

STATUS OF REFUGE FIELD PROJECTS, JUNE 2008

Habitat Restoration/Invasive Species Management

Invasive Species Projects

Bird studies at Rat I.: Pre-rat eradication studies on birds are nearing completion (crews will be picked up about June 20). Data have been collected on some species of waterfowl, shorebirds, seabirds, and songbirds and on bald eagles and rock ptarmigan to document population levels now for comparison with similar studies after rats are removed in October 2008 to evaluate the response of birds after rat eradication.

Bird studies at reference islands near Rat Island: In early June surveys were completed on islands near Rat Island for some species of waterfowl, shorebirds, seabirds, and songbirds as well as rock ptarmigan to provide a reference for comparison of changes that will be detected at Rat Island after rat eradication there. In other words, we need to know whether region-wide population trends are going on to properly interpret changes at Rat Island related to rat eradication. Surveys were conducted at Kiska, Segula, Davidof, Khvostof, Amchitka, and Adak islands.

Study of effects of rats on auklets at Kiska: Graduate students from Memorial University in Newfoundland (under the supervision of Dr. Ian Jones) are continuing to study the effects of Norway Rats on auklets at Kiska Island. In late May it appeared that the harsh winter resulted in relatively low rat populations this spring, so possibly auklet productivity might not be drastically affected by heavy predation by rats in early spring.

Nocturnal seabird restoration study: Graduate students from Memorial University and Simon Frazier University are conducting social facilitation (call playbacks) at Little Sitkin and Amatignak islands to determine whether this technique will be useful in attracting nocturnal seabirds like storm-petrels and ancient murrelets to islands after invasive species are removed.

Inventory and Monitoring

Annual Monitoring Projects

Cape Lisburne: Final preparations are being made to go to C. Lisburne in July to continue the long-term monitoring of kittiwakes and murrelets there. This site is particularly affected by ice so it will be interesting to see the effects of the long, cold winter.

Pribilof Islands: Refuge field crews began the annual seabird monitoring at St. Paul and St. George islands in May. The primary species are cormorants, kittiwakes, murrelets, and least auklets. A very cold winter has been followed by a very cold spring and some kittiwakes built nests on snow banks covering cliff ledges. Nevertheless, kittiwake

nesting is well underway; the first murre eggs were noted about June 17 and the first black-legged kittiwake chick was seen on June 19, both early as the species tend to be in cold springs (probably based on good productivity in the cold waters. Auklet survival studies were delayed due to snow covering talus nesting areas at St. George, but band resightings have now been completed and productivity monitoring is underway. Population counts will begin in early July.

Aleutian Sites: Crews at Aiktak, Kasatochi, and Buldir are well underway with seabird monitoring projects. The primary groups of seabirds include: storm-petrels, gulls, kittiwakes, auklets, murres, and puffins. Although snow lingered relatively late this spring, timing of nesting for most species appears to be relatively normal. Storm-petrels may have been slightly delayed due to ice in burrows longer than normal. The first auklet chicks were seen on June 19.

Barren Islands: Final preparations are being made to send a crew to East Amatuli Island to continue the annual seabird monitoring there for storm-petrels, kittiwakes, murres, and tufted puffins.

St. Lazaria: Crews got monitoring underway in May for cormorants, storm-petrels, gulls, and puffins. So far it appears most species started nesting relatively early or at normal times.

Other Inventory and Monitoring Projects

Intermittent site surveys, Afognak/Kodiak: In a joint project with Kodiak NWR, refuge areas including marine waters that are part of Alaska Maritime NWR are being surveyed for seabirds including marbled and Kittlitz's murrelets.

Seabird, Marine Mammal, Oceanography, Coordinated Investigation: Final preparations are being made for the 2008 SMMOCI project at Buldir in July. This project is describing the nearshore marine ecosystem near our annual seabird monitoring sites.

Pelagic seabird distribution: A graduate student from the University of Alaska and volunteers working for FWS Migratory Bird Management or the refuge are counting seabirds on opportunistic transects from the M/V Tiglax to describe distribution of species and identify marine "hot spots".

Whale distribution: Crews on the M/V Tiglax are recording all sighting of whales as they travel throughout southcentral and southwestern Alaska. Recently a Sai Whale and calf were spotted in the central Aleutians, far west of their known normal range.

Insect Inventory: Dr. Derek Sykes, the curator of insects at the University of Alaska Museum, accompanied the M/V Tiglax to several sites in the central Aleutians to begin a multi-year inventory of arthropods in the Aleutian Islands, a largely previously undescribed region for terrestrial invertebrates.

Research

Refuge Special Studies

Bering Sea Integrated Ecosystem Study (BSIERP): This unprecedented study of ecosystem processes in the Bering Sea got underway in June. The refuge is involved in the seabird components of this broad ecosystem study designed to understand the impacts of changing sea ice on the Bering Sea shelf ecosystem.

Seabird egg contaminants (STAMP): A number of villages near the refuge have begun collecting gull eggs for this seabird egg contaminant study. A local student in Homer has been hired and trained to help extract material from the eggs for analysis. Murre eggs will be collected in July. The study is to determine contaminant loads in seabird eggs around the coastline of Alaska.

Aleutian Common Eider status and distribution: Common eiders are being captured and implanted with satellite transmitters in the central Aleutians in a joint project with USGS, Biological Resources Division. The work is underway, and so far 27 eiders have been instrumented. The objective is to determine whether these birds are resident in the central Aleutians and to study movement within the region.

Kittlitz's Murrelet breeding ecology: The little known and candidate for listing as threatened, Kittlitz's Murrelet was found nesting at Agattu Island in 2003 and in 2004, 10 nests were found, an amazing discovery because only 23 nests had every been found in total ever and nowhere had more than nest ever been found. A study of the species began in late May and continues. So far, the crew has found 6 nests this year. This is the first chance ever to study the breeding ecology of this rare murrelet.

Migration Watch: Each field crews records all species of birds seen during migration. This year the most unusual sighting so far is the occurrence of rufous-tailed robin at both St. Paul and Attu (the later recorded by a crew from the Univ. of Alaska, Fairbanks). This is the first documented record of this Asiatic species in North America. Also there were records of another rare Asiatic species, black-tailed gull, at Shemya and St. Paul. Besides these exceptions, it generally was a slow year for Asiatic migrants because wind directions were mainly north and east, instead of the more favorable westerly winds, during the spring migration period, mid-May to mid-June.