**Biologist**

IISD-ELA – Winnipeg, Manitoba

Apply for this Job

Department: IISD-ELA

Employment Type: Full time

Minimum Experience: Mid-level

Compensation: $45,000 to $60,000 /annually

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**Biologist - Food Web**

**General:**

The IISD-Experimental Lakes Area (IISD-ELA) was formed to create new ways of bridging applied science with on-the-ground sustainability policy solutions. The IISD-ELA maintains its head office in Winnipeg, Manitoba and its research facility (ELA) in the boreal ecozone of northwestern Ontario. The Experimental Lakes Area (ELA) is a globally unique facility where whole-ecosystem experiments and long-term monitoring are conducted to understand potential impacts and solutions for a wide range of environmental stressors to the world’s freshwater resources. We encourage candidates to visit our website ([https://www.iisd.org/ela/](https://www.iisd.org/ela/)) to find out more about our organization.

Scientific operations at the IISD-ELA are coordinated by Biologists, who are responsible for collecting and processing samples, analyzing data, and assisting with the preparation and publication of results. They may also assist with the management of external research funds. Typically, Biologists hold a M.Sc. degree or have a significant amount of relevant work experience. We seek a motivated and enthusiastic person with documented experience in field limnology to support research and monitoring activities related to the algae and invertebrate ecology programs at the IISD-ELA.

**Specific:**

Under the direction of two Research Scientists, the incumbent will organize and conduct field, laboratory, and analytical activities in support of the algae and invertebrate ecology programs at the IISD-ELA. The Biologist will assist graduate students, supervise undergraduate research assistants, and work with other technical staff at the IISD-ELA to ensure research and monitoring activities are completed. He/she will assist with data analysis and the preparation and publication of results, and occasionally assist with educational and outreach activities.

A significant portion of the Biologist’s duties will occur at our research station, which is located in northwestern Ontario. The incumbent should be comfortable living and working in a remote research facility for up to seven months (mid-April through October); operating trucks, ATV’s, small boats, and snowmobiles; and work well in a team environment. During the remainder of the year the Biologist will primarily work from the head office in Winnipeg, making occasional trips to the research facility to assist with winter surveys or other research activities.
In particular, the Biologist will:

- Plan and carry out annual field and laboratory research programs relating to algae and invertebrate dynamics;
- Conduct routine experiments to assess primary production in both laboratory and field settings using variations in dissolved gasses (DIC, CO₂, O₂) using methods including gas chromatography, in situ sensors/sondes, and potentially radioactive tracers (C-14);
- Use the programming language R to analyze ecosystem metabolism data collected from the Algal Ecology Program at the IISD-ELA;
- Using a database platform (e.g. Microsoft Access or LIMs) develop and maintain a database for high resolution water quality data and in situ (sonde based) productivity estimates, algal taxonomy data, invertebrate samples, and other parameters;
- Manage the day to day operations of the algae and invertebrate ecology programs (e.g. hiring, training and supervising students; purchasing, servicing and maintaining research equipment; data entry and analysis;
- Operate various field vehicles (all-terrain vehicles, trucks, vans) on highways and gravel roads;
- Use a variety of watercraft, including boats with outboard motors and canoes;
- Perform a variety of laboratory tasks, including sample preparation for subsequent analyses;
- Download data from various data-logging devices;
- Analyse data for inclusion in scientific reports;
- May be required to assist other IISD-ELA researchers with tasks, including camp operations and communicating with the public and donors;
- Conduct other tasks as assigned.

Qualifications:

Essential Qualifications:

- Enthusiasm for freshwater science and contributing to the IISD-Experimental Lakes Area mandate of the sustainable use of freshwater resources in Canada and globally;
- Completion of thesis-based M.Sc. degree in freshwater ecology;
- Experience leading, planning, and coordinating a field program in aquatic biology, supervising assistants, delegating tasks, and ensuring the quality and completion of data collection requirements;
- Experience operating small motorized vessels with an outboard motor;
- Experience with the collection and/or analysis of samples for water quality, phytoplankton and invertebrates;
- Ability to work well in a team environment;
- Excellence in written and oral communication;
- Proficiency with standard computer programs for the storage and analysis of scientific data including Microsoft Excel, Word, and Access or other database software;
- Must possess valid: First Aid/CPR certificate, Pleasure Craft Operators Card, Driver’s license;
- Physical ability to carry 20 kgs of field equipment over 300-500m portage trails;
- Must be willing to work long hours in diverse weather conditions;
- Must be willing to live in shared accommodations;
Asset Qualifications:

- Experience with Gas chromatography or other analytical instruments,
- Maintaining and servicing electronics/field instruments;
- Knowledge of statistics, including the use of ‘R’ or ‘Matlab’;
- Experience with the collection and identification of aquatic invertebrates;
- Experience culturing algae or conducting primary production or nutrient limitation assays;
- Knowledge and experience with the use of stable isotopes for food web analysis;
- Other skillsets/experience that benefits the position or organization (e.g. light power tools/machinery, electronics, programming, SCUBA, snorkelling, ATV, GIS, etc.)

**Work Conditions:** The Biologist will typically spend the majority of the open-water season (mid-April to November) at the IISD-ELA research station, which is a remote field camp located 4 hrs drive east of Winnipeg. During the remainder of the year, the Biologist will work primarily from the IISD-ELA head office in Winnipeg. Room, board, and laundry facilities while at IISD-ELA research facility are provided. Shuttle vans are available to transport people to/from the camp each week (to/from Winnipeg or Kenora).

**Starting Date:** mid-April 2017 (negotiable)

**Application procedure:**

Please upload a CV and covering letter to the selection committee at the IISD Employment webpage ([http://www.iisd.org/about/employment](http://www.iisd.org/about/employment)). Information on the IISD-ELA can be found at: [http://www.iisd.org/ela](http://www.iisd.org/ela). If you have additional questions about the organization or position please visit contact Dr. Scott Higgins ([shiggins@iisd-ela.org](mailto:shiggins@iisd-ela.org)) or Dr. Michael Paterson ([mpaterson@iisd-ela.org](mailto:mpaterson@iisd-ela.org)).

Electronic applications are preferred; there is no need to provide hard copies

**Application deadline:** March 20th, 2017