

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

Sunny and calm with very light variable winds. 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 and a faint scum *Anabaena*. Otherwise the 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 leaves are nearing surface but so far no signs of flowers on their spiral “stalks” or the floating “boats” carrying pollen formed underwater among the roots of the native plant known as Wild Celery.

IMPORTANT GLSD & GLA: LAKE RESIDENCES ARE USING A SHARP TOOL TO CUT MACROPHYTES NEAR BOTTOM AS VERY UNHAPPY WITH THEIR QUANTITY AND THE EFFORT OF THE HARVESTER. UNKNOWN IF THE CUT WEEDS ARE REMOVED FROM THE LAKE. ALSO SEVERAL ARE EXPLORING USE OF CHEMICALS TO ADD NEAR PIERS.

STATIONS	TIME	SECCHI (FT)	SURFACE TEMP (F)	CUSTER COLORS		LAKE OBSERVATIONS
				½ SECCHI & ½ M		
WEST	1:20	16.0 Ft	73 F	3.0	1.5	Murky & green
EAST	1:52	16.0 Ft.	74 F	4.0	1.5	Murky & green

AIR TEMP: 73 F west; 76 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 as calm.

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>
Blue-green:	<i>Anabaena</i> <i>Microcystis</i>	<i>Gleotrichia</i> <i>Coelosphaerium</i> <i>Lyngbya</i>	<i>Gloeocapsa</i> <i>Gomphosphaeria</i> <i>Oscillatoria</i>	<i>Aphanotheca</i> <i>Chrococccus</i> <i>Holopedia</i>
Green:	<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>
Dinoflag. & Protozoa:	<i>Ceratium</i> <i>Vorticella</i>		small ciliates & flagellates ice-cream cone	“
Diatoms	<i>Fragilaria</i>	<i>Meridium?</i>		
Desmids & “Golden”:	Staurastrum, <i>Dinobryon</i> (Above: many Stau. empty (“dehisced”) & covered with epiphytes)		<i>Cosmarium</i>	Unknown Strands
Zooplankton:	Cyclopoids Daphnidia Nauplii	immature zebra mussels	<i>Leptodora</i>	
Metazoans & Rotifers:	<i>Conochilus unicornis</i>	<i>K. cochlearis</i>	<i>Collotheca</i> <i>Polyarthra</i> <i>K. quadrata</i>	<i>Ascomorpha</i> <i>Brochionus</i>
Others:	Pieces of plants & animals!, Insects	Debris	Tiny, Flat, Round, Fast, Colorless	
	Filaments of terrestrial seeds Conjugation in green algal filaments	Clear, sharp and long Empty cells in algal filaments	PHOTO: very sharp, black object (++)	

Mary Jane Bumby, Volunteer Monitor, Green Lake, WI

ELEVENTH Report: August 8, 2013

An often seen algal specimen may be clumps of mature *Anabaena* spores. (I have Photo and would like help)

Source: Lund, J.W.G & H., 1995, Freshwater Algae. UK . Color photo p. 213