

# Brendan Casey

ECOLOGIST

Edmonton, Alberta

☎ 780 920 1787 | ✉ [brendangerardcasey@gmail.com](mailto:brendangerardcasey@gmail.com) | 📷 [bgcasey](#)

## Education

### PhD Ecology

Edmonton, Alberta

UNIVERSITY OF ALBERTA

2017 - 2023

- Thesis: Evaluating remote sensing covariates for understanding habitat selection by boreal forest birds

### MSc Biodiversity and Conservation

Dublin, Ireland

TRINITY COLLEGE DUBLIN

2013 - 2014

- Thesis: Enhancing Connectivity Between Ireland's Native Woodlands.

### BFA Art and Design

Alfred, New York

ALFRED UNIVERSITY

2002 - 2007

## Employment

### Research Assistant

Edmonton, Alberta

UNIVERSITY OF ALBERTA

2022 - Present

- Generate topographically downscaled climate layers using remote sensing, terrain modeling, and environmental data loggers.
- Develop high resolution spatial data layers reflecting microrefugia for Alberta and British Columbia.
- Create a reproducible workflow that can used as more environmental data is acquired.

### Graduate Research Assistant

Edmonton, Alberta

UNIVERSITY OF ALBERTA

2017 - 2023

- Conducted bioacoustic and vegetation surveys in Alberta's boreal forests.
- Programmed, deployed, and maintained autonomous recording units.
- Managed field logistics and supervised wildlife technicians.

### Graduate Teaching Assistant

Edmonton, Alberta

UNIVERSITY OF ALBERTA

2017 - 2021

- Helped facilitate undergraduate ecology and population ecology courses.
- Taught lessons on experimental design, statistical analyses, and bioacoustics.

### Sustainability Scholar

Edmonton, Alberta

UNIVERSITY OF ALBERTA

2021 - 2021

- Worked on the Edmonton River Valley Connectivity Analysis
- Evaluated wildlife connectivity through Edmonton's city core using remote camera data, wildlife movement models, and GIS.
- Created communication materials including cross sectional maps and Shiny apps.

### Yellowstone Program Supervisor

Missoula, Montana

ECOLOGY PROJECT INTERNATIONAL

2016 - 2017

- Supervised Yellowstone field programs including research on the population dynamics of cougar and bison and the impacts of grazing on grasslands.
- Partnered with park biologists, government agencies, landowners, and community stakeholders to develop conservation research and education programs.
- Recruited, trained, and supervised field staff.
- Coordinated service projects including invasive species removal and fence modification to remove barriers to wildlife migration.
- Drafted grant proposals and reports, and wrote social media content, program handbooks, and research summaries.
- Planned community outreach and fundraising events.

## Chapter Services Program Coordinator

Missoula, Montana

NATIONAL AUDUBON SOCIETY

2015 - 2016

- Liaised with local chapters and partner organizations on programming that supports bird conservation across North America's major migratory flyways.
- Was the primary contact between the national office and local chapters on new conservation initiatives, policy changes, and annual financial reports.
- Managed organization databases and wrote monthly, quarterly, and annual reports.

## Wilderness Expedition Supervisor

Sitka, Alaska

SOUTHEAST ALASKA REGIONAL HEALTH CONSORTIUM

2009 - 2013

- Managed all aspects of the field program, including program development, budgeting, and the hiring, training, and supervision of field staff.
- Collaborated with tribal councils, state regulatory agencies, and community partners to develop substance abuse treatment programs in First Nations communities.
- Created program wide risk management protocols, an incident command system, medical standing orders, and a policies and procedures manual.
- Developed curriculum on Alaskan coastal ecology, wildlife biology, and human-carnivore conflict

## Senior Field Instructor

Belgrade, Montana

THREE RIVERS MONTANA

2007 - 2009

- Supervised field operations and provided technical support to field crews.
- Designed and taught field courses on astronomy, ecology, and natural history.
- Managed expedition logistics including gear maintenance, risk management, and route planning.

## Additional Experience

---

### Wetland Restoration Volunteer

Dublin, Ireland

IRISH PEATLAND CONSERVATION COUNCIL

2013 - 2014

- Contributed to wetland restoration and monitoring projects.
- Surveyed peatland indicator species and installed peat dams and plastic drain pilings.

### Pre-Doctoral Internship Orientation Faculty

Sitka, Alaska

ALASKA PSYCHOLOGY INTERNSHIP CONSORTIUM, SITKA, AK

2010 - 2012

- Taught pre-doctoral psychology interns courses on Southeast Alaskan coastal ecology and social-ecological resilience.

## Certifications

---

### Snowmobile Safety

Edmonton, Alberta

ALBERTA SNOWMOBILE ASSOCIATION

2018

### ATV Safety

Edmonton, Alberta

ALBERTA CONSERVATION ASSOCIATION

2017

### Chemical Dependency Counselor

Sitka, Alaska

ALASKAN COMMISSION FOR BEHAVIORAL HEALTH

2013

### Behavioral Health Counselor

Sitka, Alaska

ALASKAN COMMISSION FOR BEHAVIORAL HEALTH

2013

## Awards

---

### Funded Fellow

Sherbrooke, Québec

COMPUTATIONAL BIODIVERSITY SCIENCE AND SERVICES (BIOS2)

2021

### ACA Grants in Biodiversity

Edmonton, Alberta

ALBERTA CONSERVATION ASSOCIATION

2019

## U of A Northern Research Awards (UANRA)

UNIVERSITY OF ALBERTA

*Edmonton, Alberta*

2019

## Doctoral Recruitment Scholarship

UNIVERSITY OF ALBERTA

*Edmonton, Alberta*

2019

## Graduate Student Teaching Award

UNIVERSITY OF ALBERTA

*Edmonton, Alberta*

2019

## ISSS Teaching Award

UNIVERSITY OF ALBERTA

*Edmonton, Alberta*

2018

## Skills

---

**Ecology** Ecological modelling, Remote sensing, Spatial analyses, Wildlife monitoring

**GIS** Google Earth Engine, ArcGIS, R

**Programming** R, Python, JavaScript, Shell