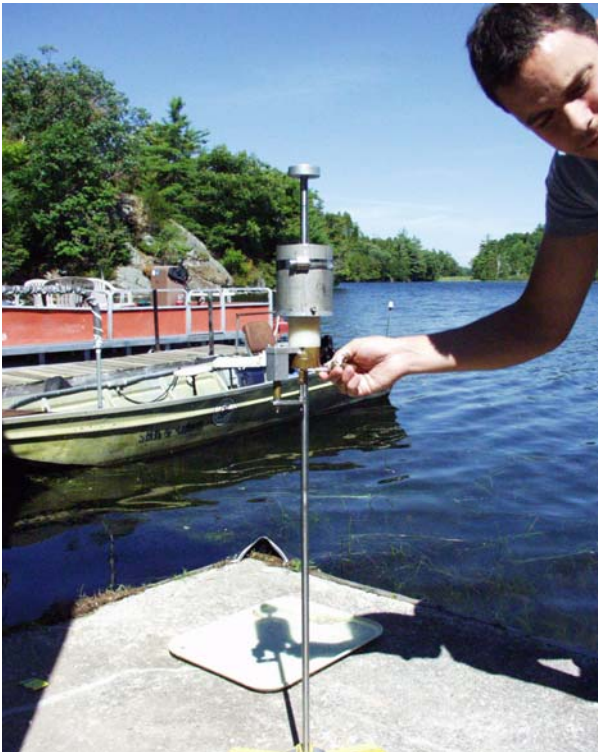


Sediment core extruding and sectioning

PEARL

Paleoecological Environmental Assessment and Research Laboratory

Department of Biology Queen's University



Set up extruder on level surface.
Make sure that the rod is straight.



Use extruder key (1.0cm) to adjust extruder to desired extruding interval. Adjust set screw to automatically drop extruder to prescribed interval.

NOTE: Periodically re-check interval with extruder key during extruding process to make sure there is no change in interval length.



Use the siphon tube to begin to remove water above the sediment. Ensure bottom of siphon does not disturb top layer of sediment.



If quick removal of water is necessary while siphoning, push the core tube firmly but slowly against the extruding rod. This will raise the sediment toward the top of the core tube.

When sediment approaches the top of the core tube, remove the last bit of water using the siphon.



Label Whirlpac bag and ensure label on bag is correct.



Push sediment up one interval at a time, and scrape sediment slice into labelled bag. The first few slices will be extremely watery.

Close top of bag, push out excess air, spin a few times around top twist tie to seal.



Place collected sample in a cooler.

If consecutive samples are taken, clean tray and spatula in between samples to prevent cross contamination.

Following collection of samples, discard rest of sediment into water, rinse out core tube, extruding tray, and spatula, and prepare for next core.

References:

Glew, J.R. 1988. A portable extruding device for close interval sectioning of unconsolidated core samples. *J. Paleolimnology* 1: 235-239.

Glew, J.R., Smol, J.P. and Last, W.M. 2001. Sediment core collection and extrusion. pp. 73-105. In: Last, W.M. and Smol, J.P. [Editors]. *Tracking Environmental Change Using Lake Sediments. Vol 1: Basin Analysis, Coring, and Chronological Techniques*. Kluwer Academic Publishers, Dordrecht.

