

Biography Dr. Joshua Kurek is a Postdoctoral Fellow in the Paleoecological Environmental Assessment and Research Lab (PEARL), Queen's University, Department of Biology. Much of his current research is focused on understanding how multiple environmental stressors (e.g. climate change, contaminants, predation dynamics) influence lake and river ecosystems in temperate regions of Canada.

Benefits of a long-term perspective in understanding the ecological phenomenon of “rock snot” in Eastern Canadian salmon rivers

Most environmental issues require an appreciation of scale, in terms of time, extent, and/or magnitude. Given the absence or irregularity of most environmental monitoring efforts, indirect methods such as those common to paleoenvironmental approaches are often the only means of generating critical data for ecosystem managers and policy makers. One such novel example includes the phenomenon of post-1990 blooms of the nuisance alga *Didymosphenia geminata* (didymo) in pristine river ecosystems from around the world (e.g. New Zealand, western Canada, southeastern Quebec, Patagonia). A major unresolved question is whether didymo blooms result from a recent introduction to new habitats or are blooms caused by changing environmental conditions in these river ecosystems. In eastern Canada, management authorities typically perceive didymo as a nuisance species that was recently introduced by recreational users; however, observations from early 20th century algal surveys challenge this characterization. In this presentation, I highlight the value of paleolimnological techniques in placing recent didymo blooms from Gaspésie, Québec, into historic environmental context.

Talk at 4:00 pm, Thursday January 9th Huggins Room 336

Coffee and cookies provided

All are welcome