

CONNOR BERNARD

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2019-Present	UNIVERSITY OF OXFORD, PEMBROKE COLLEGE DPhil/PhD Zoology, Department of Zoology Thesis: Unusual Life Histories & Comparative Demography Advisor: Roberto Salguero-Gomez (salgo.ox.ac.uk)	expected 2022
2012-2016	UNIVERSITY OF CALIFORNIA, BERKELEY BS 1 st Equivalent (Hons) Conservation and Resource Studies Zoology and Natural Resource Policy Specialisation <i>UC Berkeley Leadership Award Scholar · Distinction · Dean's list (4.0 gpa qual)</i>	<i>Cum Laude</i>

PUBLICATIONS

- Bernard C**, Compagnoni A, Salguero-Gómez, R. 2020. *Functional Ecology*: Testing Finch's hypothesis: the role of plant modularity on the escape of demographic senescence. <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2435.13486>
- Bueno de Mesquita C, Tillmann L, **Bernard C**, Rosemond K, Suding K, Molotch N. 2018. *Arct. Antarct. Alp. Res* Topographic heterogeneity explains patterns of vegetation responses to climate change (1972-2008) across a mountain landscape, Niwot Ridge, Colorado. <https://doi.org/10.1080/15230430.2018.1504492>

RESEARCH & PROFESSIONAL EXPERIENCE

July 2018 – June 2019 Boulder, CO	ENVIRONMENTAL MANAGEMENT AND PLANNING SOLUTIONS, INC. <i>Environmental Law, Policy, & Planning Consultant</i> Authored chapters of Environmental Impact Statements. Led protest resolution analyses. Wrote briefs, reports, and technical summaries for Dep't of the Interior leadership. Facilitated public meetings. Reviewed documents for the U.S. Nat'l Park Service, Forest Service, BLM, and U.S. Fish & Wildlife Service.
March 2018 – June 2018 Washington DC	UNITED STATES BUREAU OF LAND MANAGEMENT, HEADQUARTERS <i>Policy and Environmental Analyst Associate</i> Led the Bureau's data standards program. Authored policy. Briefed senior leadership. Represented BLM Washington on Bureau and Inter-agency working groups. Authored materials for the Council on Environmental Quality. Reviewed RMPs and protest reports. Assisted with NEPA streamlining initiatives.
March 2017 – Feb 2018 Taos NM	UNITED STATES BUREAU OF LAND MANAGEMENT, TAOS FIELD OFFICE <i>Planning Associate (Acting Planner, 2018)</i> Authored decision records, legal findings, sections of environmental assessments, and other elements of NEPA documents. Met with state agencies, tribal governments, and local stakeholders in consultation for projects. Surveyed endangered species. Led interdisciplinary NEPA coordination meetings.

May 2016 – August 2016 <i>Northern CA</i>	BEISSINGER LAB, UNIVERSITY OF CALIFORNIA, BERKELEY <i>Bird Surveyor</i> Used call-playback methods to survey rare and threatened wetland birds in Northern California. Deployed song-meters to record birds. Assessed hydro-logic conditions, vegetation community, and grazing characteristics in wetland habitat. Negotiated access to habitat on private property.
June 2015 – Aug 2015 <i>Niwot Ridge LTER</i>	SUDING LAB, INSTITUTE FOR ARCTIC AND ALPINE RESEARCH CU BOULDER <i>Nat'l Science Foundation REU Student</i> Assessed environmental mediators of shrub encroachment in the alpine. Sampled soil properties, plant traits, and plant community characteristics. Gathered data on snowpack and geography. Developed sampling protocols, collected data, wrote analysis, and presented the project at the REU symposium.
Aug 2014 – May 2015 <i>Berkeley, CA</i>	BAY AREA CONSERVATION BIOLOGY SYMPOSIUM <i>Conference Co-Coordinator</i> Assisted writing and review of grant proposals. Led conference outreach. Secured venue/food/technologies. Helped develop conference materials. Keynote delivered by Dr Jodi Hilty.
June 2014 – Aug 2014 <i>Niwot Ridge LTER</i>	SUDING LAB, INSTITUTE FOR ARCTIC AND ALPINE RESEARCH CU BOULDER <i>Research Assistant</i> Administered research projects associated with plant community ecology. These projects covered interactions among global change factors, nitrogen and diversity loss, elevational gradients of plants and microbes, plant-soil feedbacks, and the biogeography of sub-nival plant communities.
June 2013 – Aug 2013 <i>Gothic CO</i>	SANDERS LAB, ROCKY MOUNTAIN BIOLOGICAL LAB <i>Undergraduate Research Student</i> Designed and conducted a study on the influence of elevational gradients on the distribution, diversity, and community assemblage of lichens in the Elk Mountains. Assisted research on projects investigating plant ecology. These projects covered the interaction of elevation effects, species interactions, and warming on plant community structure and function, and the interactions of nitrogen and species presence.

UNIVERSITY LEADERSHIP & AWARDS

Marshall Scholarship Nominee	<i>UC Berkeley Prestigious Scholarship Committee</i>	2018
Vice-President, Administrator	<i>UC Berkeley Natural Resources Club</i>	2015 - 2016
Executive Board Officer	<i>UC Berkeley Chapter of the Wildlife Society</i>	2015 - 2016
Junior/Senior Representative	<i>College of Nat. Resources CRS Council</i>	2014 - 2016
CRS Major Representative	<i>UC Berkeley Environmental Panel</i>	2013 - 2015
Coordinator (mbr. 2013 - 2016)	<i>UCB Ch. Society for Conservation Biology</i>	2014 - 2015

GRANTS

£ 460 - Pembroke College, Oxford. Dean of Graduates Fund. Travel Grant to Galway, Ireland.
£ 4,200 - National Science Foundation. Research Experience for Undergraduates Grant. Niwot LTER.

