

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

January 2018

Garrett Duncan, Russell Bradley

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

January 6: “**Stillwater**” (Skipper Richard Webber) delivered supplies for the fire door/ alarm installation, brought Pete Warzybok out for a day trip, and left with Trevor Barclay.

January 21: “**Hokahey**” (Skipper Jan Passion) brought out Russell Bradley and Trevor Barclay and departed with Garrett Duncan.

**West End Island Visitors**

January 13: Piero Becker and Garrett Duncan visited West End Island to conduct pinniped research.

**Weather/Ocean**

The weather in January was variable. Winds were very evenly split between the west and east and there was one major storm event. The vast majority of the month was very cloudy and the island experienced a few days of heavy fog. There were 5.24 inches of precipitation recorded, most of which fell during the storm on the 8th and 9th. Mean midday air temperature was 13.6° C, with a standard deviation of 0.9° C. Mean sea surface temperature was 12.76° C, with a standard deviation of 0.32° C, a high of 13.36° C on the 9th, and a low of 12.16 ° C on the 3rd. Mean SST was approximately 0.50° C warmer than the long-term mean for this month, and 0.89° C warmer than last January.

**Oiled & Entangled Wildlife**

Thirteen California sea lions, one Steller Sea Lion and one Northern Elephant Seal cow were noted to have monofilament, packing straps 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** – Up to 20 birds have been occasionally seen in regular evening roost sites or on the water.

**Common Murre** –Numbers have been increasing throughout the month in typical breeding areas, sometime in great numbers. On the 7th, at least 150,000 were seen on the island, West End and the Islets.

**Pigeon Guillemot, Rhinoceros Auklet and Tufted Puffin** – Very few Rhinoceros Auklets were observed on the water throughout the month, but no Tufted Puffins or Pigeon Guillemots were seen.

**Cassin’s Auklet** –A few nights this month a low number of Cassin’s Auklets returned to the island to dig and sing.

**Black Oystercatchers** – Some birds are still attending territories, but larger wintering roosting groups frequent Low Arch and Mussel Flat.

**Pinnipeds**

**California Sea Lion***–* Numbers of California sea lions fluctuated considerably throughout January. On average there were 1,848 (SD ± 432) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 2,443 individuals on the 19th. By the end of the month, only 1,362 individuals were counted on the island.

**Steller Sea Lions** –On average there were 57 (SD ± 26) individuals counted, with a high count of 98 on the 25th.

**Northern Elephant Seal** –The elephant seal colony reached its peak this month. The average total count of the island was 153 (SD ± 19) individuals. The high count was 174 on the 28th. In addition, there were 29 elephant seals seen on West End on the Jan 13th visit, including 13 cows and 2 pups. A subsequent pinniped census from the lighthouse had a third pup on the 31st. There have been 28 total males on SEFI including 5 bulls, and 5 total males on WEI including 2 bulls. On SEFI, a cumulative 99 cows have been recorded island-wide and a high count of 78 cows was seen on the 28th. A cumulative 70 pups were born, 57 of which survived until the end of the month. As in prior years, large swells breaking in the Mirounga Beach colony were partially to blame for mortalities. On the 18th, 6 pups were washed out to sea from Mirounga Beach and the harem master abandoned his harem.

**Harbor Seal** –Harbor seal numbers were highly variable. On average there were 50 (SD ± 59) individuals counted. The high count was 125 on the 25th, with a low count of 0 on the 31st.

**Northern Fur Seals** – Fur seals attendance was low but rose markedly towards the end of the month. The mean count from the lighthouse was 59 (SD ± 45) individuals, with a high of 141 on the 31st.

One trip to West End Island was made on the 13th. We counted 95 total individuals from Breaker Cove to Indian Head Beach. We only found one tagged individual, but it had a red and a white tag.

**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 eleven of the days this month. Daily incidental observations were also recorded.

