

A group of about seven students wearing backpacks are standing in a line on a grassy field, looking towards a line of trees in the background under a clear sky.

DIRECTED RESEARCH PROJECTS

THE SCHOOL FOR FIELD STUDIES

FALL 2025



Australia

A preliminary survey of the plant and animal biodiversity of a regenerative agroforest in northeast Queensland, Australia

Faculty advisors: Dr. Deborah Apgaua and Dr. David Tng

Student authors: Oliver Zach Sacher¹, Robert Chase Van Vranken², Dingyi Yu³

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A Snapshot of Biodiversity on Australian Savannah: Surveying the Faunal Diversity of Watsonville in North Queensland on Mbabaram Managed Land

Faculty advisor: Dr. Mia Derhe

Student authors: Diana Kettler¹, Ida Landecker², Lily Malkus³, Mohammed Rzane⁴, Meilynn Smith⁵, Tatianna Velicer⁶

¹ Austin College, ² Reed College, ³ Franklin and Marshall College, ⁴ University of Alaska Anchorage, ⁵ Grinnell College, ⁶ University of Southern California

How to Restore Mabi Rainforest on a Cinder Cone in the Atherton

Faculty advisor: Dr. Sigrid Heise-Pavlov

Student authors: Eden J. Leak¹, Nicholas V. McCarver²

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Urban Ecology and Diversity of Epiphytes on Street Trees in the Australian Wet Tropics

Faculty advisors: Dr. David Tng and Dr. Deborah Apgaua

Student authors: Hannah L. Flis¹, Javier Olmedo², Martin M. Kacin³, Niseya L. Guerra⁴, Shaylen C. Roell⁵

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Bhutan

Multi-Season Occupancy Analysis of Asiatic Wild Dogs in Paro Valley, Bhutan

Faculty advisor: Dr. Tshering Tempa

Student authors: Emmie Corbin¹, Mara Glinberg¹, Will Nakahara², Scout Noble³, Bryce Papp¹, Iris Petrin⁴

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Predator-Prey Dynamics: Co-Occurrence of Dhole with Livestock and Wild Prey in the Bumdra-Taksthang Area, Paro Valley

Faculty advisor: Dr. Tshering Tempa

Student authors: Jack Schwarting¹, Ellarain Moore², Michelle Laferriere³, Broden Walsh⁴, Sean Mulhall⁵, James Owen⁶

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A Comparative Study on Community-Based Tourism and Conventional Tourism in Punakha, Bhutan

Faculty advisor: Dr. Kuenga Wangmo

Student authors: Hazel Stanfield¹, Sophia M. Spindler-Krage², Emma DeFilippes¹, Olivia Chang³

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Setting Down the Plough: Agricultural Futures of Tourism in Bhutan

Faculty advisor: Dr. Kuenga Wangmo

Student authors: Elleanor da Silva¹, Forrest Feist², Grace Knuth³, Helena King⁴, Phebe O'Connor⁵

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Perceptions of Tourism's Impacts on Bhutanese Cultural and Religious Heritage

Faculty advisor: Dr. Kuenga Wangmo

Student authors: Ava Romano¹, Sophia Swanson², Cecily Trowbridge²

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Bridging the Gaps: Integrating Policy, Science, and Tradition in Bhutan's Water Governance

Faculty advisor: Dr. Norbu Wangdi

Student authors: Naisha Gaur¹, Ezra Krantz², Corinne LePage³, Maya Surbeck²

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Cambodia

Watersnake Bycatch and Trade, Kampong Khleang

Faculty advisor: Dr. Megan English

Student authors: Geffen Waterman¹, Emma Bilgreen²

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Participatory Land Use Research with Indigenous Researchers

Faculty advisor: Dr. Tim Frewer

Student authors: Yasmin Barnes¹, Elsa Tessandori²

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Food for Thought: The Household-Level Decision-Making for the Adoption of the Participatory Guarantee System. A Case Study at ECOFARM and FUDAC in Siem Reap, Cambodia

