Anne-Marie Parkinson

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EDUCATION

Master of Environmental Science and Management (Expected 2021)
Bren School of Environmental Science & Management – University of California, Santa Barbara
Specialization: Conservation Planning | **Focus**: Data Science | **Fellowship**: Forest and Sustainability Fellow ($25,000/yr)

Bachelor of Science in Environmental Studies (June 2017)
University of California, Santa Barbara
Emphasis: Wildlife, Ecosystems and Habitat Restoration

ENVIRONMENTAL RESEARCH EXPERIENCE

Forestry Masters Project (Thesis Equivalent), UCSB, Santa Barbara, CA (04/20–current)

- Collaborating with a multidisciplinary team to compare changes in historic and current forest conditions in southern California to aid the USFS in conducting forest health projects and planning for the future
- Creating a MaxEnt species distribution model to compare current suitable habitat of *Pinus jeffreyi* adults and saplings and predicted future suitable habitat of saplings under 8 climate change projections

Remote Sensing Research Intern, National Park Service, SMMNRA, CA (6/20–9/20)

- Monitored drought induced dieback in oak woodlands using remote sensing to assess landscape scale mortality
- Utilized R to iteratively calculate vegetation indices for 100+ satellite images, quantified annual changes in vegetation greenness, and created a threshold to quantify oak dieback using a binomial model
- Synthesized research results in a 5-minute presentation to 70 professionals in the scientific field

Research Associate, UCSB Earth Research Institute, Santa Barbara, CA (12/18–9/20)

- Collaborated with 4 PIs, an USFS ecologist, and a 3-person field team to develop a research experiment planting 2,000 conifer seedlings to improve restoration success of endemic conifer *Psuedotsuga macrocarpa*
- Created a model in R using random forest machine learning to understand how environmental variables like topography, climate, and fuels contribute to fire-induced mortality of *P. macrocarpa*
- Manage team of 5 undergraduate students who collected data using Google Earth, ArcGIS, and R

Project Manager, UCSB Geography Department, Santa Barbara, CA (5/18–2/19)

- Interviewed, trained, and led a 3-person field crew to conduct vegetation surveys of chaparral, conifers, and oaks in remote areas of LPNF for a project funded by National Fish and Wildlife Foundation (NFWF)
- Conducted ground truthing to examine if oak skeletons post-fire cause remote sensors to underestimate actual vegetation regrowth; results were summarized in co-workers thesis
- Wrote 15-page project summary with data analyzed from R and maps created in ArcGIS, which was then communicated in a 10-minute presentation to 85 representatives from NFWF and USFS

PUBLICATIONS

- Understanding type conversion in southern California mixed conifer and coulter pine forests(in prep.)
- Monitoring Post-Fire Recovery of Chaparral and Conifer Species Using Field Surveys & Landsat Time Series(2019)
- The effect of common soil amendments on the germination and growth of native plants frequently used in restoration in coastal southern California(2018)

AFFILIATIONS & LEADERSHIP

Co-Chair and Undergraduate Representative, The Green Initiative Fund (10/15–6/17)
Newsletter Chair & Scholarship Chair, Gamma Phi Beta, Delta Psi Chapter (9/13–6/16)

SKILLS & QUALIFICATIONS

Computer: ArcGIS, ArcGIS Pro, QGIS, ENVI, R
Qualifications: Advanced data analysis and statistics, Botany, Dichotomous keys, Writing scientific papers, Literature review, Remote sensing, Environmental negotiations, Landscape ecology, Population ecology