

DANIELLE DESROCHERS

Aquatic Biologist | Data Scientist

CONTACT

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☎ Not publicly available

EDUCATION

- Current | 2021
- **M.Sc. Coastal and Marine Biology and Ecology**
Università del Salento 📍 Lecce, Italy
 - Expected graduation: April 2024
 - Thesis: Study of the interactions between dolphins and artisanal fishing and mitigation of impacts through the use of acoustic and visual deterrents and alternative fishing gear as part of the European Life Delfi Project
 - Unisalento4Talents Programme (2021 - 2024)
 - Study in Italy Grant (2021)
- 2020 | 2014
- **B.Env.Sc., Honours**
University of Manitoba 📍 Winnipeg, MB
 - Thesis: Characterizing the potential impacts of diluted bitumen remediation methods on benthic freshwater macroinvertebrate community composition and abundance
 - Aboriginal NSERC USRA Recipient (2018, 2019)
 - Dean's Honour List (2015 - 2020)

RESEARCH EXPERIENCE

- Current | 2023
- **Marine Mammal Observer**
Filicudi Wildlife Conservation 📍 Filicudi, Italy
 - Testing the usefulness of HydroMoth in the study of the bottlenose dolphin (*Tursiops truncatus*) in the Aeolian Archipelago (Sicily, Italy).
 - Conducting land-based surveys for cetaceans.
- 05/2023 | 04/2023
- **Research Intern**
Delfini del Ponente 📍 Imperia, Italy
 - Performed photo identification analysis of bottlenose dolphins via the characteristics of their dorsal fins, such as scars, notches, and pigmentation.
 - Performed dedicated boat surveys to monitor cetacean and marine turtle distribution and behaviour.
- 09/2022 | 05/2022
- **Graduate Researcher**
Filicudi Wildlife Conservation 📍 Filicudi, Italy
 - As part of the European Life DELFI project, worked with small-scale fishermen to reduce dolphin fishing gear interactions using acoustic deterrents.
 - Processed fish catch, identifying the species, measuring lengths and weights.
 - Assisted with day to day care of rescued marine turtles (*Caretta caretta*).
 - Presented bilingual interactive tours of the Sea Turtle Rescue Centre.
- 05/2022
- **Volunteer**
Project Manaia 📍 Sicily, Italy
 - Performed line transect sampling to map the presence and abundance of *Posidonia oceanica* seagrass meadows along the Italian coastline aboard Project Manaia research vessel.

LANGUAGE SKILLS

English C2, Fluent
French C2, Fluent
Italian B2, Conversational

TECHNICAL SKILLS

🔗 R and R Studio
📊 Tidyverse
📊 Data visualization
🖥 Office Suite
📧 Google Suite

CERTIFICATIONS

📄 Manitoba Class 5 Driver's Licence
🚤 Pleasure Craft Operator Licence
🏍️ ATV Training Certificate
👤 WHMIS Training Certificate
⚙️ Basics of R for Ecologist, R for Ecology
👤 Dolphin Watching, Università di Siena

2021
|
2020

● Biological Technician

University of Manitoba

📍 Winnipeg, MB

- Analyzed a 15-year dataset of surface water samples measuring pesticide concentrations by modelling environmental exposure distributions to determine the probability of exposure to each pesticide, and the probability of exceeding regulatory guidelines.
- Work primarily done in R Studio.

2019
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2018

● Research Assistant

Stress Ecology Lab, University of Manitoba

📍 Winnipeg, MB

- Designed Honours thesis study, collected the weekly samples from the field, and processed the samples by enumeration and identification of invertebrates.
- Constructed model boreal wetlands (mesocosms) representative of the systems found at the IISD-ELA, then tracked their progress and stability as an experimental system.
- Assisted with the implementation and decommissioning of the Boreal Oil Release Experiment by Additions to Limnocorrals (BOREAL) and the Freshwater Oil Spill Remediation Study (FOReSt) experimental set-ups.
- Acquired field sampling skills using various instruments (secchi disk, YSI multi-parameter probe, depth sounder, zooplankton nets, Manta Trawl, Ekman dredge, kick nets, and passive samplers).

2018

● Field Research Assistant

IISD Experimental Lakes Area

📍 Kenora, ON

- Assisted with the capture of freshwater fish using an assortment of methods: gill nets, seine nets, trap nets, minnow traps, and angling.
- Observed and aided with different procedures used to process both small- and large-bodied freshwater fish. This included: identification, basic measurements (total length, fork length, and weight), and implanting tags (PIT and acoustic telemetry).
- Performed dissections of small-bodied freshwater fish to collect ageing structures (otoliths and fin rays), and tissue samples (muscle, stomach, and liver).



OTHER EMPLOYMENT

Current
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2020

● Co-Owner, Metis Artisan

Prairie Owl Beads

📍 Winnipeg, MB

- Self-employed, co-owner and social media manager dedicated to driving engagement and sales through Facebook, Instagram, and website.
- Mentor artist at Le Musée de Saint Boniface Museum (since 2016).

10/2019

● Deputy Returning Officer/Registration Officer

Elections Canada

📍 Winnipeg, MB

12/2017
|
05/2017

● Education and Outreach Assistant

IISD Experimental Lakes Area

📍 Kenora, ON

- Generated educational content and materials related to IISD-ELA science, used to inform the broader public on its importance and relevance.
- Routinely updated spreadsheets documenting day-to-day outreach activities, both on-site and off-site, then reported results to senior staff, highlighting the overall demographics of participants.
- Presented bilingual interactive tours and presentations.

2016
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2014

● Historical Interpreter

Louis Riel Institute

📍 Winnipeg, MB

- Taught complex traditional Metis art (beadwork, jig, sash weaving) to diverse groups ranging in age and abilities.

- Can safely travel to sampling locations using various field vehicles and watercrafts.
- Comfortable working in remote outdoor locations, in demanding weather conditions and for extended periods of time.
- Ability to record complete and accurate field notes.
- Knowledgeable in field sampling techniques, laboratory analyses, and environmental monitoring.

- Capable of working effectively and collaboratively with team members to maximize productivity and efficiency.
- Natural leader with great teamwork and problem-solving skills.
- A wealth of experience communicating to the general public, both in French and English.