> <i>Gomphosphaeria</i>	<i>Aphanotheca</i> <i>Chroococcus</i> <i>Holopedia</i>
<b>Green:</b>	<i>Sphaerocystis</i>	Little Green Balls <i>Spirogyra</i>	<i>Botryococcus</i> <i>Coelastrum</i> <i>Gloeocystis</i> <i>Oocystis</i>	<i>Mougeotia</i> <i>Pediastrum</i> <i>Tetraspora</i> <b>Unknown*</b>
<b>Dinoflag. &amp; Protozoa:</b>	<i>Ceratium</i> <i>Vorticella</i>		small ciliates & flagellates	“ice-cream cone”
<b>Diatoms:</b>	<i>Fragilaria</i>		<i>Meridium?</i>	
Desmids & “Golden”:	<i>Staurastrum</i> (Above: many Stau. empty or “dehisced” & covered with epiphytes)		<i>Dinobryon</i>	<i>Cosmarium</i> Unknown Strands
<b>Zooplankton:</b>	Cyclopoids Daphnidia (several colored reddish with green guts) Nauplii	immature zebra mussels	<i>Leptodora</i>	
<b>Metazoans &amp; Rotifers:</b>		<i>Conochilus unicornis</i>	<i>K. cochlearis</i> <i>Polyarthra</i>	<i>Ascomorpha</i> <i>Brochionus</i> <i>K. quadrata</i>
<b>Others:</b>	Pieces of plants & animals! , Insects Filaments of terrestrial seeds Conjugation in green algal filaments	Debris Clear, sharp and long	Tiny, Flat, Round, Fast, Colorless Empty cells in algal filaments	

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Ninth Report: July 31, 2013

\* Unknown, 10-15 micrometer, filamentous, unbranched.