Faculty advisor: Dr. Jean-Christophe Diepart

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Chile

Field Protocol for Microplastic Sampling from Feces and Nest Material of Upland Geese (*Chloëphaga picta*) in Private Lands: A Case Study in Estancia Vega Castillo and Villa Rio Serrano, Torres del Paine, Chile

Faculty advisor: Dr. Glenda D. Hevia

Student authors: Ashley Martinez¹

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An Analysis of Potential Threats to Waterfowl Nesting Behavior in a Rural Patagonian Wetland

Faculty advisor: Dr. Glenda D. Hevia

Student authors: Norah Goldbecker¹, Isabel Goldstein², Summer Saifee³, Shreya Shah⁴, Elanora Smith⁵

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Benthic Macroinvertebrate Community Responses to Invasive Salmonids in the Southern Magellanic Region, Chile

Faculty advisors: Dr. Glenda D. Hevia and Paola A. Goich

Student authors: Cassia Post¹, Froney Dreher², John Middleton³

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Evaluating Techniques for In-Situ Black Carbon Monitoring on Snowpack in Southern Patagonia and Identifying Potential Sources of Contamination

Faculty advisor: Dr. Francisco Aguirre

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Saxicolous Lichens of the High Andean Region in Southern Patagonia

Faculty advisor: Dr. Francisco Aguirre

Student authors: Ingrid Noren¹, Molly Hunt²

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An Exploration of Hydrologic and Geological Characterization in Río Rincón and Río Nutria Watersheds and Laguna Sofía Area as a Baseline for Future Climate and Hydrological Modeling in the Última Esperanza Region, Southern Patagonia

Faculty advisor: Dr. Francisco Aguirre

Student authors: Grace Gordon¹, Olivia Mohel¹, Natalie Hood²

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Snowmelt Dynamics Across Two Different Watersheds in Southern Patagonia

Faculty advisor: Dr. Francisco Aguirre

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Land Cover Mapping and Analysis of the Predictive Power of Temperature on Organic Land Cover Types

Faculty advisor: Dr. Francisco Aguirre

Student authors: Yonatan Grossman¹

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Perceiving Socioecological Change: Stakeholder Narratives of Tourism, Aquaculture, and Environmental Governance in Última Esperanza, Chile

Faculty advisor: Florencia Sánchez, Doctoral Candidate

Student authors: Diana Borrison¹, Kjellen MacBain², Alexa Terry³, Sarah Van Lonkhuyzen³

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Microplastics in the Última Esperanza Fjords: Environmental and Community Impacts in Puerto Natales

Faculty advisor: Florencia Sánchez, Doctoral Candidate

Student authors: Sam Benjamin¹, Dalia Luckhardt², Bernie Townsend³

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Monitoring Didymo in Spring-Fed and Glacial Rivers of Magallanes: Educational Awareness for Didymo Control in Puerto Natales

Faculty advisor: Florencia Sánchez, Doctoral Candidate

Student authors: Nathan Havens Spigel¹

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Costa Rica

Cultivating Agroecological Resilience: Honey Production and Agrotourism in the Bellbird Biological Corridor

Faculty advisor: Mary Little, L.L.M., Doctoral Candidate

Student authors: Emma Larson¹, Lillian Robinwhite²

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Connecting Canopies: Identifying Priority Areas for Ecological Connectivity and Arboreal Mammal Conservation in Atenas (Alajuela, Costa Rica)

Faculty advisor: Milena Cambroner, M.Sc.

Student authors: Catherine Ferrantino¹, Hadas Brownstein², Elliot Needle³, John Ramsey⁴

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Through the Looking Glass: The Role of Coloration in Highland Neotropical Salamanders

Faculty advisor: Jeremy Klank, M.Sc.

