

2021 Mortar Board Outstanding Senior Recognition Ceremony

W.A. Franke College of Forestry and Conservation

Department of Forest Management

| <u>Major</u> | <u>Student</u> | <u>Presenter</u> |
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| Forestry | Jake Reller | David Affleck |

Jacob Reller is an outstanding representative of the Forestry program and is nominated by the faculty for his leadership and service. Throughout his time here, Jacob has been a resource for faculty and students, and is recognized for going above and beyond in mentoring and supporting his classmates. His demonstration of support for his classmates, his initiative, and his openness are the essence of Mortar Board ideals.

Jacob entered the Forestry program after several seasons working on trail crews around Montana. As a result of field experiences and opportunities to engage with forestry professionals here, he broadened his academic program to include a minor in Wildland Fire Sciences and Management and a certificate in GIS Sciences and Technologies. Jacob worked as a Pathways Intern in the Northern Rockies last summer, and upon graduation plans to begin a career as a forester with the US Forest Service.

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| Forest Operations | Samuel Robert Malloy | David Affleck |

Samuel Malloy graduated from the Bachelor of Science in Forestry (Forest Operations) program at the top of his class and with honors. He was nominated by the faculty for his scholarship and service, and was recognized as a broad thinker, adept at weighing and communicating competing resource management needs and solutions.

Samuel came to the University from Bozeman, Montana, with only a passion for the outdoors. He quickly identified Forestry as the right program and profession for him, and proceeded to build numerous extra-curriculars - teaching assistantships and club activities (including the Foresters' Ball) - into his academic program. Moving forward, Samuel plans to continue working for the Montana Department of Natural Resources and in the GIS field.

Ecosystem Science and Restoration Program

| <u>Major</u> | <u>Student</u> | <u>Presenter</u> |
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| Terrestrial | Nathaniel Maxwell Miller | Lisa Eby |

Nathaniel has excelled academically as a student in the Ecosystem Science and Restoration Program and the Honors College, repeatedly making the Dean's List 6 times, and graduating with two minors Business Administration and Biology. Nathaniel has been a key project leader in building Montana's First Firewise Demonstration Garden on campus as a senior Capstone Project with fellow ESR seniors Melody Hollar, Zachary Garibay, and William Stevens. They have held six volunteer events, engaging over 30 volunteers, putting 300 labor hours into the project. He also helped craft their successful application to the Montana Department of Natural Resource and Conservation's Fire Adapted Montana Program, being awarded with a \$7,500 grant and was awarded \$915 through the Associated Student at the University of Montana through their Research and Creative Scholarship Fund-Experiential Learning Fund Scholarship. This project is the first of its kind in Montana, and will provide a helpful resource for local residents on how they can landscape using fire-resistant, native plants and fire-resistant landscaping materials to reduce the risk of their home being lost in a wildfire.

He has been able to gain additional experience in the field. In 2018-2019, he was a Forest Ecology Research Technician with the Bioenergy & Biofuels Integration Project, assisting a graduate student under Prof. John Goodburn, gaining experience in research, data collection, entry and management. He has also completed two terms-of-service with the Montana Conservation Corps as a Summer Conservation Intern. His first term-of-service was in the Summer of 2019 with the East Zone of the Lolo National Forest controlling invasive plants. His second term-of-service was in the Summer of 2020 with the Butte Field Office of the Bureau of Land Management, conducting stream surveys. Through his time at UM, he has gained a number of experiences that involve academic rigor, hands-on experience in his field, project leadership, and building a professional network that will launch him into a successful career post-graduation.

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| Aquatic | Danielle Novotny | Lisa Eby |

Danielle graduated Magna Cum Laude with a very strong academic background and high GPA. In addition to achieving high honors, her senior capstone experience involved working with a local community sponsor (Trout Unlimited) and carrying out an aquatic restoration monitoring project. The year and a half experience included writing a proposal for riparian monitoring, the implementation of monitoring in a field setting, data collection, the analysis of biological data post monitoring and compiling the results through an extensive research paper. Her project group presentation won the University of Montana Conference on Undergraduate Research (2020) for presentation winner in the physical sciences category based on this research

paper entitled: “The Pace of Recovery of Riparian Ecosystem Structure in Restored Reaches of Ninemile Creek”.

