

TABLE 1

Phytoplankton Results for Lake Bellaire
(June 29, 1983)

Bacillariophyceae (diatoms)

<u>Achnanthes lanceolata</u>	
<u>Achnanthes minutissima</u>	
<u>Amphora ovalis</u>	
<u>Asterionella gracillima</u>	
<u>Cyclotella Meneghiniana</u>	1215*
<u>Cyclotella striata</u>	
<u>Cymbella sp.</u>	
<u>Diatoma elongatum</u>	
<u>Fragilaria brevistriata</u>	
<u>Fragilaria crotonensis</u>	215
<u>Gomphonema olivaceum</u>	
<u>Melosira islandica</u>	
<u>Navicula radiosa</u>	
<u>Navicula spp.</u>	
<u>Nitzschia filiformis</u>	
<u>Nitzschia palea</u>	
<u>Nitzschia paradoxa</u>	
<u>Synedra ulna</u>	

Chlorophyceae (green)

<u>Scenedesmus quadricauda</u>	
<u>Staurostrum sp.</u>	

Chrysophyceae (golden brown)

<u>Dinobryon sp.</u>	193
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Cyanophyceae (bluegreens)

<u>Oscillatoria sp.</u>	
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Dinophyceae (armored dinoflagellates)

<u>Ceratium hirundinella</u>	15
<u>Peridinium sp.</u>	

*Number of cells per ml.

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The phytoplankton community is dominated by diatoms, of which Cyclotella Meneghinia is by far the most prevalent in cell number, and in biomass makes up about 55% of the total phytoplankton. Fragilaria crotonesis is also very common and in terms of biomass makes up about 35% of the total. Taste and odor causing algae such as Dinobryon, Ceratium and Peridinium are surprisingly common and contribute about 10% of biomass. The remaining species are uncommon and they in total make up the remaining phytoplankton component.

METHODS

The sample was concentrated about 67 times (360 ml → 5.4 ml). Permanent diatom slides were made, while the remaining aliquot was examined under 400x utilizing the nanoplankton cell. The diatom slides were first viewed under oil (1000x) for species identification and then the remaining slides were scanned under oil (500x) for the qualitative analysis.