

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

February 2018

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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 this month included: Trevor Barclay, Piero Becker, Russell Bradley, Garrett Duncan, Kathryn Roy, and April Surgent.

February 5: “**Private Helicopter**” brought out Sansone Company Inc. contractors Jim Tuzzio and Tod Jacobson and Deep Blue Integration Inc. members Scott Brooks and Antonio Camerena.

February 8: “**Private Helicopter**” departed with Tuzzio, Jacobson, Brooks, and Camerena.

February 12: “**Private Helicopter**” arrived with Tuzzio, Jacobson, Brooks, and Camerena.

February 15: “**USCG Helicopter**” brought out Gerry McChesney, Jonathan Shore, and Mark Harris to inspect and receive training on the new fire alarm and egress system. They departed the same day.

February 15: “**Private Helicopter**” departed with Tuzzio, Jacobson, Brooks, and Camerena.

February 18: “**Steadfast**” (Skipper Kixon Meyer) brought out Piero Becker and departed with April Surgent.

February 21: “**John A. B. Dillard Jr.**” (Skipper Kixon Meyer) brought out 6 USCG personnel to maintenance the lighthouse light, two Sansone contractors to retrieve tools and trash from fire alarm and egress installation project, Jonathan Shore and Ed Van Til. Ed Van Til remained on the island.

February 26: “**USCG Helicopter**” brought out the NOAA/GFNMS intertidal crew: Jan Roletto, Greg Baker, Rob Ricker, and Natalie Cosentino-Manning. Ed Van Til departed the island.

**West End Island Visitors**

February 7: Garrett Duncan and Kathrine Roy visited West End Island to conduct pinniped research.

February 23: Garrett Duncan and Trevor Barclay visited West End Island to conduct pinniped research.

**Weather/Ocean**

The weather this month was surprisingly dry and the island experienced some of the warmest days, as well as the coldest days of the season. Winds were predominantly from the northwest but highly variable. The sky was consistently clearer than January and there was only 0.35 inches of precipitation recorded. Mean midday air temperature was 12.9° C, with a standard deviation of 2.7° C. Mean sea surface temperature was 11.93° C, with a standard deviation of 1.08° C, a high of 13.14° C on the 8th, and a low of 10.12 ° C on the 27th. Mean SST was approximately 0.28° C colder than the long-term mean for this month, and 0.81° C colder than last February.

**Oiled & Entangled Wildlife**

Six California sea lions were seen with monofilament or an unknown substance embedded in their necks. No oiled animals were observed.

**Breeding Birds**

**Storm-Petrels** – No Storm-petrels were detected this month.

**Brandt’s, Pelagic, and Double-crested Cormorant** – Brandt’s and Pelagic Cormorants were regularly present at roost sites in the morning and evening. Both have started to molt into their breeding plumages.

**Western Gull** – Attendance in the colony has been increasing over the month with some roosting in intertidal areas as well.

**California Gulls** – Seen approximately half of the days this month in regular evening roost sites or on the water. A high count of 9 was seen on the 16th.

**Common Murre** –Numbers have been increasing throughout the month in typical breeding areas, sometime in great numbers. On the 24th and 25th an estimated 200,000 were seen on or around the island, West End and the Islets.

**Pigeon Guillemot, Rhinoceros Auklet and Tufted Puffin** – A few Rhinoceros Auklets were observed on the water throughout the month and several were found depredated by Peregrine Falcons, but no Tufted Puffins or Pigeon Guillemots were seen.

**Cassin’s Auklet** –Increasingly frequently, Cassin’s Auklets have returned to the island in the thousands to roost.

**Black Oystercatchers** – Some birds are still attending territories. The large winter roosting group departed by the end of the month.

**Pinnipeds**

**California Sea Lion***–* Numbers of California sea lions was very consistent during February. On average there were 1,436 (SD ± 18) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 1,458 individuals on the 22nd.

**Steller Sea Lions** –On average there were 47 (SD ±9) individuals counted, with a high count of 59 on the 16th.

**Northern Elephant Seal** – By the end of the month, the breeding season was nearly finished. The average total count of the island was 111 (SD ± 33) individuals. The high count was 159 on the 4thand decreased quickly throughout the month. By the end, there were only 63 individuals on SEFI, including 7 cows, 3 pups, and 35 weaners. In addition, there were 69 elephant seals seen on West End on the Jan 7th visit, including 38 cows and 27 pups. The visit on the 23rd, there were only 28 individuals, including 9 cows, 6 pups, and 8 weaners. There have been 25 total males on SEFI including 4 bulls, and 9 total males on WEI including 1 bull.

**Harbor Seal** –Harbor seal numbers were highly variable and dependent on tide. On average there were 71 (SD ± 35) individuals counted. The high count was 108 on the 8th.

**Northern Fur Seals** – Fur seal attendance was very steady this month. The mean count from the lighthouse was 94 (SD ± 4) individuals, with a high of 99 on the 16th.

