U.S. Fish & Wildlife Service / Alaska Maritime National Wildlife Refuge / Aleutian Islands Unit

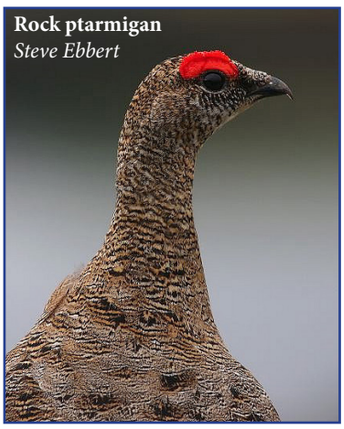
FROM THE WILDSIDE

September 2015

Sayonara, Seabirds and Seasonals

The auklets have gone back to sea, ledgenester cliffs are emptying quickly, and the last of the puffins and storm-petrels will be heading out soon. The *Tiglax* is currently picking up our seabird monitoring crews and bound for Homer, but the end of the Refuge's field season is only the beginning for others. *Tiglax* will have just a couple of days in Homer before they head out on charters to recover whale recording buoys in the Gulf of Alaska and engage in another round of oceanographic work along the Seward Line. R/V *Maritime Maid* will be in and out of Adak as they ply the Aleutians this fall with a medly of researchers aboard for the GeoPRISMS (Geodynamic Processes at Rifting and Subducting Margins) Program. R/V *Norseman* will be stopping here in late September for a marine mammal research crew change. Last but not least, the Kittlitz's murrelet monitoring team will be back in Adak in late September/early October to recover trail cameras and collect nest site data. A busy fall ahead!

Tiglax heading home
Travis S



Rock ptarmigan
Steve Ebbert

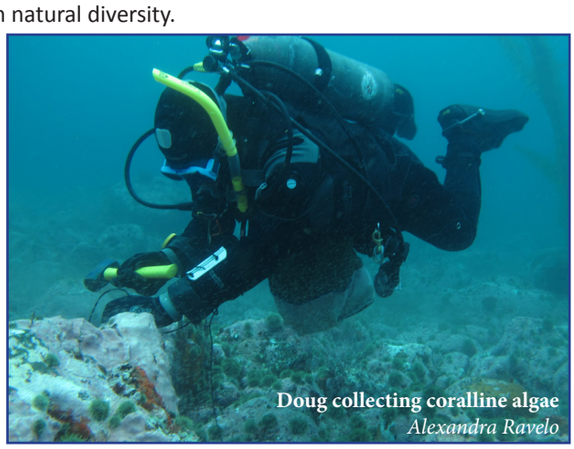
Adak Activities in 2015

Most of the work the Refuge supports from its Adak office happens further afield, but each year a smattering of activities occur in our own back yard. Here is a quick summary of this summer's Adak projects:

Rock Ptarmigan.--Steve Ebbert (AMNWR), Clait Braun (Grouse Inc.) and Bill Taylor (Wildlife Vet Consulting) established survey routes on Adak, Amchitka and Attu. We hope to repeat these surveys annually to learn about population changes across the western Aleutians.

Kagalaska Caribou.--USDA Wildlife Specialists worked off *Tiglax* to cull nine caribou that had swum to Kagalaska from Adak, and the meat (over 1,200 lbs) was distributed to Adak residents. The Refuge does not want a population of non-native ungulates to become established on Kagalaska, because the resulting changes to the island's ecosystem would be incompatible with the Refuge's responsibility to maintain natural diversity.

Kittlitz's Murrelets.--Every summer Robb Kaler (USFWS Migratory Bird Management) and Leah Kenney (USFWS Ecological Services) return to Adak to search for the nests of this elusive and mysterious seabird. You can read about their work in more detail in last month's issue of *The Eagle's Call* (available on the City of Adak's website).



Doug collecting coralline algae
Alexandra Ravelo

Subtidal Ecology.--Doug Rasher (Univ. of Maine post-doc), Ben Weitzman (USGS) and Kristy Kroeker (UC Santa Cruz) collected coralline algae and sea urchins in nearshore waters. These were kept alive and shipped to labs where they'll be exposed to various environmental conditions, in order to reconstruct the ecological history of coastal marine systems in the Aleutians, including the deeper time ecology of sea otters and kelp forests and some of the influences of ocean acidification in cold, high-latitude oceans.

Takakia sp.
Derek Sikes

Botanical Collections.--Steve and Sandy Talbot (USFWS Regional Botanist and USGS Research Geneticist, respectively) came out to continue vegetation ecology and colonization genetics studies as part of their post-eruption Kasatochi work, but also collected, in addition to other plants on Adak, hard-to-find and almost-as-hard-to-classify *Takakia* sporophytes for genomic analysis. This tiny velvety moss was long thought to be a liverwort, and is so unusual the Japanese name for it, nanjamonja-goke, means "impossible moss". These collections are part of an international collaborative effort to update the knowledge of the bryoflora of the Aleutian Islands.

A weevil (Entiminae) on Kuluk Beach
Derek Sikes

Insect Collections.--Derek Sikes (Curator of Insects at the Univ. of Alaska Museum) and Logan Mullen (UAF grad student) went in search of rove beetles in the remnant snow patches on Mt. Moffett. Logan's thesis project is a taxonomic revision of the rove beetle genus *Phlaeopterus*, using morphological and molecular data. Derek came out to continue his post-eruption work at Kasatochi, documenting the recovery of terrestrial invertebrates, but seas were too rough to get ashore, so he made the most of his time fossicking for fascinating bugs at Atka, Little Tanaga and Adak.

Wednesday Walkabouters greet a harbor seal in Shagak Bay

Soil Microbes.--Lydia Zeglin (Assistant Professor of Microbial Ecology at KSU) continued her time series of soil sampling transects on Adak. Lydia is another member of Kasatochi's post-eruption research team, but is also interested in larger scale microbial diversity and processes, and has collected samples from islands throughout the Aleutians; this was her third year working on Adak. She graciously invited the Wednesday Walkabout group to join her and help with sampling, and told us some jaw-dropping stories about the amazing mob of microbes that live upon, within, and all around us.

Lydia pointing out one of 80 ash layers representing 10,000 years of deposition in a 3-m bank on the way to sample soil microbes

Wednesday Walkabout.--All summer, the Refuge provided a weekly opportunity for Adak's kids to explore their island's wild side, having fun and learning heaps at the same time.