Fall 2012

Sources of Knowledge Newsletter

Sharing Perspectives on the Natural and Cultural Heritage of the Bruce Peninsula

Parks Canada Research and Monitoring Summer 2012

We thought you may be interested in the type of research and monitoring that was completed this past season in Bruce Peninsula National Park and Fathom Five National Marine Park. Projects included:

- Black bear population: DNA hair trap survey, cooperative with OMNR.
- Forest bird diversity: automated recorders.
- Red-backed salamander: cover board survey.
- Forest health.
- Marsh bird diversity
- Frogs and toads call survey.
- Willow Creek and Crane River: water quality, temperature, and hydrology.
- Willow Creek: Brook trout presence.
- Cyprus and Emmet Lakes: water quality.
- Cyprus Lake: hydrology.
- Prairie white fringed orchid: population inventory.
- Massasauga rattlesnake: incidental sightings/roadkills.
- Species at Risk assessments: lakeside daisy, dwarf lake iris, hill's thistle, tuberous Indian plantain, and hill's pondweed.
- Cyprus Lake road ecopassage: assessment.
- Coastal wetlands: fish community, aquatic plant, and water quality assessment.
- Nearshore shore fish survey: Hay Bay, cooperative with OMNR.
- Colonial waterbird: nest count.
- Invasive species removal: phragmites, spotted knapweed, garlic mustard.
- Seed collection for restoration projects.
- Restoration: tree planting, access areas

Parks Canada ecologists Scott Parker and Cavan Harpur setting a fyke net at Russel Island as part of coastal fish survey project.

For more information on any of these projects, contact either: Michael Patrikeev (ext. 321); Scott Parker (ext. 314); or Cavan Harpur (ext. 312) at 519-596-2444.

A black bear at one of the bait stations designed to catch hair in barbwire for DNA population analysis.

Barcode of Life Project

Every summer the BIObus, research vehicle of the Biodiversity Institute of Ontario (BIO, University of Guelph), ventures to various locations across North America in search of insects for the Institute's Barcode of Life Project. The focus of this years' expedition was National Parks of central/western Canada. In partnership with Parks Canada and 14 participating National Parks, including Bruce Peninsula National Park, the BIObus executed the Canadian National Parks Malaise Program.

A malaise trap, targeted at capturing strong flying insects such as wasps and flies, was deployed and serviced by park staff over the course of the summer. The trap was near the park's visitor centre. The insect catches from this and all the malaise traps across central/western Canada are destined for the lab facilities at BIO. These specimens will undergo genetic analysis for the purpose of species identification in contribution towards the Institute's reference library of genetic barcodes, which are unique genetic signatures that help tell species apart. Analysis results will also provide Bruce Peninsula with a preliminary insect diversity inventory.

The BIObus visits Bruce Peninsula National Park and deploys a malaise trap. From left to right, Crystal Sobel (Collections Technician, BIO), Katrina Keeshig (Parks Canada, Resource Conservation Technician), Alina Macmillan (Parks Canada, park volunteer).

For more information on the BIObus and DNA barcoding check out these websites:

- The BIObus Blog: www.BIObus.ca
- International Barcode of Life: www.iBOL.org
- Biodiversity Institute of Ontario: www.biodiversity.ca

Plans for our 2013 Forum are well under way. The theme will be our changing lake and details will be sent out shortly. Meantime keep the dates May 4th and 5th free!