Danielle T. Fradet

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EDUCATION

University of California, Davis
Davis, CA
3.921 GPA
2020 Graduate
BS Wildlife, Fish and Conservation Biology

University of Queensland, St. Lucia
Brisbane, QLD
August 2019-November 2019
UCEAP Marine Biology and Terrestrial Ecology

Flintridge Sacred Heart Academy
La Cañada Flintridge, CA
4.447 GPA
2016 Graduate

Upper-Division Coursework:
BIS 101/D Genes and Gene Expression
ENH 160 Restoration Ecology
ESP 100 General Ecology
EVE 100 Intro to Evolution
NPB 102 Animal Behavior
PLS 147/L CA Plant Communities*
STA 100 Applied Statistics for Biological Science
UCEAP Marine Biology*
UCEAP Terrestrial Ecology*
WFC 110/L Biological Conservation of Wild Mammals
WFC 111/L Biological Conservation of Wild Birds*
WFC 130 Physical Ecology of Wildlife
WFC 134 Herpetology
WFC 136 Ecology of Waterfowl and Game Birds*
WFC 151 Wildlife Ecology
WFC 168 Climate Change Ecology
WFC 198 Population Dynamics and Estimation
*indicates field course

HONORS AND AWARDS

UC Davis Outstanding Senior Award 2020
UC Davis Jastro Scholarship 2016-2020
UC Davis Dean's List Honors 2016-2020
UC Davis Honors Program 2016-2020
Yolo Audubon Small Grant 2019
Archer Rise Award Finalist 2016
Archer STEM Research Grant 2016
Flintridge Sacred Heart Academy Thomas Aquinas Academic Excellence Award 2016

RESEARCH EXPERIENCE

Junior Specialist at UC Davis Museum of Wildlife and Fish Biology..... (9/2020-present)

- Established small mammal trapping lines with Sherman traps, handled small mammals, took external measurements and determined reproductive status of small mammals, and collected small mammals
- Set sonobat detectors and wildlife camera bait stations, processed data
- Conducted herpetofauna coverboard surveys
- Conducted avian transects and point counts in the San-Joaquin Delta
- Prepared and curated specimens for the Sacramento Valley Avian Bioinventory Project

Undergraduate Research Assistant (paid) at UC Davis Museum of Wildlife and Fish Biology……..…….(4/2017-6/2020)

- Bird soft and hard body study skin preparation, wing preparation, skeleton preparation, tissue sampling, sexing, molt identification, and measurements
- Mammal soft body study skin preparation, skeleton preparation, tissue sampling, sexing, and measurements
- Field experience in avian point counts, transects, mist nets, automated recording methods, specimen collection
- Conducted small mammal trapping, handled and external measurements and determination of reproductive status of small mammals, set sonobat detectors, specimen collection
- Certified for firearms use through California Dept of Fish and Wildlife Hunter Safety Program
- Outreach and education events on and off campus

Songbird Nest Box Undergraduate Research Assistant at UC Davis Museum of Wildlife and Fish Biology...……(4/2018-7/2020)

- Established nest box transect lines, checked nest boxes and recorded the stages of nests, recorded the bird species using the nests, recorded the number eggs and nestlings,
- Proficient in banding with USGS and color bands on nestlings and adult songbirds; can measure birds and fill out banding reports
- Became a field team leader and coordinated the monitoring and banding of 40 nestboxes producing over 200 chicks; coordinated with landowners

Marine Biology and Terrestrial Ecology at University of Queensland…..(8/2019-10/2019)

- Designed, proposed, conducted and presented a collaborative research project at Moreton Bay Research Station to test for environmental variables controlling the burrowing preference of echiuran *Ochetostoma australiense* in intertidal mudflats
- Designed, proposed, conducted and presented a collaborative research project at Heron Island Research Station on the size and occurrence of the alga *Chlorodesmis fastigiata* in relation to substrate coral cover in the Southern Great Barrier Reef
- Conducted fieldwork at Girraween, Lamington and Carnarvon Gorge National Parks with an emphasis in plants, birds and mammals

