

JESS M. STITT

EDUCATION

UNIVERSITY of IDAHO, College of Graduate Studies, Moscow, Idaho *Class of 2020, expected*
Ph.D. student, Natural Resources

- Pursuing research & coursework on forest biodiversity & three-dimensional structure using remote sensing

COLUMBIA UNIVERSITY, Graduate School of Arts & Sciences, New York, New York *Class of 2015*
M.A., Conservation Biology

- Independent Research, thesis, and coursework in Biodiversity & Ecosystem Functioning – “The Role of Species Traits in Neotropical Scarabaeine Dung Beetle Distributions within an Amazon Basin Forest Community”
- Relevant coursework includes Biodiversity & Ecosystem Processes, Advanced GIS & Spatial Analysis, Statistical Modeling, Conservation Biology, Foundations of Ecology & Evolution

CORNELL UNIVERSITY, College of Agriculture & Life Sciences, Ithaca, NY *Class of 2010*
B.S., Natural Resources

- Independent Research in Applied Ecology & Conservation – “The Use of Woody Material to Enhance Forest Biodiversity – Does Removal of Woody Material Affect Ecological Processes on the Forest Floor?”
- Relevant coursework includes Community Ecology, Applied Conservation Ecology, Geographic Information Systems (GIS), Applied Population Ecology, Ecological Management of Water Resources, Natural Resources Planning & Management, Vertebrates, Primate Behavior & Ecology, Botany, Intro to Fungi, Biological Statistics

RESEARCH EXPERIENCE

UNIVERSITY of IDAHO, College of Graduate Studies, Moscow, Idaho *Summer 2015 – 2018*
Graduate Researcher

- Carried out fieldwork for my Ph.D. chapters at National Forest sites across Washington & Idaho
- Collected sterile wood decay fungi DNA samples from woodpecker cavities in standing dead trees
- Conducted lidar validation surveys using Trimble GPS, including vegetation, snag, & cavity density data
- Surveyed bird diversity using audiovisual point count surveys

AMERICAN MUSEUM OF NATURAL HISTORY, New York, NY *Summer 2014 – 2016*
Research Intern, US Endangered Bird Recovery Plan Project

- Coded data from government-compiled Recovery Plans for 96 species of endangered birds throughout the US
- Gathered information used to conduct interviews of academic and governmental researchers

ORANGUTAN TROPICAL PEATLAND PROJECT**, Palangkaraya, Indonesia *Summer – Fall 2012*
Research Intern, Orangutan Behavior Project

- Observed and recorded wild Bornean orangutans (*Pongo pygmaeus*) behavior and ecology in Sabangau peat swamp forest of Central Kalimantan; investigated female social networking and ranging patterns
- Gathered GPS, ranging, feeding, behavior, and vocalization data; individual ID techniques; urine & fecal material collection and storage; data entry into databases using Microsoft Access and MapSource
- Other work included butterfly mark-recapture studies, southern Bornean gibbon & red langur ranging, feeding, and behavior data, botanical and phenology surveys, and camera trap maintenance

** Now the Borneo Nature Foundation

CENTER FOR CONSERVATION BIOLOGY, University of Washington, Seattle, WA

Spring-Fall 2011

Volunteer Lab Assistant

- Employed methods for DNA, glucocorticoid, & thyroid hormone extraction from scat of multiple wildlife species for analysis of individual identification, population size & range, and environmental stressors
- Utilized PCR, radioimmunoassay, vortex, centrifuge, and decanting methods for acquiring subsamples

CORNELL ARNOT TEACHING & RESEARCH FOREST, Van Etten, NY

Summer 2009

Research Intern, Biofuels and Biodiversity Study

- Measured impacts of woody material removal on forest biodiversity & habitat quality
- Employed techniques for quadrat setup, herpetological surveys, soil coring, leaf litter collection, temperature and moisture monitoring device set up, soil invertebrate sifting & ID, tree plot measurements, statistical analysis using Excel & JMP software, and community outreach

ORGANIZATION FOR TROPICAL STUDIES, Costa Rica

Spring 2009

Student, Costa Rica Tropical Biology Semester Abroad Program, Duke University

- Traveled between OTS biological field stations; co-designed study on display arena selection behavior of the White-Collared Manakin; co-designed study on Morning Glory resource allocation in response to nectar predation; investigated Mantled Howler Monkey time budgeting using behavioral scan sampling
- Learned strategies in mitigation of biological corridor & agricultural coexistence disputes; employed techniques in floral & insect taxonomy, botanical surveying, natural history & biodiversity assessments, and data analysis

