

MARCH SAMPLING REPORT

THREE LAKES LAKE BELLAIRE PROJECT

Sampling date: March 12, 1983

Personnel: W. G. Weiss, Jr., R. Logee

GENERAL

It had been planned to sample Lake Bellaire under winter ice cover late in the season to determine what levels of dissolved oxygen might be found at depth. Due to the extremely warm winter parts of the lake near Station B-2 never formed a suitable ice layer; and the ice was not thick enough to safely support a snowmobile and sampling gear as expected. Therefore, a sampling trip was made as soon as the ice broke up.

Part of the ice was removed by northwest winds on March 9, 1983, but still covered Stations B-3 and B-4. The sampling was timed for March 12, 1983 when surface ice chunks were still floating in the lake although most had clustered on shore or at the mouth of Grass River.

Two days of moderate winds preceeded the sampling date. That day was clear and sunny with a slight breeze. Temperature was in the low 40's.

DATA 3-12-83

Station B-2

Secchi Disk Transparency - 22 ft.

Depth (ft)	0	10	20	30	40	50	60	70	80	90
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Temperature (°F)	34	34	34	33	33	33	33	33	33	33

Station B-3

Secchi Disk Transparency 21 ft.

Depth (ft)	0	10	20	30	40	50
Temperature (°F)	36	34	34	33	33	33

Station B-4

Secchi Disk Transparency 21 ft.

Depth (ft)	0	10	20	30	40	50	60
Temperature (°F)	34	34	34	34	33	33	33

Dissolved oxygen concentrations

		mg/l	% saturation
Station B-2	Surface	13.8	100
	Bottom	13.3	95
B-3	Surface	11.7	87
	Bottom	11.7	83
B-4	Surface	12.4	90
	Bottom	12.5	89

CONCLUSIONS

The temperature data indicated that the water column was well mixed. The dissolved oxygen data indicated that any winter stratification of oxygen had been destroyed prior to sampling. The values were only slightly higher at the surface and all were near saturation.

Submitted by:

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