

Penn State University

2020-2022 PhD:
Forest Resources

National University of Singapore

2018-2019:
PhD Student Geography



Texas Tech University

2017 MS:
Wildlife, Aquatics, and Wildlands Science and Management

Geographic Information Science and Technology Certificate

2013 BS:
Natural Resources Management and Wildlife Biology

Sasha Danielle Soto

PROFESSIONAL EXPERIENCE

2020-Current

PhD Student/Penn State University

Engages with environmental and government stakeholders to develop an ecosystem service and disservice management strategy and

2017

Invasive Species Technician/Oregon Dept Fish & Wildlife

Conducted invasive species inspections and decontaminated infected vessels. Performed public outreach, education, and conflict resolution.

2014

Environmental Research Technician/R2M Engineering

Prepared permits, Stormwater Pollution Prevention Plans, and annual reports. Performed environmental site assessments, compliance inspections, and water quality monitoring.

2013

Undergraduate Researcher/Texas Tech University

Developed a laboratory experiment to observe invertebrate behavior when exposed to allelopathic chemicals from invasive species.

2018-2019

PhD Student/National University of Singapore

Engages with environmental and government stakeholders to develop an ecosystem service and disservice management strategy and analysis.

2015-2017

MS Student/Texas Tech University

In R, used Maxent and Maxlike to make predictions for aquatic invasion species distributions. Compared biotype survival by observing desiccation in mesocosm experiments. Award recognition for conference presentations.

2013-2014

Student Research Technician/Texas Tech University

Surveyed for endangered and endemic species by deploying traps, collecting, and prepping specimens for the museum.

2012-2014

Intern/South Plains Wildlife Rehabilitation Center

Animal care intake, management, and release. Maintained habitats and administered food, medications, and supplies.

SKILLS

MANAGEMENT

Oversight/Development



Leadership/Collaboration



Conflict Resolution



Compliance Regulation



TEACHING

Presenting



Lecturing



Outreach Education



Outdoor Field Instruction



TECHNICAL

Data Collection/Mgt.



Policy/Data Analysis



ArcGIS/Remote Sensing



R Modelling

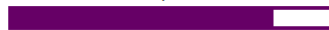


WRITING

Proposals/Grants



Reports



Scientific Publications



Permit Applications



TEACHING EXPERIENCE

2018	Field Studies: Thailand mangroves, National University of Singapore
2018	Biophysical Environments of Singapore, National University of Singapore
2015-2016	Introduction to Natural Resources Management, Texas Tech University
2015-2016	Vegetation and Wildlife Inventory and Analysis Techniques, Texas Tech University

MANUSCRIPTS IN PROGRESS

- I. **Soto, S.D.**, and Barnes, M.A., Elevated humidity and bunching decrease desiccation rate and increase survival of air-exposed fragments of the aquatic invasive plant *Hydrilla verticillata*. **Submitted** Journal: *Hydrobiologia*.
- II. Friess, D.A., Yando, E.S., Alemu, J.B., Wong, L.W., **Soto, S.D.**, and Bhatia, N., Ecosystem services and disservices of mangrove forests and saltmarshes. **Pending October 2020** Journal: *Oceanography and Marine Biology: An Annual Review*.
- III. **Soto, S.D.**, Mach, C. Portillo-Quintero, C. Rockwell, K. Erickson, and Barnes, M.A., *Hydrilla verticillata* biotype alters spatial distribution model predictions. **Target** Journal: *Diversity and Distributions*.

REVIEWER: PLOS One

ORAL PRESENTATIONS

S.D. Soto, D. Friess, N. Bhatia, December 2018. Examining coastal litter from an ecosystem service and disservice framework. International Conference of Plastics in the Marine Environment, Singapore, SG.

S.D. Soto, Barnes, M.A., Elevated humidity and bunching decrease desiccation rate and increase survival of air-exposed fragments of the aquatic invasive plant *Hydrilla verticillata*
October 2016. The Native Plant Society of Texas Fall Symposium, Glen Rose, TX.

Ann Miller Gonzales Graduate Research Grant Awardee

April 2016. 7th Texas Tech Annual Biological Science Symposium, Lubbock, TX.

2nd Place Natural Resources Management Warren Ballard Memorial Award

March 2016. Texas Academy of Science 119th Meeting, Junction, TX.

S.D. Soto, Mach, C. Portillo-Quintero, C. Rockwell, K. Erickson, Barnes, M.A., March 2016. The management of *Hydrilla verticillata* dispersal and distribution can be improved by using biotypes to produce species distribution models, Texas Tech Three Minute Thesis Competition, Lubbock, TX.

S.D. Soto, Roesler, E.L., Rogowski, D.L., March 2013. Effects of Allelopathic Chemicals of Common Reed (*Phragmites australis*) on Aquatic Invertebrates, 4th Texas Tech Annual Biological Science Symposium, Lubbock, TX.- **1st Place Undergraduate Researcher**

POSTER PRESENTATIONS

S.D. Soto, D. Friess, N. Bhatia, July 2019. Examining coastal litter from an ecosystem service and disservice framework. MMM5-Mangroves, Macrobenthos, and Management, Singapore, SG.

S.D. Soto, C. Mach, C. Portillo-Quintero, C. Rockwell, K. Erickson, Barnes, M.A., Incorporation of biotype alters species distribution model predictions of suitable habitat for the invasive aquatic macrophyte *Hydrilla verticillata*

August 2016. Ecological Society of America Meeting, Ft. Lauderdale, FL.

