NATIONAL ESTUARINE RESEARCH RESERVE

Student Exchange

Lake Superior National Estuarine Research Reserve

University of Wisconsin-Superior

University of Alaska Anchorage

Kachemak Bay National Estuarine Research Reserve

January-July 2016

UNIVERSITY OF ALASKA ANCHORAGE

UW-Superior student and Lake Superior National Estuarine Research Reserve intern Adam Lein studied at the University of Alaska Anchorage from January to May 2016 as a participant in the National Estuarine Research Reserve Student Exchange.

During his semester at UAA, Adam took core courses like cell biology and organic chemistry and was also able to take courses that afforded him experiences unique to Alaska. He especially enjoyed a course on marine mammal necropsy techniques, in which he and his classmates conducted surgical examinations to determine the cause of death of marine mammals. Adam also visited a fish hatchery for his ichthyology (fish science) course, where he received a behind-the-scenes tour.

Outside of coursework, Adam found opportunities to explore the many parks and natural areas in and around Anchorage. One memorable hike was an ascent of Flattop Mountain, where he fondly recalls the scenic view overlooking Anchorage and the scurrying ptarmigans (pictured, left). He also participated in a full-day HAZWOPER training that certified him for cleaning sea otters in the case of an oil spill.

KACHEMAK BAY RESEARCH RESERVE

Following the spring semester, Adam worked at Kachemak Bay Research Reserve in Homer, Alaska, from May to July. While there, he helped out with System-Wide Monitoring Program (SWMP) sampling, analyzed water samples for fluorescence and documented the differences between freshwater and saltwater sonde-to-lab analysis. Adam also helped out at Discovery Labs teaching the public about the local bay and the ocean.

While in Homer, Adam found time to participate in a Master Naturalist training, where he learned about the area and its diverse organisms, including whales. This training inspired him to reach out to whale-watching crews to learn more about monitoring efforts, ultimately leading to his participation in two whale-watching tours. Following the tours and discussions with the boat crews regarding their observations, Adam compiled a map showing where whales are typically spotted in the bay. This initial geographic data could lead to research that investigates why whales frequent specific areas and, more broadly, how the whales use the bay. If recordkeeping continues, the presence or absence of whales could be considered a key indicator of water conditions and the general health of the bay ecosystem.

To round out his Alaska experience, Adam participated in documenting salmon in uncharted streams and cleared overgrowth from state park trails. “This entire Alaska trip was a great experience,” he said. “I can’t wait to go back.”