

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

February 2019

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**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**: Garrett Duncan, Leah Kerschner, Sophia Prisco, Marine Quintin, Sarayu Ramnath, Jon Schneiderman, Pete Warzybok.

February 4: **US Coast Guard helicopter** brought out Gerry McChesney and Ed Van Til.

February 6: “**Outer Limits”** (skipper Jim Robertson) brought out Garrett Duncan, Marine Quintin and Jim Niehaus, and departed with Sarayu Ramnath and Pete Warzybok.

February 8: **US Coast Guard helicopter** departed with Gerry McChesney, Jim Niehaus and Ed Van Til.

**West End Island Visitors**

February 19: Duncan, Quintin and Schneiderman visited West end for pinniped research.

**Weather/Ocean**

Of the wind observations this month, 55% was blowing from the north or west, and 45% from the east or south. The sky had an average cloud cover of 62%. A total of 10.63 inches of rain fell, the bulk of which fell during 4 storm systems. (1st-5th, 8th-10th, 13th-17th, 26th-27th) Mean midday air temperature was 12.0° C (SD ± 1.11). The highest air temperature was 14.5° C recorded at noon on the 2nd. The lowest was 6.5° C recorded on the mornings of the 5th and 10th. Mean sea surface temperature was 12.44° C (SD ± 0.24), with a high of 12.80° C on the 9th, and a low of 11.80° C on the 12th. Mean SST was approximately 0.22° C higher than the long-term mean for this month, and 0.52° C higher than last February.

**Oiled & Entangled Wildlife**

No oiled wildlife was observed in February.

Eight Zalophus were observed with monofilament, rope, packing straps or an unknown material either embedded in their neck or tight around their body.

**Breeding Birds**

**Storm-Petrels** – No individuals were observed.

**Brandt’s Cormorant** – Large numbers were seen on Sugarloaf and various cliffs around the island.

**Pelagic Cormorant** – Individuals were observed roosting near-daily on cliffs around the island.

**Double-crested Cormorant** – No individuals were observed.

**Western Gull** – Large groups were seen in roosting flocks on the Marine Terrace, Shell Beach, and Aulon Peninsula, or observed bathing in the bays. Attendance of nesting areas has been observed nearly every day.

**California Gulls** – Individuals have been observed near-daily in roosting flocks on the island and in the surrounding waters.

**Common Murre** – Murre numbers were highly variable. Many days they were seen in very high numbers in the typical colony areas but sometimes were nearly absent from the island and surrounding waters. Several colorband resight efforts were made this month.

**Pigeon Guillemot** – No individuals were observed.

**Rhinoceros Auklet** – No individuals were observed.

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

**Cassin’s Auklet** – Several individuals were occasionally seen on the water around the island. On the evening of the 25th, a few individuals were first seen on the island and heard singing.

**Black Oystercatchers** – Pairs were seen in typical nesting areas, as well as a large roosting flock on Low Arch.

**Pinnipeds**

**California Sea Lion***–* On average there were 2,279 (SD ± 550) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 2,877 individuals on the 22nd. On the 19th a staggering 3759 individuals were counted on West End alone. 25 fecal samples were collected for diet analysis.

**Steller Sea Lions** –On average there were 84 (SD ± 23) individuals counted, with a high count of 114 on the 28th.

**Northern Elephant Seal –** Numbers steadily declined over the month as the breeding season comes to an end. On both islands combined there was an average of 99 (SD ± 22) individuals counted. There was an average of 19 (SD ± 2) breeding sized males. On SEFI, the number of cows decreased from 53 at the beginning of the month to only 10 individuals. Of the 54 pups born on the island this year, 32 had successfully weaned and 6 were still nursing at the end of the month. During the trip to West End on the 19th there were 16 cows, 6 pups and 8 weaners. By the end of the month there were no cows seen on West End from the lighthouse.

**Harbor Seal –** Counts were variable, due to the variety of tide and swell conditions during the weekly census. On average there were 61 (SD ± 39) individuals counted, with a high count of 126 on the 27th.

**Northern Fur Seals** – The average of the weekly lighthouse census counts was 96 (SD ± 33) individuals, with a high of 146 on the 22nd. On the trip to West End, 200 individuals were observed.

**Cetaceans**

**Standard Survey** – 15 one-hour standard whale watches were conducted this month from the Lighthouse using the Spotter App. On 6 days this month the weather permitted two surveys, one in the morning and one in the afternoon. Daily high counts from standard watches combined with incidental observations are summarized below.

