



LAKE WINNIPEG FOUNDATION

Behind the scenes at IISD-ELA

Photo Gallery

LWF

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The IISD Experimental Lakes Area (IISD-ELA) is located in northwest Ontario, and is one of Canada's primary sources of lake science. Since 1968, whole-ecosystem research conducted at the 58 small lakes and watersheds which make up this facility have provided us with the evidence we need to take action for the health of our shared waters. LWF toured IISD-ELA on Sept. 13.



Autumn at IISD-ELA.



In 1980 a huge forest fire ripped through IISD-ELA; save for the camp buildings themselves, the entire area was burnt down to bedrock. The trees on

the site today are all new growth.



In the zoobenthos lab, Joey, a University of Manitoba Masters student, picks through sediment samples. These are Mysis, a species of tiny freshwater shrimp which migrate up the water column at night and are an important part of a lake trout's diet.



The yellow structure is a prototype enclosure that isolates water around the shoreline. It will be used next year for new research into the ecological consequence of diluted bitumen and the effectiveness of various remediation techniques.



Clean, dry volumetric flasks wait to be put into use. "Labelling and dishwashing is half of chemistry," jokes IISD-ELA chemist Sonya Haven.



IISD-ELA's on-site chemistry lab processes 20 to 30 water samples every week. Ten different analyses are conducted in house; six more are done at the University of Alberta. This auto-analyzer runs collected samples to measure phosphorus levels.



Syringes, part of a homemade gas chromatograph set-up that measures carbon dioxide levels



Molly the dog. IISD-ELA scientists often stay in camp for days, if not weeks, and many bring their families and pets along with them for the duration of their visit.



The final path to get to Lake 227.



Lake 227's experiment on eutrophication has been running since 1969. Every Monday, researchers add phosphoric acid to its waters to study the effects on algae.



A cattail bio-platform floats along the far shoreline of Lake 227, part of a project studying the effectiveness of portable, human-constructed wetlands on nutrient uptake.



Rubber gloves dry on a rack in the fish lab.



As much as possible, non-lethal fish sampling is conducted at IISD-ELA. Biologists anesthetize fish then surgically insert tracking devices which range in size, from as big as an AAA battery (shown here) to as small as a tic tac.



LWF staffers Chelsea and Kirsten lay out a seine net in Lake 240, helped by Justin, an undergrad working at IISD-ELA as part of a co-op program. These nets are used to catch smaller fish.



Back on shore, LWF's Alexis and Johanna begin pulling the large circular net together; any school of fish passing by will get caught in the net's box-like interior chamber.



Success! Our efforts yield dozens of young perch - some likely hatched in May, others maybe a year old. (Our catch is examined, then released.)



IISD-ELA is as beautiful as it is important. This island in Lake 240 is one of the most-photographed landmarks at the facility.

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