Gray whales were seen almost daily when fog permitted a view, with a maximum of 23 on the 30th. Humpback whales were seen twice this month: 4 individuals were seen on the 1st and 1 was seen on the 19th. One Blue whale was seen on the 3rd.

**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 nearly stabilized. 9 individuals have been seen this month and the daily high count of 4 individuals was seen 10 days this month. One individual had not been documented before and may have been an arrival, and one had not been seen in over a month. They are noticeably less active during high winds and inclement weather.

**Crickets**

Cricket surveys were conducted on the 26th, 28th and 31st. There was lower abundance at all sites except Spooky Cave which had an average of 502 individuals. The high counts in Cricket Cave, as well as the other caves on the island, were achieved on the 28th. There were 1,581 in Cricket Cave and 622 observed elsewhere.

**Mice**

Two mouse surveys were conducted this month beginning on the 12th and 30th. Trap success for both was 11%.

**Inverts and Intertidal**

# Nothing of note to report.

**Plants**

Recent rains have contributed to a significant increase in the number of New Zealand Spinach sprouts, particularly on the south and southeast sides of the island. A concerted effort was made to pull New Zealand Spinach on the Marine Terrace and commonly traveled areas on West End Island. The first flowering of *Lasthenia maritima* was observed on the 30th.

**Violations**

In January we recorded ‘Pacific Mist’ fishing within the SE Farallon State Marine Reserve. We were able to hail them over the marine radio, described the SMR violation area to them, and they departed.

**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 float system was installed on the gray water tank to better monitor water level. ~11,000 gallons of water was collected and pumped into the cistern. The PRBO house drain was snaked and flows well now.

**Maintenance Needs**

* Repair liner in the Gravity tank
* The dumper jet battery appears to be losing its charge quickly despite regular recharges. It appears to be a bad battery.
* 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. The weather stripping for all doors needs to be replaced to keep out weather, flies, and mice.
* 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.
* Replace window blinds in PRBO bathrooms and kitchen.
* 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.
* Washing machine door lock is beginning to fail. It requires a bit of finesse to close and sometimes will get stuck in lock mode.
* 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.

**Solar/Electric**

**PV System**

* The batteries were filled with 16 gallons of distilled water.

**Generator run times**

Kohler 15ROZ (Buffy): 10.6 hours

Kohler 30REOZJC (Speedwagon): 7.9 hours

Kohler 40REOZK (Zeke): 3.7 hours

Kohler 15ROY61 (Peevey): 21 hours

Webasto: 2.5 hours

Power Used this month: Start = 64,956; End = 65,798 for total of 842 kwh

**Fuel Reserves**

Fuel used in January: 27.6 gallons

Drums: 5 X 55g = 275 gallons

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: Full

Kohler 40REOZK (Zeke) Tank: Full

Kohler 15ROY61 (PV) Tank: Full

Webasto Tank: Full

**Water Reserves**

Cistern: ~95,000 gallons (7’1”)

Gravity Tank: empty

Settling Tank: empty

Water use at house meter was 1,792 gallons.

**Sightseeing Boats**

During January, 3 sightseeing boats visited the Farallones. The **Happy Days** was seen three times with an average of 20 POB. The **Outer Limits** was seen once with 30 POB. The **Kitty Kat** was seen once with 25 POB.

**Non-breeding birds**

Eared Grebe, Black-footed Albatross, Sooty/short-tailed Shearwater, Northern Gannet, Brown Pelican, Surf Scoter, American Kestrel, Peregrine Falcon, Wandering Tattler, Whimbrel, Black Turnstone, Rock Sandpiper, Mew Gull, California Gull, Herring Gull, Thayer’s Gull, Glaucous-winged Gull, Burrowing Owl, Anna’s Hummingbird, Black Phoebe, Rock Wren, American Robin, European Starling, Audubon’s Warbler, Fox Sparrow, White-crowned Sparrow, Golden-crowned Sparrow