Concurrent with her coursework and capstone project, she had the opportunity to work within an academic research lab for over a year as a research assistant. This lab’s predominant work focused on the drivers and patterns of elements within ecosystems, many of the current projects were based around the Clark Fork River Superfund site as well as other local watersheds. During her time in the research lab, she honed her field, lab and collaborative skillsets within area of conservation. Some of the specific duties included: macroinvertebrate identification, writing and implementing a variety of protocols, extensive field and lab work, and working on the Long-Term Research in Environmental Biology (LTREB) on the Clark Fork River. During her undergraduate time at UM, she also had the opportunity to do an internship with the Montana Natural History Center which provided an opportunity to see the inner workings of a local nonprofit organization with a focus on community outreach. Throughout all of these experiences Danielle shined through her academic achievements, her capstone project and award-winning presentation, her work experience in the field and lab, and internship with a local nonprofit.

Environmental Sciences and Sustainability

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| Resource Conservation | Eleanore McManus | Laurie Young |

While in Missoula, Elly worked at the National Wildlife Federation on outreach related to beaver restoration and wildlife conflict resolution. She also collected field data on interactions between insect populations in pear orchards in Washington. Elly has completed her Wilderness Emergency Medical Technician training and will be working on wildlife and conservation research in Arizona after graduation. She has volunteered with the Wildlife Society/Flagship After-School Program and with the Watershed Education Network.

She was a member of Backcountry Hunters and Anglers and received the Rebecca Romero Hunting Legacy Awards, which enabled her to hunt for the first time. Elly loves exploring outside, whether hiking, backpacking, sea kayaking, rock climbing, sunset watching, skiing, rock flipping, or stargazing. Once the pandemic has subsided she is looking forward to swing dancing on a regular basis and enjoying live music with friends!

Geography

| <u>Major</u> | <u>Student</u> | <u>Presenter</u> |
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| B.A. Geography Community and Environmental Planning Option | Bradley Smith | Sarah Halvorson |

Bradley Smith truly stands out at the top of his cohort. He came to UM with a unique background and set of experiences from years of living in distant places such as Hawaii, Saudi Arabia, and elsewhere. He has excelled in all of his courses and contributed a great deal to the exchange of ideas both inside and outside the classroom. He is fascinated by the complex interactions between people and the environments they inhabit and is highly committed to fostering sustainable and innovative living and working spaces.

Drawn to land use planning and the urban planning profession, he enthusiastically delved into coursework to complete the B.A. in Geography and the Option in Community and Environmental Planning. He furthered his professional knowledge by completing the LEED Green Associate Certification. The Department of Geography applauds his motivation, intellect, desire to serve, and work ethic.

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| B.S. Geography | Margie Erin Knapp | Sarah Halvorson |

The Department of Geography is proud to have Margie Erin Knapp as our outstanding senior in the B.S. in General Geography. Erin is a knowledgeable and engaged student who consistently made the President's List. As a non-traditional student, she brings tremendous insights from her previous life experiences to her studies. Erin has great passion for science, the dynamics of natural systems, geospatial technologies, cartography and making a positive contribution to the world around her.

She excels in writing and research, showing a special interest in science communication and policy analysis. We appreciate her service and leadership as the Co-President of the Geography Club, student representative, and member of Gamma Theta Upsilon. After graduation, she intends to assist with natural disaster mitigation and response through crisis mapping using GIS technologies. Erin is a true geography enthusiast, and we are thrilled to honor her accomplishments.

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| B.S. Geography Planning Option | Robert Schreiner | Sarah Halvorson |

Robert Shreiner has distinguished himself while pursuing a B.S. in Geography with the Option in Community and Environmental Planning. He has also successfully completed the GIS Sciences & Technologies Certificate. Robert embodies the interdisciplinary nature of Geography, demonstrating focused interest in environmental planning, water resources, and community resilience, and more. Robert embarked on his Geography degree, building upon his training and expertise gained while serving in the U.S. Air Force.