MPALA RESEARCH CENTRE, Laikipia District, Kenya

Winter 2009

Student, Kenya Tropical Field Ecology course

- Conducted group research projects on *Acacia* ant-plant mutualisms & related tree fitness, ungulate foraging & vigilance behavior, measures of elephant ecosystem damage, and a pilot study on avian sallying behavior

REGENERON PHARMACEUTICALS, Tarrytown, NY

Summer 2007

Molecular Biology Intern, Protein Sciences Lab

- Utilized molecular techniques including PCR amplification, gel electrophoresis, and mass spectrometry to construct DNA vectors for protein expression, to be used for medical processes and antibody research

PUBLICATIONS & PRESENTATIONS

Stitt, J.M., Svancara, L.K., Vierling, L.A., & Vierling, K.T. (2019). Smartphone lidar can measure keystone habitat structures for wildlife studies. *Wildlife Society Bulletin*.

Vierling, K., Hudak, A., Jarolimek, J., Jusino, M., Lorenz, T., Silva, C., **Stitt, J.**, Swift, C. and Vierling, L. (2018). Perspectives on Piciformes: impacts on biodiversity from holes to whole landscapes. 5th European Congress of Conservation Biology. doi: 10.17011/conference/eccb2018/107240

Stitt, J.M. March 2018. *Using Smartphone Lidar to Measure Keystone Habitat Structures for Wildlife Studies*. Oral presentation. Northwest Scientific Association Annual Meeting. Olympia, WA.

Morrogh-Bernard, H.C.*, **Stitt, J.M.***, Yeen, Z., Nekaris, K.A.I., & Cheyne, S.M. (2014). Interactions between a wild Bornean orang-utan and a Philippine slow loris in a peat-swamp forest. *Primates*, 1-4. **Joint first authors*

TEACHING & SCIENCE COMMUNICATION EXPERIENCE

UNIVERSITY OF IDAHO, College of Natural Resources, Moscow, ID

Teaching Assistant, “Ornithology”

Spring 2019

- Taught weekly lab on birds of North America

Teaching Assistant, “Principles of Ecology”

Fall 2018

- Provide teaching assistance about introductory topics in ecology

Teaching Assistant, “Society & Natural Resources”

Fall 2018

- Provide teaching assistance about society and its relationship with natural resources

NSF IDAHO EPSCOR, Moscow, ID

Research Assistant, Managing Idaho’s Landscapes for Ecosystem Services (MILES)

Fall 2015 – Spring 2017

- Served as Student Coordinator, building networking opportunities for MILES undergraduate researchers
- Organized semester-long curriculum of activities to support students in developing scientific skillsets, including grant writing, career planning, manuscript publication, conference preparation, & scientific illustration

COLUMBIA UNIVERSITY, Graduate School of Arts & Sciences, New York, NY

Reading Assistant, “Forest Ecology”

Fall 2014

- Provided transportation & ecological knowledge for weekly class field trips into forests around Northeastern US

Reading Assistant, “The Human Species”

Fall 2013

- Led weekly discussion sections for undergraduate course in primate evolution, proctored & graded exams

UW SCIENTIFIC ILLUSTRATION PROGRAM, University of Washington, Seattle, WA

Class of 2011

Professional Certificate in Natural Science Illustration

- Studied techniques in traditional & digital media to render detailed, accurate scientific illustrations of natural flora & fauna; prepared a portfolio of works suitable for publication or educational exhibits

ORANGUTANGLED, personal website & business

Created Spring 2011

Freelance Scientific Illustrator

- Completed commissioned work focused on wildlife art projects, from cartoons for educational books to entries for field guides using a variety of media; accessible through self-made website: <http://www.orangutangled.com>

CORNELL OUTDOOR EDUCATION, Ithaca, NY

Winter 2007 – Spring 2010

Senior Instructor & Staff Member

- Led multi-day rock climbing, tree climbing, backpacking, and outdoor leadership courses; planned lessons for indoor & outdoor programs; organized logistics for food, camping, transportation, first aid, & gear
- *What the Wild Things Are* – taught 2-hour field seminar on species ID and natural history lessons for common animals & plants seen around upstate NY wilderness, presented to the outdoor educator community; *Fall 2009*

Wilderness Guide & Field Site Coordinator, ‘Outdoor Odyssey’ Pre-Orientation Program

- Led pre-orientation trips for incoming students; taught outdoor skills & safety
- Interviewed, hired, and trained new wilderness guides; taught effective group instruction techniques
- Elected to Chair of Advisory Committee

FUNDING RECEIVED

NASA IDAHO EPSCOR, Moscow, ID

2017 - 2018

Graduate Research Fellowship, Idaho Space Grant Consortium

NSF IDAHO EPSCOR, Moscow, ID

2015 - 2017

Graduate Research Assistantship, Managing Idaho’s Landscapes for Ecosystem Services (MILES)