

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

Sunny with clouds and calm with very light variable wind. Activity of boats of all varieties and motorboat slop was especially bad! Macrophytes growing thickly toward and floating on surface with attached filamentous algae (*Zygnema*, *Mougeotia*, *Spirogyra*). Many more gulls appearing, several hatches of insects, grasshoppers, fireflies and damsel- and dragonflies. Very few butterflies noted.

Variety of visible blue-green algae, etc. scattered down several inches below lake surface – especially in East. Not a “bloom”.

Yesterday - due to wind and waves - the lake was very dirty - apparently with suspended sediments - and many aquatic plants floating and attached near pier impeded swimming enjoyment.

CUSTER COLORS

STATIONS	TIME	SECCHI (FT)	SURFACE TEMP (F)	½ SECCHI & ½ M		LAKE OBSERVATIONS
WEST	1:10	15.5 Ft	82 F	4.0	2.0	Murky & green/brown
EAST	2:00	16.0 Ft.	84 F	4.0	2.0	Murky & green/brown
AIR TEMP: 92 F west; 93 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).

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>Lyngbya</i>
<b>Green:</b>	<i>Sphaerocystis</i>	Little Green Balls <i>Spirogyra</i>	<i>Coelastrum</i> <i>Gloeocystis</i> <i>Tetraspora</i>	Unknown * <i>Mougeotia</i>
<b>Dinoflag. &amp; Protozoa:</b>	<i>Ceratium</i> (MOST ABUND.) <i>Vorticella</i>			small flagellates
<b>Diatoms:</b>	<i>Fragilaria</i>			Stephanodiscus
Desmids & “Golden”:	<i>Staurastrum</i> (#2 MOST ABUND.)		Desmidium Dinobryon	Unknown Strands
<b>Zooplankton:</b>	Cyclopoids Daphnidia (no ephippia) 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 Dense, dark clusters of sharp, short “needles”! (photo shows cells) Filaments of terrestrial seeds	Debris		Tiny, Flat, Round, Fast, Colorless Empty filaments of cells

Mary Jane Bumby, Volunteer Monitor, Green Lake, WI

Eighth Report: July 20, 2013

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