Student authors: IZ Kurtz¹, Jenna Gentert-Corso², Anika Overvoorde¹

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A Comparison of Diet Between Three Highland Neotropical Bolitoglossa Salamanders in Costa Rica

Faculty advisor: Jeremy Klank, M.Sc.

Student authors: Lesly Hernández¹, Liam Shields²

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Croatia

Abundance Estimate of Bottlenose Dolphins (*Tursiops truncatus*) in the Cres-Lošinj Site of Community Importance

Faculty advisor: Dr. Grgur Pleslić

Student authors: Alina Barreto Cubiña¹, Molly Butts², Anthony Stackle³, Ellie Thomas⁴

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Social Stratification in Kvarnerić Bottlenose Dolphins Based on Sex and Reproductive Status

Faculty advisor: Dr. Grgur Pleslić

Student authors: Katie Brown¹, Bailey Carmack², Anna Grez³, Rowan Mulder⁴

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Trawler Activity and Bathymetry Shape Habitat Use and Behavior of Bottlenose Dolphins (*Tursiops truncatus*) in the Cres-Lošinj Archipelago

Faculty advisor: Dr. Grgur Pleslić

Student authors: Stephanie Charbonnier¹, Mariah Davis², Abigail Donovan³, Anna Mazur⁴

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Seasonal High-Risk Interaction Areas Between Small and Large Juvenile Loggerheads and Industrial Fisheries in the Adriatic Sea

Faculty advisor: Matic Jančič, Doctoral Candidate

Student authors: Sae Ackerstein¹, Julia Norton², Olivia Schreinert³, Ali Wawner⁴

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Behavioral Effects of Satellite Tag Attachment on Neonate Loggerhead Sea Turtles

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Correlating the Health Status and Epibiont and Ectoparasite Loading of Loggerhead Sea Turtles (*Caretta caretta*) in the Adriatic Sea

Faculty advisor: Mateja Zekan Lupič, M.Sc.

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Italy

Assessing the Impact of Agroecological Practices on Soil Health Using QBS-ar Index and Other Soil Quality Indicators: A Study in Tuscany, Italy

Faculty advisor: Dr. Gherardo Biancofiore

Student authors: Daniel Williams¹, Grace Ellsworth², Maeve Merrick³, Mary Parks⁴, Savannah Wickam⁵

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How Does Consumer Satisfaction Reflect Physiological Indicators of Produce Quality in Pears and Cauliflower Sold in Various Store Types Across the Florence–Greve Area?

Faculty advisor: Dr. Filippo Randelli

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Kenya

The Status of Lions in Amboseli National Park, Amboseli Ecosystem

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Hyena Den Distribution, Prey Preference, and Human–Hyena Interactions in the Amboseli Ecosystem

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How Human–Wildlife Coexistence Is Understood by Different Stakeholders in the Amboseli Ecosystem

Faculty advisor: Dr. Lucy Atieno

Student authors: Mindy Mitchell¹, Josie Dickman², Tamar Breines³, Montana Gura²

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Panama

Using the Q-Methodology to Understand Different Perspectives on Land Use on Isla Colón, Panamá

Faculty advisor: Holly Hummel, M.A.

Student authors: Alice O’Neal-Freeman¹, Isabelle Rowley², Leila Bannon³, Emily Taylor¹, Luna Wilhelm⁴

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Cacao Land Management Effects Diversity and Community Dynamics of Leaf-Litter Frogs in Bocas del Toro, Panamá

Faculty advisor: Dr. Daniel Medina

Student authors: Ariel Dean¹, Forrest Kayser², Robyn Altham³

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The Impact of Land-Use Changes on Habitat Use and Behavior of the Strawberry Poison Dart Frog, *Oophaga pumilio*, in Bocas del Toro, Panamá

Faculty advisor: Dr. Daniel Medina

Student authors: Esther Calvert¹, Olivia Britton², Haley Novonthy³

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Structure of Fish Communities Associated to Acroporid Patches Impacted by a Recent Coral Bleaching Event in Bocas del Toro