Robert's insatiable curiosity, positive outlook, thoughtful perspective, and intellectual abilities made working with him a pleasure for Geography faculty and fellow students. We are confident that Robert will meet great success in the future.

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| B.S. Geography Physical Option | Zoe Tyson | Sarah Halvorson |

Zoe Tyson is a dedicated student of Geography. In addition to satisfying the requirements for the B.S. degree with the Option in Physical Geography, she distinguished herself in independent research situations. She is captivated by the geographical perspective and the study of human-environment interactions. Her passion for geographical inquiry led her to undertake a substantive study of glacial hazards and their physical and societal implications in the Karakoram-Himalayan region.

Zoe has a strong interest in the mountainous regions of Central and South Asia and hopes to continue engaging in this dynamic part of the world. She graduates this spring with a strong desire to pursue a lifetime worth of learning in the field of geography.

Parks, Tourism, and Recreation Management Program

| <u>Major</u> | <u>Student</u> | <u>Presenter</u> |
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| Parks, Tourism, and Recreation Management | Jaime Breisch | Elizabeth Covelli Metcalf |

Jaime is a tremendous student, seizing every opportunity at UM. She is in the top of her class in PTRM, and also minored in Wilderness and Civilization, completed the Global Leadership Initiative, and Northern Rockies Outdoor Leadership Initiative. Making her a true leader in the field of wildland recreation management.

For her senior project, Jaime led an effort to design a questionnaire for a high use recreation area. She collected data, analyzed the data, and led her group in writing a technical report. She also leads in the area of women and hunting where she actively encouraged more college aged students to learn to hunt. Jaime is a true star of PTRM!

Resource Conservation Program

| <u>Major</u> | <u>Student</u> | <u>Presenter</u> |
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| Resource Conservation | Grace Stavich | Laurie Yung |

During her time as a Resource Conservation student at the University of Montana, Grace worked two summers as an ecological rangeland field technician, and for two seasons as a trip leader for the UM Outdoor Program Freshman Wilderness Experience. She recently completed her Wilderness First Responder Certification. Grace loves being outdoors in any capacity - hiking, camping, backpacking, climbing, or just relaxing in a hammock with a good book. Grace presented at the UM Conference on Undergraduate Research about a zero waste system for the University Center. She is currently finished up a capstone project with the Montana Climate Office. After graduation, Grace will be working for the Sequoia National Forest in the giant sequoia groves that burned in the 2020 Castle Fire.

Wildlife Biology Program

| <u>Major</u> | <u>Student</u> | <u>Presenter</u> |
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| Aquatic | Hayden Cody | Chad Bishop |

Hayden Cody seized the day as a UM student! He excelled in academics, leadership, and experiential learning throughout his undergraduate degree. He completed internships and jobs focused on fisheries conservation and management at various locations in Montana and Minnesota. He was President of the UM student chapter of the American Fisheries Society and was actively engaged with the Clark Fork Coalition, Trout Unlimited, and Backcountry Hunters and Anglers.

Throughout his degree program, Hayden played key roles in helping other students gain hands-on opportunities related to a fisheries education. Hayden also found time to conduct his own independent research. He studied seasonal movements of trout in headwater streams. He received an Irene Evers grant to support his research and presented his research findings at the 2020 annual meeting of the Montana American Fisheries Society. Hayden capitalized on the opportunities before him at UM and is set up well for an impactful career in fisheries conservation.

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| Terrestrial | Miles Scheuering | Chad Bishop |

Miles Scheuering excelled as an undergraduate student in the wildlife biology program, earning a 3.97 GPA while taking a demanding set of coursework. Miles completed an advanced senior thesis project using Google Earth Engine and advanced analytical methods to evaluate wetland abundance and quality in Mexico and its effects on migratory birds. He focused in particular on distribution and effects of shrimp farms. His thesis represents advanced work for an undergraduate and will be suitable for publication.

While completing his senior thesis, Miles independently developed close working relationships with biologists in Mexico. Additionally, he was invited to present the results of his research at several prominent meetings across North America to the professionals responsible for managing and conserving migratory birds. He has a confident yet engaging personality that has allowed him to open new doors for future collaboration. As an undergraduate, Miles accomplished research that will benefit bird conservation in North America.