

Crater Lake Limnology Update

Sample analyses of 1980 phytoplankton samplings at Crater Lake are nearing completion at Beak Consultant laboratories in Portland, Ore. The work is part of ongoing research by Doug Larson, U.S. Army Corps of Engineers limnologist, and Stan Geiger of Beak Consultants.

In addition to vertically profiling algae sampled at the Lake station in 1978-79, the 1980 summer studies included determination of spatial differences in phytoplankton composition across the lake, carbon 14 productivity measurements for comparison with data for 10 years earlier, vertical profiles of water chemistry and chlorophyll a, and light and Secchi disc transparency measurements. Scanning electron microscopy was used to assist identification of small diatoms that are abundant in the lake at depths near 200 meters.

Larson and Geiger were joined in 1979 and 1980 by John Prisco of the University of California at Davis, a limnologist working out of UCal's division of environmental studies under the direction of Dr. Charles Goldman. His work was on phytoplankton primary production and vertical abundance of particulate nitrogen, particulate carbon, and protein.

The plan is to continue research, with emphasis on measuring lake spectral qualities and the vertical distribution of particulate matter. All three researchers have indicated great interest in helping interpreters incorporate their study results into visitor information that will make the lake "come alive" as an evolving phenomenon.