Faculty advisor: Dr. Dagoberto E. Venera Pontón

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Peru

An Evaluation of the Cultural and Economic Benefits of Medicinal Plant Usage in Chirikyacu Indigenous Community, San Martín, Peru

Faculty advisor: Dr. Cecilia Beatriz Barriga Bahamonde

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¹ Bard College

Examining Community-Conservation Methods in Peru: An Analysis of Subsistence Hunting Practices of the Chirikyacu Native Community and Their Impact on Terrestrial Mammals

Faculty advisor: Dr. Cecilia Beatriz Barriga Bahamonde

Student authors: Julia Charlwood¹, Liam Pentangelo²

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Impact of Chakra Agricultural System on Bat Functional Diversity in the Northern Peruvian Amazon

Faculty advisor: Ricardo Sánchez Calderón, M.Sc.

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Frugivorous Bat Interactions with Plants and Their Role in Seed Dispersal Across an Agricultural Gradient in a Peruvian Indigenous Community

Faculty advisor: Ricardo Sánchez Calderón, M.Sc.

Student authors: Charlie Fox-Whelpton¹, Ryley Olsen², Davis Peltier³

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Assessing the Impact of Chacras Agricultural System on Bat Community Health in the Northern Peruvian Amazon

Faculty advisor: Ricardo Sánchez Calderón, M.Sc.

Student authors: Ellie Connor¹

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Contested Conservation: Power, Narratives, and Environmental Justice in Cordillera Escalera Protected Area

Faculty advisor: Dr. Edwin Rap

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Tanzania

Local Communities' Understanding, Attitudes, and Perceived Socio-Economic Impacts of Carbon Tanzania's Lake Eyasi Project

Faculty advisor: John Mwamhanga, M.Sc.

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Assessing Carbon Trade Impacts on Environmental Health from Local Perspectives in Lake Eyasi Basin, Northern Tanzania

Faculty advisor: John Mwamhanga, M.Sc.

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Assessing the Use, Preservation, and Integration of Traditional Knowledge within Burunge Wildlife Management Area

Faculty advisor: John Mwamhanga, M.Sc.

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The Effect of Burning on Wildlife Habitat Health Seasonally in Burunge Wildlife Management Area – Tanzania

Faculty advisor: Dr. Shem Mwasi

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Diversity of Birds, Small Mammals, and Associated Ectoparasites in Karatu and Monduli Districts, Northern Tanzania

Faculty advisor: Dr. Egidius James Rwebuga

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Effects of Human and Lion Activity on Temporal Activity Patterns of Mesopredators in Ndutu Area

Faculty advisor: Dr. Bernard Kissui

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Turks and Caicos Islands

CoastWISE (Coastal Wealth, Integrity, and Service Evaluation): Using Mixed Methods to Assess and Value Coastal Ecosystem Services in South Caicos

Faculty advisor: Dr. Yuqian Zhang

Student authors: Sylvie Archer¹, Alyssa Castro²

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Decipher the Secret Language of the Sea: An Assessment of South Caicos' Nearshore Reef Soundscapes

Faculty advisors: Dr. Yuqian Zhang and Mikayla Carrier

Student authors: Nora Hakimian¹, Gregory Garlisch², Marguerite Bartlett³

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When Life Gives You Lemons: Assessing the Juvenile Lemon Shark Population Around South Caicos

Faculty advisor: Dr. Stephan Bruns

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Itty Bitty Pygmy Committee: Behavior, Skin Patterning, and Substrate Use by Two *Paraoctopus* spp. of South Caicos

Faculty advisor: Dr. C.E. O'Brien

Student authors: Gilang Arifin¹, Caroline Brecke², Delia Parco³

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OctoPop: Prey Selection, Prey Handling, and Skin Patterning in *Octopus insularis* of South Caicos

Faculty advisor: Dr. C.E. O'Brien

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