

## **Organic Geochemistry of the Glacial Lake Varves of New England**

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### **Abstract**

Proposed is an exploratory study into the soluble lipid components of varved sediments from New England glacial lakes. Varves from these relict lakes have been an important component for the reconstruction of the deglaciation of the Northeast since the 1920s, when Ernst Antevs first tracked the recession of the Laurentide Ice Sheet from New England (Antevs, 1922; 1928). Approximately six thousand varves have been counted in the Connecticut River Valley, covering a period about 12 to 18 thousand years ago (Ridge, 2004). Though these sediments have been used extensively for chronological information in the study of the last deglaciation, little is known about the lakes themselves. I propose to characterize the soluble lipid fraction of these unique sediments. Pilot samples from this study will be used as a proof of concept for subsequent projects to increase our understanding of the biogeochemistry of newly deglaciated lakes, the chronology of deglaciation, and the paleoclimate of the late Pleistocene.