Volunteer Undergraduate Research Assistant in Sih Lab at UC Davis.....(11/2019-8/2019)

- Studied altered behavior of goldfish in response to various levels of human disturbance
- Conducted assays on stress levels and predator-prey behavior
- Experimental design, wet lab maintenance, fish husbandry, video recording
- Used Jwatcher for behavioral analysis

UC Davis Honors Senior Capstone……..……..…….……(5/2019-6/2020)

- Distinguished the effect of microhabitat variation on the occupancy of breeding birds using automated recording units
- Experience in Raven Pro software and identification of birds by sound
- Used R for occupancy modeling

Walkabout Wildlife Park Volunteer through Loop Abroad Australia……(6/2018)

- Studied zoology, wildlife husbandry and zoo veterinary medicine
- Wildlife handling including pythons, echidnas, rodents and marsupials
- Conducted an ethogram on pythons and designed an enrichment based on ethogram
- Performed necropsies

Volunteer Internship at Arroyos and Foothills Conservancy..…… (6/2017-8/2017)

- Experience in nonprofit land trusts, property stewardship, and human-wildlife conflict
- Wildlife camera set up and photo download
- Southern California plant identification, ethnobotany
- Removal of invasive plants and trail maintenance
- Taught others about their local native habitat through AFC's education programs

Flintridge Sacred Heart Academy Honors Scientific Research Course…...(9/2015 – 5/2016)

- Designed, proposed, conducted and presented an honors capstone research project on increasing the lipid content in cyanobacteria *Spirulina platensis* to make it more cost-effective as a biofuel
- Use of spectrophotometer to take measurements for growth curve of cyanobacteria
- Presented in a poster and presentation session; chosen as a finalist at Archer STEM symposium

Internship at California Institute of Technology…….…….(6/2015 - 8/2015)

- Isolated bacterial and archaeal strains and enriched them in the lab
- Performed gel-electrophoresis, RNA sampling and replication

- Conducted nucelotideBLAST analysis
- Defined bacteria and archaea from their physiological and phylogenetic characteristics
- Experience in writing, editing, and revising a paper for publication in a scientific journal

PAPERS AND PUBLICATIONS

- Fradet, D. T., Tavormina, P. L., Orphan, V. J. 2016. Members of the methanotrophic genus *Methylomarinum* inhabit inland mud pots. *PeerJ* 4:e2116 https://doi.org/10.7717/peerj.2116
- Fradet, D. T., 2016. Micro-algae Creating Big Change: Characterizing Lipid-increasing Growth Conditions and Specifying the Starvation Profile in *Spirulina platensis*. Flintridge Sacred Heart Academy

SKILLS

Computer

- Proficient in Microsoft Word, Excel and PowerPoint
- Experience in R Studio
    - Occupancy models, N-mixture Models, GLMs, basic coding
- Experience in Raven Pro
    - Importing and analyzing audio files
- Experience in Jwatcher
    - Importing and analyzing video
    - Setting up the coding structure

Science Communication

- Proficient in communication of scientific and conservation topics to all ages
    - Extensive experience with formal training as a Sacramento Zoo docent (2018-present) teaching people of all ages about wildlife and conservation.
    - UC Davis science camp instructor for middle school and high school students for the summers for 2018 and 2019.

First Aid

- CPR and first aid trained and certified

Language

- Basic Spanish conversational and writing skills

Personal

- Highly motivated and goal oriented
- Organized and hardworking
- Excellent public speaking and writing skills
- Hunter Safety Certified
- Played softball for 11 years; captain of high school team senior year
- Head basketball manager for four years of high school

EXTRACIRRICULARS/HOBBIES

- Hiking
- Reading
- Travel

AFFILIATIONS/MEMBERSHIPS

- The National Society of Collegiate Scholars