

# Scientist of the Month



## Sable Scotton

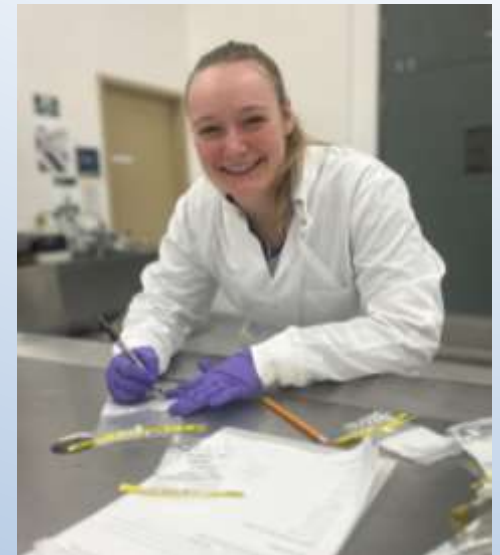
Sable Scotton is a third-year BLaST scholar and a junior at UAF earning a BS degree in Wildlife Biology and Conservation. She grew up on the Yukon River in Galena, Alaska, a village of only 460 people in the Interior. Scotton is also a UAF Honors student and Climate Scholar and is interested in ecological contaminants and their effects on wildlife and people. She plans to study abroad in Bergen, Norway in spring 2025, and shared, "I am excited to experience a new place and culture." In her free time, she enjoys hiking, skiing, and baking.

## Research

Scotton's current research project, "Mustelids as Indicators for Alaska One Health," investigates contaminants and zoonotic pathogens in marten, mink, and otters. Scotton's project is focused on microplastics in various tissues from these animals. She is working under UAF assistant professor of veterinary medicine, Dr. Marianne Lian, and her One Health Wildlife Lab (OWL). Their lab has had a collaborative partnership with the statewide organization Alaska Trappers Association to collect carcasses of trapped animals from around the state. These are necropsied, and tissues are collected to test for microplastics in the lungs, heart, brain, and gastrointestinal tract. "We are curious how microplastics move through the ecosystem and if there are trends of concentration related to the animals being exposed to human interactions such as access to road systems." Their project uses these species as indicators for Alaskan ecosystem health. Previously, Scotton worked under UAF associate professor of wildlife and ecology, Dr. Todd Brinkman, measuring caribou calves featured in game camera photos. Scotton shared, "We were working on creating a formula that could be used to calculate caribou calve growth based on their size (in pixels) and their distance from the camera."

## Mentoring

Scotton would like to thank her current research mentor Dr. Lian for working with her and sharing her knowledge. Scotton would also like to thank Dr. Brinkman who first introduced her to research at UAF. Brinkman shared, "Sable's pragmatic and critical thinking helped us assess the real-world application of our technique." Scotton continued, "Additionally, I would like to thank all the BLaST RAMPS I have had over the years including Hannah Robinson, Sarah Barcalow, Nikola Nikolic, Logan Ito, and Lori Gildehaus for helping and supporting me. I would also like to offer a big thank you to all the trappers who have donated to our project, and to the staff at the Biological Research and Diagnostics (BiRD) Lab, especially Christine Terzi [UAF research technician] in her help facilitating the space for the necropsies."



**Top left:** BLaST Scholar Sable Scotton enjoying the summer sun. Homer, Alaska. (June 2024, Photo credit for this photo and the next photo: Sam Banks)

**Left:** Scotton conducting fieldwork on Murphy Dome, Fairbanks, Alaska. (January 2024, Photo credit: S. Banks)

**Right:** Scotton in the Biological Research and Diagnostics (BiRD) Necropsy Lab, UAF Campus. (December 2024, Photo credit M. Lian)

