

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

October 2018

James Tietz, Pete Warzybok

jtietz@pointblue.org

**Point Blue Conservation Science –**Point Blue advances conservation of birds, other wildlife and ecosystems through science, partnerships and outreach. Our highest priority is to reduce the impacts of habitat loss, climate change, and other environmental threats while promoting nature-based solutions for wildlife and people, on land and at sea. Visit Point Blue on the web [www.pointblue.org](http://www.pointblue.org).

**Island Visitors**

**Point Blue crew**: Preston Duncan, Rae Engert, John Garrett, Sarah Hecocks, Dan Maxwell, Joey Negreann, Kurt Ongman, Jim Tietz, and Pete Warzybok.

October 7: **“French Kiss”** (skipper Harmon Shragge) brought out John Garrett, Joey Negreann, and Pete Warzybok. It departed with Jim Tietz, Kurt Ongman, Dan Maxwell, Charles Whitefield, and Jose Levya. No crew toured the island.

October 9: **U.S. Coast Guard helicopter** brought out Gerry McChesney, Jonathan Shore, Ed Van Til, and Louis Terrazas from the U.S. Fish and Wildlife Service.

October 11: **U.S. Coast Guard helicopter** departed with Jonathan Shore and Ed Van Til.

October 12: **U.S. Coast Guard helicopter** departed with Gerry McChesney and Louis.

October 20: “**Starbuck”** (skipper John Wade) brought out Jim Tietz. Three crew members toured the island. The boat departed with Sarah Hecocks and Pete Warzybok.

**West End Island Visitors**

October 15: Rae Engert, Joey Negreann, and Pete Warzybok conducted fur seal resights.

**Weather/Ocean**

The wind this month was blowing west to northwest for 76% of the weather observations, with a few days of southerly winds at the beginning and middle of the month. Skies averaged 52% overcast and fog was recorded on 17% of weather observations. 0.77 inches of rain fell on the 2nd and 3rd. Mean midday air temperature was 16.4° C, with a standard deviation of 1.47° C. The highest air temperature was 22.0° C recorded at noon on the 15th, the lowest was 12.0° C recorded at 0600 hours on the 20th. Mean sea surface temperature was 14.41° C, with a standard deviation of 0.64° C, a high of 15.44° C on the 15th, and a low of 12.72° C on the 17th. Mean SST was approximately 0.58° C higher than the long-term mean for this month, and 1.56° C higher than last October.

**Oiled & Entangled Wildlife**

No oiled wildlife were observed this month.

Four Zalophus and one Mirounga were observed with monofilament or rope either embedded or tight around their necks. Two Western Gulls were entangled and attached to each other with monofilament in Fisherman’s Bay. One was an adult with line tightly around its leg and the other with was a juvenile with line loosely around its wing. The juvenile was dead and the adult could not take off.

**Breeding Birds**

**Storm-Petrels** – At the beginning of the month, 26 sites had active Ashy nests. One new Ashy nest site was added on the 23rd by tracking the begging calls of the chick. By the end of the month, 23 Ashy nests had confirmed fledges and 3 were still being monitored. Only one chick disappeared prior to fledging.

**Brandt’s Cormorant** – At the beginning of the month, several chicks were still creching at Sewer Gulch, but all birds had departed this area by the end of the month. Independent fledglings and adults roosted daily on islets and West End.

**Pelagic Cormorant** – Adults and fledglings were observed roosting daily on cliffs around the island.

**Double-crested Cormorant** – Individuals were seen on only five days this month.

**Western Gull** – Birds were mostly concentrated in roosting flocks on the Marine Terrace, Shell Beach, and Aulon Peninsula, or observed bathing in the bays or attending feeding flocks.

**California Gulls** – Individuals from colonies elsewhere have been observed daily in roosting flocks on the island and in the surrounding waters.

**Common Murre** – Murre numbers steadily increased around the island this month, and they started landing on the island on windy days during the final week.

