# **Crystal Braun, B.Sc.**

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## **RELEVANT QUALIFICATIONS**

- Operated as a graduate student researcher in a science research environment.
- Planned and conducted field surveys, data collection and statistical analysis.
- Prepared reports, posters, and presentations for stakeholders, government organizations, and the public at meetings, conferences, and workshops.
- Designed research posters and maintained research website through desktop publishing. ٠
- Displayed and analyzed spatial data in ArcGIS v.9 applications. ٠
- Proficient with word-processing and spreadsheet data entry in Windows-based programs.
- Keen to take initiative both independently and in team environments. •
- High-level written and oral communication skills. •
- Valid Class 'G' Ontario Driver's License.
- Able and willing to travel. •
- Able and willing to relocate.
- Canadian Citizenship.
- Receiving Master's degree in summer 2009.

## **EDUCATION**

## M.Sc. (Natural Resources and Environmental Studies – Biology)

University of Northern British Columbia Areas of Concentration: biology, forest pathology, geographic information systems. Anticipated Completion Date: April 30, 2009.

### **B.Sc. (Biology)**

### 2000 - 2005

2006 - 2009

University of Northern British Columbia Areas of Concentration: Plant and animal biology, invertebrate zoology, ecology.

## **EMPLOYMENT HISTORY**

### **Research Assistant – Nipissing University, Biology Department**

- o Performed dendrochronology analyses and maintained database quality for predictive ecological mapping and forest resource inventory projects.
- Provided technical support for undergraduate projects in the Forest Resources Laboratory.

2009 – present

## Graduate Student/Researcher – UNBC, Biology Department

- Developed research project and deliverables with biology, geography, and forestry research associates, as well as maintained project updates between UNBC, the BC Ministry of Forests and Range, and Silverwood Consulting.
- Independently directed field work in remote areas, trained field assistants in data collection methods, and performed statistical analysis on field and aerial survey data to quantify the presence, location, and abundance of a foliar disease.
- o Summarized journal articles and prepared results in reports, presentations, and a thesis.

## **Teaching Assistant – UNBC, Geography Department**

- o Developed and delivered lessons aimed to familiarize students with ArcGIS v. 9 software and how to organize, display, and analyze spatial data.
- o Introduced raster and vector data models, concepts of map projections, scale, resolution, accuracy, precision, and principles of proper cartographic design.

## **Teaching Assistant – UNBC, Biology Department**

- o Introduced students to representatives of biological classes, emphasized ecological roles of specimens, and guided students through led wet-lab experiments.
- o Instructed writing tutorials on scientific writing for the biology stream.

## **Research Assistant – UNBC, Biology Department**

- Conducted site surveys assessing disease severity in Dothistroma-infected lodgepole pine stands.
- o Isolated using sterile procedures and categorized the variability in wood decay fungi from mountain pine beetle killed trees.
- Identified and recorded spore capture from volumetric spore trapping trials.

## **RELEVANT COURSEWORK**

- **NRES 798** Statistical Methods for Ecologists
- **NRES 799** Epidemiology of Forest Pathogens in a Spatial Context
- **Research Design and Methods NRES 705**
- Design of Sample Surveys MATH 699

## TRAINING AND SPECIALIZED COURSES

Ecological Land Classification St John Ambulance Standard First Aid with CPR Level C	In progress 2009
WHIMIS	2009
Occupational Health and Safety Act	In progress
Field Skills Workshop	2006
Biogeoclimatic Ecosystem Classification workshop	2006
Bear Aware	2006

## 2006 - 2007

2007 - 2008

## 2006 - present

2005 - 2006

## **SPECIALIZED EQUIPMENT & COMPUTER SKILLS**

- Two years of experience with the following statistical analysis and graphic software: R 2.4.1, Tinn-R, ArcGIS v.9 applications, Sigmaplot, and Excel.
- Proficient with numerous Windows based programs and presentation software (e.g., Microsoft Word, Excel, PowerPoint, Acrobat).
- Trained in safe and sterile wet-lab procedures for associated equipment (e.g. dissecting and compound microscopes, autoclaves, fumehoods, etc.).
- Experienced with field monitoring equipment and associated software:
  - HOBOware Pro for Micro Station Data Loggers.
  - o BoxCar 3.6 for HOBO Pro Series temperature and humidity monitors.
  - o Tree core increment borers and WinDendro (dendrochronology software).
  - ETrex® H for eTrex series of Garmin hand-held GPS units.

## **RESEARCH COMMUNICATIONS**

Guest presentation, Nipissing University. North Bay, ON Apr 9, 2009

Braun, C. "The role of weather and topography in the development of *Dothistroma septosporum*."

Braun, C, Lewis, K, and Woods, A. 2007. Forest Science Program - Forest Investment Account (FIA) Report and Presentation: British Columbia Ministry of Forests and Range.

Poster presentation, Northern Silviculture Committee Winter Workshop Jan 21-23, 2007 Prince George, BC

Braun, C, Lewis, K. "The role of climate and topography in the development of *Dothistroma septosporum*."

Poster presentation, 54<sup>th</sup> Western International Forest Disease Work Conference Oct 15-19, 2007 Sedona, AZ

Braun, C, Lewis, K. "The role of climate and topography in the development of *Dothistroma septosporum*."

## ACADEMIC AWARDS AND ACHIEVEMENTS

•	CSAM Graduate Teaching Award – \$500.00 value	2008
•	Graduate Teaching Assistantship – \$4000.00 value	2008
•	Graduate Student Conference Travel Award – \$1000.00 value	2007
•	Graduate Teaching Assistantship – \$4000.00 value	2007
•	Graduate Stipend Award – \$24000.00 value	2006

## EXTRACURRICULAR ACTIVITIES AND INTERESTS

• "LAPH" forest entomology discussion groups (weekly)

Sept 2007 – Apr 2008 Sept 2007 – Apr 2008

• Maintain research website: web.unbc.ca/~braunc

• Forest soils discussion groups (weekly)

• Nature photography, bird watching, wilderness hiking, squash, and non-fiction reading.

## **COMMUNITY SERVICE**

- Central Interior Science Exhibition (CISE) judge for grades 4–6 category 2003 2008
- Crisis Prevention, Intervention, and Information Centre for Northern BC phone volunteer

2006 - 2007

## LONG AND SHORT TERM GOALS

- Successfully complete graduate studies by summer of 2009.
- Long term: pursue permanent employment with a not-for-profit, government, or industrial organization. The ideal position would allow for collaboration with numerous agencies and organizations, good life–work balance, and incorporate a variety of tasks including, but not limited to, technical writing, graphics and report preparation, and field research.