Gray Whales were seen 17 days this month and an average of 6 (SD ± 5) individuals on the days that they were seen. A high count of 19 was observed on the 11th.

Two Orca Whales were seen on the 11th and two Risso’s Dolphins were seen on the 24th.

**Sharks**

No predation events this month.

**Salamanders**

Two surveys were conducted this month: 31 were found on the February 5th survey (12 large, 18 small and 1 tiny) and 29 were found on the February 18th survey (21 large, 5 small and 3 tiny).

**Owls**

A total of 13 Burrowing Owls were seen in the daily surveys of known roosting locations. A high count of 9 was recorded on the 11th.

**Crickets**

No cricket surveys were conducted this month.

**Bats**

None were observed.

**Mice**

One mouse trapping session was conducted this month starting the 22nd and had a 12% capture rate.

**Inverts and Intertidal**

Nothing of note.

**Plants**

Nothing of note.

**Violations**

No violations were observed this month.

**Maintenance**

Island biologists Duncan and Warzybok conducted routine maintenance checks on the PV system and generators weekly. Monthly changes of water filters and crane greasing was conducted.

**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 circuit that powers the downstairs overhead lights in the PRBO house has a short. This is not a pressing matter as the auxiliary lights are working well.
* 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. (Exercise not needed during the winter months.)
* The cistern and other elements of the water catchment system are showing their age and are need of major repairs or replacement. 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.
* The Settling Tank measuring stick came undone and fell into the tank.
* Many of the wooden railing on Lighthouse Hill needs repair.
* Several separations have been seen on the East Landing derrick slewing rope, possibly from jogging the slew. A couple more separations have appeared, possibly from the large storm events in the last couple of months.
* Several inches of water accumulate in the pipe shop after a good rain. A new threshold is needed to seal the door. Also, there could be a crack in the foundation.
* Several grease points on the crane are having difficulty taking grease.
* There are several broken sections 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.
* The kitchen drain is not draining well. I propose eventually abandoning the current plumbing and installing new pipes outside the house that connects the sinks and showers in the house to the graywater system.
* The water meter at the house is reading the proper volumes of water again but I propose switching to the pump house meter, so we can monitor water use at the landing and other hose bibs along the cart path.
* The PRBO house kitchen counters especially around the sink are continuing to deteriorate. Replacement sometime in the next year is recommended.

**Solar/Electric**

**PV System**

Distilled water used: 7 gallons

Distilled water reserves: 80 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 21.2 hours (1721.5 on meter)

Kohler 30REOZJC (Speedwagon): 7.4 hours (594.3 on meter)

Kohler 40REOZK (Zeke): 17.3 hours (265.4 on meter)

Kohler 15ROY61 (Peevey): 0 hours (3869.0 on meter)

Webasto: 0 hours

**Power use**

Facilities power use: Start = 74,689; End =75,606; for total of 917 kWh

**Fuel Reserves**

Diesel used in February: 10 gallons

Jerry Cans: 3 @5gal: 15 gallons

Kohler 15ROZ (Buffy) Tank: ¼ Full

Kohler 30REOZJC (Speedwagon) Tank: ¾ Full

Kohler 40REOZK (Zeke) Tank: ¾ Full

Kohler 15ROY61 (Peevey) Tank: ¾ Full

Webasto Tank: ¼ Full

Surplus gasoline for boat motors: 13 gallons

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Water used this month: Start = -----; End = 25,111; for a total of ----- gallons

Cistern: 8.7’

Gravity Tank: empty

Settling Tank: ~2’

**Sightseeing Boats**

No sightseeing boats were seen around the island.

**Non-breeding birds**

Eared Grebe, Sooty/Short-tailed Shearwater, Blue-footed Booby, Nazca Booby(!), Brown Booby, Northern Gannet, Brown Pelican, Canada Goose, Surf Scoter, Common Goldeneye, Peregrine Falcon, Wandering Tattler, Whimbrel, Ruddy Turnstone, Black Turnstone, Heermann’s Gull, Mew Gull, California Gull, Herring Gull, Glaucous-winged Gull, Black-legged Kittiwake, Barn Owl, Burrowing Owl, Black Phoebe, Rock Wren, Audubon’s Warbler, Myrtle Warbler, Fox Sparrow, White-crowned Sparrow, Golden-crowned Sparrow, and Western Meadowlark.