July 2016. Aquatic Plant Management Society 56th Annual Meeting, Grand Rapids, MI.-

1st Place Graduate Student Poster

July 2016. Annual Coordinating Committee Meeting Texas Fish and Wildlife Research Unit, Lubbock, TX.

S.D. Soto, Roesler, E.L., Rogowski, D.L., Effects of Allelopathic Chemicals of Common Reed (*Phragmites australis*) on Aquatic Invertebrates

October 2013. Society for Ecological Restoration, Madison, WI.

April 2013. Texas Tech Undergraduate Research Conference, Lubbock, TX.



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GRANTS AND FELLOWSHIPS



2018	Marine Science Research & Development Program of the National Research Foundation, International Conference on Plastics in the Marine Environment Sponsorship. \$150
2016	Native Plant Society of Texas, Ann Miller Gonzales Research Grant for Graduate Students. \$1,200
2016	Natural Resources Management Department, Texas Tech University, Travel Fall Scholarship Award. \$500
2016	Texas Tech University Graduate School, Travel Scholarship Award. \$400
2016	Association of Natural Resources Scientists, Travel Summer Scholarship Award. \$250
2016	Natural Resources Management Department, Texas Tech University, Travel Summer Scholarship Award. \$500
2016	Association of Natural Resources Scientists, Travel Spring Scholarship Award. \$200
2013	Natural Resources Management Department, Texas Tech University, Travel Fall Scholarship Award. \$400
2013	Center for Active Learning and Undergraduate Engagement Travel Scholarship, Texas Tech University. \$500

DEVELOPMENT WORKSHOPS

2016	Texas Tech University Teaching, Learning, & Professional Development Center Workshop: Science Databases
2016	Texas Tech University Teaching, Learning, & Professional Development Center Workshop: Publishing Research
2016	Texas Tech University Teaching, Learning, & Professional Development Center, Getting Your First Academic Job Panel Discussion
2016	Texas Tech University Graduate School, Statistics Workshop
2016	Texas Tech University Teaching, Learning, & Professional Development Center Workshop: How to Literature Review
2016	Texas Tech University Teaching, Learning, & Professional Development Center Workshop: Conference Prep
2016	Texas Tech University Teaching, Learning, & Professional Development Center Workshop: How to Submit a Proposal
2015	The University of Texas at Austin, Department of Statistics and Data Sciences, Geospatial Data Analysis in R Workshop
2015	Texas Tech University Graduate School, Writing a Research Statement/Proposal Workshop
2015	Texas Tech University, Student Organization Risk Management Training
2015	Texas Tech University, Natural Resources Management, Natural Resources Professionalism
2015	Texas Tech University, Student Counselling Center: Question, Persuade, Refer Training
2008	Texas Tech University, Study Abroad, San Pedro, Belize, Tropical Marine Biology, TTU Biology, Dr. Mark McGinley

COMITTEES AND VOLUNTEER SERVICE

2018-2019	Volunteer, Planning restoration, education activities, and mangrove tours, Restore Ubin Mangroves, Ria Tan
2018-2019	Volunteer, Leading and participating coastal cleanups, Nature Society Singapore
2018-2019	Volunteer, Leading and participating coastal cleanups, Trash Heroes Singapore
2017	Volunteer, Stream seining and fish identification, Texas Parks and Wildlife: Inland Fisheries and TTU Natural Resources Management, Dr. Sarah Fritts
2017	Volunteer, Endangered species trapping and tagging, TTU Natural Resources Management, Sam Harryman
2016-2017	Volunteer, Electro-boat surveying, Texas Parks and Wildlife: Inland Fisheries, Dr. Matthew Barnes
2016	Volunteer, Vegetation surveying, TTU Natural Resources Management Rangeland, Mark Johnson
2016	Volunteer, Environmental-DNA air particle collection and filtering, TTU Natural Resources Management, Mark Johnson
2016	Volunteer, Environmental-DNA water collection and filtering, TTU Natural Resources Management, Dr. Matthew Barnes
2015-2016	Vice President, Association of Natural Resource Scientists
2015-2016	President, WRECK the Stigma
2015-2016	Volunteer, Scales, Tails, and Trails, Association of Natural Resources Scientists
2015	Volunteer, Backpack-shocking and surveying, TTU Natural Resources Management, Dr. Allison Pease
2015	Volunteer, Radio telemetry/Mammal processing, TTU Natural Resources Management, Katie Guntly
2015	Volunteer, OpenStreetMap verification- Map a Thon, TTU Youth Mappers, Dr. Carlos Portillo
2013-2014	Volunteer, Surveying for <i>Assiminea Pecos</i> , TTU Natural Resources Management, Elizabeth Roesler
2013	Volunteer, Surveying for <i>Avicennia</i> seedlings, Florida Atlantic University, Dr. Donna Devlin
2013	Volunteer, Invasive plant removal and herbicide treatment, St. Lucie Inlet Preserve State Park, Dallas Shauan
2012	Volunteer, Deer aging, Texas Parks and Wildlife, Russell Martin
2012	Volunteer, Direct observation of <i>Ictinia mississippiensis</i> nests, TTU Natural Resources Management and Biology, Brandi Welsch
2012-2013	Vice President, Conservation Biology, Texas Tech University

REFERENCES



Dr. Matthew Barnes
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Dr. Daniel Richards
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Natural Capital SG
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