**Pigeon Guillemot** – Very few were seen this month, and numbers steadily declined as they headed out to sea.

**Rhinoceros Auklet** – A few were being seen in the water around the island throughout the month.

**Tufted Puffin** – No individuals were observed.

**Cassin’s Auklet** – A few individuals were seen on the water around the island most days. Adults returned to the island on dark nights to vocalize.

**Black Oystercatchers** – Most pairs were seen foraging along the intertidal.

**Pinnipeds**

**California Sea Lion***–* On average there were 3,262 (SD ± 930) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 4,306 individuals on the 4th. The high count for pups was 440.

**Steller Sea Lions** –On average there were 79 (SD ± 31) individuals counted, a high count of 115 on the 4th. The high count for pups was 14. One adult female was seen on Mussel Flat with a boat propeller wound on its left flank.

**Northern Elephant Seal –** Numbers of elephant seals gradually increased this month, with an average total count of 72 (SD ± 24) individuals counted. An immature was seen in Sea Pigeon Gulch with a propeller wound. The

**Harbor Seal –** Harbor seal numbers were relatively low, reflecting high tide conditions during the weekly census. On average there were 26 (SD ± 20) individuals counted.

**Northern Fur Seals** – Fur seal numbers remained high during the month. The mean count was 751 (SD ± 242) individuals, with a high of 917 on the 4th. The high count for pups was 280. On the 15th, a trip to West End read 6 tags and saw 5 other tags that we were unable to read. All of the tagged animals seen on this trip were from San Miguel Island. A count was not conducted because the animals were moving around too much and many were out in the water due to the sunny conditions.

**Cetaceans**

**Standard Survey** – Seventeen one-hour standard whale watches were conducted this month from the Lighthouse using the Apple iPad and Spotter App. Daily high counts from standard watches and incidental observations are summarized below.

A few gray whales (1-3) were seen almost daily this month. Humpback whales were seen on two-thirds the days this month, with a high count of 28 on the 12th. Blue whales were seen on three days during the latter half of the month with a high count of 10 on the 23rd. Groups of Risso’s dolphins were seen on three days. A group of Pacific White-sided Dolphins was seen on the 3rd.

**Sharks**

Eleven predation events on pinnipeds were observed this month at various locations around the island. On the 23rd, a diver was bit on the hand by a 17’ shark in Mirounga Bay and had to be evacuated by a U.S. Coast Guard helicopter to the Stanford Medical Center. He was treated and released the same day and is recovering at home.

**Salamanders**

Two surveys were conducted this month. None were seen on the first survey, but 8 were found on the second survey.

**Owls**

Standardized surveys were conducted daily and it was determined that 17 individuals had arrived by the end of the month. The high-count for the month was 17 on the 23rd. Ten new individuals were captured in mist nets using playback and banded. An owl with a U.S.G.S. metal band, but no field readable band, was discovered on the 24th, indicating this bird was banded elsewhere – unfortunately we were unable to capture it. Two owls, banded in previous years, were resighted this year – one was banded in 2017 and the other was banded in 2015. The 2015 owl has overwintered in the same roost location just west of Heligoland for the past four years.

**Crickets**

The quarterly cricket survey was initiated on the 15th with nocturnal counts conducted three times at Rabbit, Spooky, Corm Blind, Gap, and NL caves. We also visited Cricket cave on Shubrick Point on two days to conduct counts. Overall numbers of crickets this fall were 80% greater than during the summer 2018 survey (only including sites counted in summer), and 41% less than in fall 2017. The difference between fall 2017 and fall 2018 was mainly driven by a 40% reduction in crickets at Cricket Cave, where counts are an order of magnitude greater than any other cave. Excluding Cricket Cave, the counts in fall 2018 were 25% greater than in fall 2017.

**Bats**

A hoary bat was observed flying over Lighthouse Hill on the 17th. The last survey of the season occurred on the 31st. A total of six hoary bats were seen from mid-August through October; three flying around and three roosting in trees. In addition, a small (*Myotis*-sized) bat was seen on 27 August flying around the lighthouse.

**Mice**

One mouse trapping session was conducted this month from the 14th to the 17th and had 70% overall trapping success.