Grant editor/reviewer - Multi-author grants for conference & research events

\$1,500 - Department of Environmental Science, Policy and Management, UC Berkeley

\$280 - Graduate Assembly, UC Berkeley

\$500 - Society for Conservation Biology

\$500 (2) - Conservation and Resource Studies Panel, UC Berkeley

CONFERENCES

Bay Area Conservation Biology Symposium | California, USA
British Ecological Society Annual Conference | Belfast, North Ireland

RESEARCH POSTERS

Testing Finch's hypothesis. British Ecological Society. Belfast, North Ireland

RESEARCH TALKS

Elevational control of lichens in the Elk Mountains | RMBL Research Symposium
Shrub encroachment over 40 years in the Rocky Mountain Front Range | Niwot REU Symposium
Topographic Variability mediating vegetation change over 40 yrs. in the the Rocky Mountains | Oxford
Testing Finch's Hypothesis: Modularity and the escape from actuarial senescence | Oxford

SELECT TECHNICAL WORKSHOPS

Field Research Techniques | Rocky Mountain Biological Lab. 2013
Statistics for Field Research with SAS | Rocky Mountain Biological Lab. 2013
Regression in R | Rocky Mountain Biological Lab. 2013
Bootstrapping and resampling using R | Rocky Mountain Biological Lab. 2013
Population Viability Analysis using Vortex | University of California, Berkeley. 2014
Geospatial Information Systems | University of California, Berkeley. 2015
Museum and Field Techniques in Natural History | University of California, Berkeley. 2016
Introduction to R | Niwot Ridge LTER. 2014, 2015
Research Ethics | Niwot Ridge LTER. 2015
Introduction to Matrix Population Models and Integral Population Models | Oxford, UK. 2019
Phylogenetical Analysis for Comparative Research | Oxford, UK. 2019
Introduction to Bayesian Analysis | Oxford, UK. 2019
Statistical Rethinking: Bayesian Statistical Analysis | Oxford, UK. 2020
An introduction to Bayesian approaches in Macroecology | Galway, Ireland. 2020

ORGANIZED WORKSHOPS

Introduction to Life Table Analysis using COM(P)ADRE | Belfast, North Ireland. 2019.
Metabolomics, Functional Traits, & Life History | Oxford UK. 2019

FIELD RESEARCH SKILLS & TECHNICAL COMPETENCIES

ANIMAL CAPTURE, HANDLING, SAMPLING, AND TRACKING (VERTEBRATES)

Riparian electrofishing
Field morphometry (life fish sampling)
Tissue sampling (fur, feather, fin clippings; blood sampling from bird wings; fecal collection)
Bait and cage-trapping for small animals (e.g. Sheldon's traps; Tomahawk Live Trap)
Mist netting (passerines...and the occasional woodpecker)
Animal tagging (ear-tags and bird bands)
Call-playback sampling (birds)

ANIMAL COMMUNITY SAMPLING (INVERTEBRATES)

Kick-net sampling, point collection (benthic macroinvertebrates)
Suction sampling, pit-trap sampling, sweep netting, beating-net/tarp collection

ANIMAL COMMUNITY SAMPLING (INVERTEBRATES)

Alpine field botany
Rocky Mountain tree taxonomy
Botany of rocky mountain Carex spp.
Herbarium reference taxonomy of alpine graminoids
Basic lotic macroinvertebrate identification
Museum accessioning under protected species permits

PLANTS

Point-quarter, quadrat, transect, and other standard field density surveys
Canopy densiometer reading
Tree size estimation

FIELD TECHNOLOGY

High resolution Trimble GIS
Song Meter Acoustic Recorders
LiDAR-based tree morphometry
LI-COR light meters and respirometers
Soil Water Sensors
Pressure Bombs

LOGISTICAL

Driving government, university, and private vehicles in remote and off-road environments
First aid, CPR, and first-responder training
Mountaineering training. Exum Guides. Jackson Hole, WY

ANALYTIC SKILLS & COMPETENCIES

Generalized Linear Mixed Models in R
Phylogenetically corrected GLMM, PCA, and NMDS models in R
Integration of aerial imagery, R, and ArcGIS for geospatial analysis
Suitability and network analysis in ArcGIS and QGIS
Demographic analysis of Matrix Population Models (Life tables & Leslie matrix theory)
Comparative demographic analysis (Normalized Life Table Contrasts)
Demographic database management
Basic stochastic population growth models

Modeling using simple difference and ordinary differential equations.
Use of simulations to study population characteristics

PROFESSIONAL AFFILIATIONS: British Ecological Society
Zoological Society of London Fellowship
Ecological Society of America
The Wildlife Society
The Society for Conservation Biology
Oxford Union Debate Society
Oxford Zoology Civil Brunch Society
Oxford University Mountaineering Club
International House, Berkeley
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SELECTED UNIVERSITY COURSEWORK

SCIENCE	Comparative Animal Physiology	Animal Communication
	Evolutionary Environmental Physiology	Animal Behavior
	Comparative Endocrinology	Wildlife Ecology
	Evolution	Fish Ecology
	Design + Analysis of Ecological Research	Conservation Biology
POLICY	U.S. Environmental Policy & Administration	Energy and Resource Policy
	Legal Rights, Science, and Society	U.S. Environmental History

SEE ATTACHED POLICY ADDENDUM FOR DETAILED POLICY EXPERIENCE