Two trips to West End Island were made on the 7th and the 23rd. We counted an average of 212 (SD ± 41) total individuals from Breaker Cove to Indian Head Beach. The high count of 252 individuals was on the 7th.

**Cetaceans**

**Standard Survey** – Twenty nine one-hour whale watches were conducted this month from the Lighthouse using the Apple iPad and Spotter App. Two whale watches were conducted on nine of the days this month. Daily incidental observations were also recorded.

Gray whales were seen almost daily, with a maximum of 24 on the 9th. Humpback whales were seen six times this month with a maximum of 6 individuals seen on the 14th. Blue whales were seen twice this month, 3 on the 8th and 1 on the 9th. One distant unidentified dolphin was seen on the 13th.

**Sharks**

No shark activity was observed.

**Salamanders**

Standard salamander surveys were conducted on the 2nd and 15th. 2 and 43 salamanders were found under cover boards respectively. An all-island cover board census was conducted on the 31st. 45 individuals were found including 2 that were not beneath cover boards. 8 salamanders were found on Marine Terrace transects, a much higher number than in previous years. Chytrid swab samples were collected for all individuals.

**Owls**

Burrowing owl numbers have stabilized. 5 individuals have been seen this month. Many times only one or two was seen in a day. They are noticeably less active during high winds, inclement weather, and during periods of high Western Gull attendance. A dead owl was discovered on the Sea Lion Cove side of the gap with no external injuries.

**Crickets**

No cricket surveys were conducted this month.

**Mice**

One mouse survey was conducted this month beginning on the 13th. Trap success was 9%.

**Inverts and Intertidal**

# A NOAA and GFNMS crew came out to revamp the long-term sampling project for key intertidal species, and sample the densities of algae, plants, and invertebrates near Queen’s Bath, Dead Sea Lion Flat, Mussel Flat and Jewel Cave.

**Plants**

Another concerted effort to pull invasive plants above Raven’s Cliff was performed during the visits to West End.

**Violations**

There were no violations this month.

**Maintenance**

Island biologists Duncan and Bradley 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 biweekly crane greasing.

A four person crew led by USFWS contractor Sansone Company, Inc. and subcontractor Deep Blue Integration, Inc., installed new hard-wired smoke alarm system, carbon monoxide alarm system, and automatic closing fire doors (those entering downstairs hallways) in both houses. The project also resulted in the entry doors to the downstairs hall closets being moved from the main hallways to the hallways by the rest rooms.

**Maintenance Needs**

* Repair liner in the Gravity tank
* Cistern is losing water at a rate ~250 gallons per month and needs to be inspected. There appears to be a much more sizable leak when the cistern is above 8’6”.
* Settling Tank appears to have a leak in it when water is above 5.1 feet.
* Some of the wooden railing on Lighthouse Hill needs repair.
* Drain line from PRBO kitchen sink drains slowly and needs to be replaced.
* Front door and frame to PRBO house are rotting at bottom corner and need to be repaired or replaced.
* New screens are needed on the PRBO house to keep out flies on “warm” days.
* Refurbishment of North Landing platform. Fabricate and install stainless steel guides for poles.
* 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.
* Several separations have been seen on the East landing derrick slewing rope, possibly from jogging the slew. Perhaps tightening the slewing rope will mitigate this issue slightly until replacement.
* The PRBO house kitchen counters especially around the sink are continuing to deteriorate. Replacement sometime this year is recommended.
* 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.

**Solar/Electric**

**PV System**

Distilled water reserves: 35 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 1 hour

Kohler 30REOZJC (Speedwagon): 4.9 hours

Kohler 40REOZK (Zeke): 10.2 hours

Kohler 15ROY61 (Peevey): 1.2 hours

Webasto: 12.5 hours

Power Used this month: Start = 65,798; End = 66,311 for total of 513 kwh

**Fuel Reserves**

Diesel fuel used in February: 31.1 gallons

Drums: 4 2/3 x 55g = 257 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: None

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Cistern: ~91,660 gallons (6’11”)

Gravity Tank: empty

Settling Tank: 3.4’

Water use at house meter was 1,872 gallons.

**Sightseeing Boats**

During February, 1 sightseeing boat and two government crafts visited the Farallones. The **Kitty Kat** was seen 5 times with an average of 29 POB. A California Department of Fish and Wildlife boat (unknown POB) circled the island on the 8th and a USCG boat “Sockeye” (unknown POB) visited the island on the 9th.

**Non-breeding birds**

Pacific Loon, Eared Grebe, Black-footed Albatross, Sooty/short-tailed Shearwater, Canada Goose, Surf Scoter, Peregrine Falcon, Wandering Tattler, Whimbrel, Black Turnstone, Rock Sandpiper, Mew Gull, California Gull, Herring Gull, Thayer’s Gull, Glaucous-winged Gull, Glaucous Gull, Burrowing Owl, Black Phoebe, Rock Wren, European Starling, Yellow-rumped Warbler, Fox Sparrow, White-crowned Sparrow, Golden-crowned Sparrow