**Inverts and Intertidal**

Several species of migratory insects were seen during the month. Dragonflies were the most abundant, and the following species were identified: Green Darner (*Anax junius*), Blue-eyed Darner (*Rhionaeschna multicolor*), Variegated Meadowhawk (*Sympetrum corruptum*), Wandering Glider (*Pantala flavescens*), and Spot-winged Glider (*Pantala hymenaea*). One damselfly was identified as a Familiar Bluet (*Enallagma civile*). Three butterfly species were identified: Monarch (*Danaus plexippus*), Painted Lady (*Vanessa cardui*), and Orange Sulphur (*Colias eurytheme*).

**Plants**

On the 10th and 11th, Gerry McChesney pulled various invasive plants.

**Violations**

Three different small, propeller airplanes flew over the island below 1000 feet on the 6th, 12th, and 14th. The plane on the 6th had no identifying features. The ID number on the plane on the 12th was N191WL, and the ID number on the plane on the 14th was N296M8. The planes on the 12th and 14th were called into CalTips. On the 24th, a yacht from the Norfolk, VA, called The Vincere was observed towing a seal decoy around the island. The incident, with photos, was reported to the Gulf of the Farallones N.M.S.

**Maintenance**

Island biologists Tietz and Warzybok conducted routine maintenance checks on the PV system and generators weekly. Monthly changes of water filters and outboard motor operation were also conducted as well as monthly crane greasing. Pete trained interns for crane operations. Wiring for the on/off switch on the Dumper Jet was repaired by Charles. Charles and Jose continued demolition of the Road to Nowhere and various other foundations in preparation to build a habitat sculpture near Twitville. The North Landing zodiac was removed from the island for scheduled maintenance and replaced with a backup FWS zodiac. The on-demand Davey pump in the Pump House lost its prime this month, which was most likely caused by a pinhole leak in the intake pipe. Numerous hours were spent attempting to restore water pressure to the houses, but nothing permanent was established, and we are now drinking bottled water.

**Maintenance Needs**

* The locking mechanism on the Crane Control Panel needs to be fixed or replaced. Sometimes it fails to lock the door when the main disconnect switch is in the on position.
* The PV and Buffy generators are supposed to automatically start to give themselves monthly exercise. This is not happening, though, so they need to be manually started for exercise.
* Restore water service to the island. This is our most pressing need. The most promising solution would be to install a new submersible pump in the cistern. However, cost of both installation and future maintenance will need to be considered before a final solution is reached.
* The cistern and other elements of the water catchment system are showing their age and are need of major repairs or replacement. This will be a large, deferred maintenance project. FWS is currently evaluating different rehabilitation options. In the meantime, the cistern continues to lose water at a rate ~250 gallons per month.
* The Settling Tank also appears to have a leak in it when water is above 5.1 feet.
* Many of the wooden railing on Lighthouse Hill needs repair.
* Corrosion of the cart path rail system appears to be accelerating and will need to be addressed soon, perhaps repaired with the old galvanized pipe when the water lines are replaced. The cart is falling of the tracks in several places now. Spot repairs have been made and planning for more extensive repairs are underway.
* Several separations have been seen on the East Landing derrick slewing rope, possibly from jogging the slew. These do not appear to be getting any worse but will be examined closely during the upcoming annual maintenance.
* Several inches of water accumulate in the pipe shop after a good rain. A new threshold is needed to seal the door.
* Several grease points on the crane are having difficulty taking grease.
* There are several broken section of pipe around the island which have received temporary repairs with compression sleeves. These sections of pipe will need to be replaced in the near future to prevent further leaks once water service is restored.

