

Kristina Deenik

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Summary

I am currently pursuing my masters at the University of British Columbia, Okanagan where I aim to use a machine learning algorithm to create a predictive wetland map with LiDAR and other remote sensing data for the Okanagan Basin. I previously worked as an Environmental Consultant and Field Biologist where I took part in projects related to land-use planning and development, sensitive habitat inventory mapping, instream works, rare and endangered species inventories, fish food inventories, aquatic biomonitoring and invasive species control. Following graduate studies, I will be eligible for my Registered Professional Biologist Designation and will have gained skills working with large data and using software such as R, Python, ArcGIS and QGIS.

Education

In progress – M.Sc. Earth and Environmental Sciences (expected December 2021)

University of British Columbia, Okanagan Campus (Kelowna, British Columbia)

Thesis topic (*in preparation*): Predictive mapping of wetland ecosystems in the Okanagan Basin to support wetland conservation and restoration

B.Sc. (Hons) Wildlife Biology (2015)

University of Guelph (Guelph, Ontario)

Graduated April 2015

Thesis topic: classifying indiscriminate fishing techniques in developing countries

Awards and honours

Special University of BC Okanagan Graduate Award (2020 – 2021)

Amount: \$3000

University Graduate Fellowship (2020 – 2021)

Amount: \$3000

Irving K. Barber School of Arts & Sciences Graduate Entrance Award (2019 – 2020)

Amount: \$15,000

UBCO Graduate Dean's Entrance Scholarship (2019 – 2020)

Amount: \$5,800

Queen Elizabeth Aiming for the Top Scholarship (2011 – 2015)

Amount: \$12,000

University of Guelph Entrance Scholarship (2011 – 2012)

Amount: \$2,500

Research Grants

Mitacs Accelerate (2020 – 2021)

Industry partner: Okanagan Collaborative Conservation Program

Total Project Funding: \$53,000

Professional Experience

Teacher's Assistant (May 2020 – Present)

University of British Columbia, Okanagan Campus (Kelowna, British Columbia)

- Grade midterms, exams and discussion posts ensuring grade submission deadlines were met.
- Answer student's questions and respond to emails in a timely manner.
- Navigate online teaching tools used to upload quizzes, exams, and lectures as well as assist students with the transition to online learning.
- Review course material and assist with formatting of course content and creation of exam questions.

Natural Resource Biologist (November 2016 – January 2020)

Ecoscape Environmental Consultants Ltd. (Kelowna, British Columbia)

- Project coordinator for land development projects involving coordinating multiple teams of two or three project biologists, project managers and field technicians to provide environmental services to clients.
- Safety coordinator involving running monthly safety meetings, writing safety plans and policies, submitting safety audits, conducting incident investigations and managing equipment.
- Project manager on a variety of land-development projects involving coordination between clients and local government, drafting proposals and preparing cost estimates.
- Field technician on large research projects as well as land-use and development projects.
- Prepared Environmental Assessment Reports, Environmental Management Plans, Erosion and Sediment Control Plans, Riparian Areas Regulations Reports, and Restoration Plans.
- Monitored construction sites to ensure environmental regulation compliance.
- Conducted bat acoustic monitoring and analyzed acoustical data.
- Equipment utilized: Anabat SD2, Wildlife Acoustics SM4, Wildlife Acoustics Echometer Touch, Trimble GPS, Eckman grab, zooplankton and phytoplankton samplers, Van Dorne water sampler, velocity meter, PAR meter, water quality meter (YSI), turbidity meter, Smith Root electrofisher and jet boat.

Resource Management Technician II – Fire & Vegetation Department (May 2016 – October 2016)

Parks Canada Agency (Lake Louise, Yoho, Kootenay Field Unit)

- Implemented invasive plant species control methods and engaged international volunteers.
- Conducted aerial surveys and caged and collected White Bark and Limber Pine cones.
- Created vegetation transects for ecological integrity monitoring of ecosystem health for prescribed fire research.
- Equipment utilized: GPS units and compasses.

Resource Management Officer I – Aquatics Department (October 2015 – January 2016)

Parks Canada Agency (Lake Louise, Yoho, Kootenay Field Unit)

- Completed water quality sampling in swift water environments following the Canadian Aquatic Biomonitoring Network (CABIN) protocol.
- Collected, prepared and organized DNA, otolith, and invertebrate samples.
- Completed snow surveys and collected water samples following strict sampling procedures as per BC Ministry of Environment's guidelines.
- Drafted summary reports for invasive species removal projects occurring in the Park.
- Equipment utilized: kick nets, water quality meter (YSI), laser range finder.

Aquatics Field Technician Summer Student (2014 & 2015)

Parks Canada Agency (Lake Louise, Yoho, Kootenay Field Unit)

- Worked with chemicals such as formalin, ethanol and clove oil.
- Processed fish samples and collected the following data: fork length, weight, species, sex, and maturity, as well as took DNA samples and extracted otoliths.
- Fieldwork assignments included multi-day trips with the use of cabins or tents, backpacking of gear, and often involved long days in remote locations.
- Communicated science concepts to the public via media updates and interactive public presentations.
- Helped coordinate and organize field logistics for backcountry fish sampling.
- Equipment utilized: seine, gill and block-nets, minnow traps, and backpack electrofisher.

Undergraduate Research Assistant (Summer 2013)

University of Guelph Integrative Biology Lab (Guelph, Ontario)

- Performed a meta-analysis of catch data from Cambodia's Tonle Sap river and lake ecosystem
- Gained experience with the following equipment: gillnets, seine nets, Ekman grabs, kick nets, and zooplankton dragnets as well as a motorized fishing boat.
- Classified invertebrates by order using dissecting scopes.
- Followed strict protocol to prepare tissue samples for DNA barcoding.

Certifications and Training

- Valid Class 5 British Columbia Driver's License
- Small Vessel Operator Proficiency Training Certificate (SVOP) issued November 17, 2017
- Advanced Electrofishing Certificate issued June 4, 2014 (recertified June 2019).
- Swift Water Rescue Technician – 1 (expires March 2021)
- OFA Level One First Aid with CPR (expires September 2021)
- 7-day Bat Acoustic Monitoring Course instructed by Dr. Cori Lausen (completed in May 2018)

Peer-reviewed Publications

- McCann, K.S., G. Gellner, B.C. McMeans, **T. Deenik**, G. Holtgrieve, N. Rooney, L. Hannah, M. Cooperman, S. Name. (2016). Food webs and the sustainability of indiscriminate fisheries. *Canadian Journal of Fisheries and Aquatic Sciences*. 73(4): 656-665.