**Solar/Electric**

**PV System**

Distilled water reserves: 95 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 3.2 hours

Kohler 30REOZJC (Speedwagon): 17.2 hours

Kohler 40REOZK (Zeke): 9.8 hours

Kohler 15ROY61 (Peevey): 0 hours

Webasto: 0 hours

Power Used this month: Start = 71,861; End = 72,592; for total of 731 kwh

**Fuel Reserves**

Diesel fuel used in August: 34.2 gallons

Drums: 1.8 x 55g = 100 gallons

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: Full

Kohler 40REOZK (Zeke) Tank: Full

Kohler 15ROY61 (PV) Tank: Full

Webasto Tank: 2/3 Full

Surplus gasoline for boat motors: 10 gallons

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Cistern: ~ 67,500 gallons (5’6”)

Gravity Tank: empty

Settling Tank: empty

Water use at house meter was 4,040 gallons

**Sightseeing Boats**

The **Kitty Kat** was seen 6 times with an average of 38 people; **Salty Lady** was seen 6 times with an average of 29 people; **Huck Finn** was seen once with 20 people; **Outer Limits** was seen once with 30 people. White shark tour boats included: **Silver Fox** seen 3 times with an average of 23 people; **Akula** seen 10 times with an average of 9 people; **Derek M Baylis** seen three times with an average of 10 people.

**Non-breeding birds**

Red-throated Loon, Pacific Loon, Common Loon, Red-necked Grebe, Eared Grebe, Western Grebe, Clark’s Grebe, Northern Fulmar, Pink-footed Shearwater, Buller’s Shearwater, Sooty Shearwater, Short-tailed Shearwater, **Masked/Nazca Booby**, **Brown Booby,** Brown Pelican, Great Egret, Snowy Egret, Green Heron, Greater White-fronted Goose, Cackling Goose, Brant, American Wigeon, Northern Pintail, Green-winged Teal, Surf Scoter, White-tailed Kite, Northern Harrier, Sharp-shinned Hawk, American Kestrel, Merlin, Peregrine Falcon, Killdeer, Wandering Tattler, Spotted Sandpiper, Whimbrel, Marbled Godwit, Black Turnstone, Ruddy Turnstone, Red Phalarope, South Polar Skua, Pomarine Jaeger, Parasitic Jaeger, Bonaparte’s Gull, Heermann’s Gull, Mew Gull, Ring-billed Gull, California Gull, Herring Gull, Iceland Gull, Glaucous-winged Gull, Sabine’s Gull, Eurasian Collared-Dove, Mourning Dove, Barn Owl, Burrowing Owl, Short-eared Owl, Vaux’s Swift, Anna’s Hummingbird, Northern Flicker, Pacific-slope Flycatcher, Black Phoebe, Say’s Phoebe, Warbling Vireo, Violet-green Swallow, Rock Wren, House Wren, Pacific Wren, Golden-crowned Kinglet, Ruby-crowned Kinglet, Blue-gray Gnatcatcher, Swainson’s Thrush, Hermit Thrush, American Robin, Varied Thrush, Sage Thrasher, European Starling, American Pipit, Cedar Waxwing, Tennessee Warbler, Orange-crowned Warbler, Nashville Warbler, Yellow Warbler, Chestnut-sided Warbler, , Audubon’s Warbler, Myrtle Warbler, Black-throated Gray Warbler, Townsend’s Warbler, **Blackburnian Warbler**, Palm Warbler, Blackpoll Warbler, Ovenbird, **Northern Waterthrush**, MacGillivray’s Warbler, Common Yellowthroat, Wilson’s Warbler, **Canada Warbler**, Yellow-breasted Chat, Summer Tanager, Western Tanager, Spotted Towhee, Chipping Sparrow, Clay-colored Sparrow, Brewer’s Sparrow, Vesper Sparrow, Savannah Sparrow, Grasshopper Sparrow, Fox Sparrow, Lincoln’s Sparrow, Swamp Sparrow, White-throated Sparrow, Harris’s Sparrow, White-crowned Sparrow, Golden-crowned Sparrow, Dark-eyed Junco, Lapland Longspur, Black-headed Grosbeak, Bobolink, Red-winged Blackbird, Western Meadowlark, Brewer’s Blackbird, Brown-headed Cowbird, Bullock’s Oriole, Purple Finch, House Finch, Lesser Goldfinch, **Lawrence’s Goldfinch**, and American Goldfinch