

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

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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.

January 7: “**Starbuck”** (skipper John Wade) brought out Sophia Prisco and departed with Leah Kerschner and Jon Schneiderman.

January 11: **US Coast Guard helicopter** delivered jugs of water and recertified SAFE boat bridle.

January 19: “French Kiss” (skipper Harmon Schragge and Don Bauer) brought out Leah Kerschner, Jon Schneiderman and Pete Warzybok, and departed with Garrett Duncan and Marine Quintin.

**West End Island Visitors**

January 4: Duncan and Ramnath visited West end for pinniped research.

January 26: Kerschner, Prisco and Warzybok visited West End for pinniped research.

**Weather/Ocean**

Of the wind observations this month, 28% was blowing from the northwest and 54% from the east or south. The sky had an average cloud cover of 67%. A total of 5.16 inches of rain fell, the bulk of which fell during the 6-9th, the 15-17th, and on the 31st. Mean midday air temperature was 13.7° C (SD ± 0.94). The highest air temperature was 15.5° C recorded on the 27th, 28th, 30th and 31st. the lowest was 10° C recorded on the mornings of the 1st, 2nd and 3rd. Mean sea surface temperature was 13.13° C (SD ± 0.26), with a high of 13.78° C on the 26th, and a low of 12.66° C on the 1st. Mean SST was approximately 0.85° C higher than the long-term mean for this month, and 0.38° C higher than last January.

**Oiled & Entangled Wildlife**

No oiled wildlife was observed in January.

Four Zalophus were observed with monofilament, netting or an unknown material either embedded in their necks.

**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.

**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.

**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 2,620 (SD ± 523) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 3,159 individuals on the 18th.

**Steller Sea Lions** –On average there were 75 (SD ± 33) individuals counted, a high count of 112 on the 18th.

**Northern Elephant Seal –** Numbers of immatures dropped significantly with the breeding season in full swing. An average total count of 147 (SD ± 24) individuals was counted. There was an average of 26 (SD ± 3) breeding sized males. The number of cows and pups rose throughout the month to a high count of 28 cows and 17 pups on West End on the 26th, and 52 cows and 34 pups on SFI on the 27th. The

**Harbor Seal –** Harbor seal numbers were variable, due to the variety of tide and swell conditions during the weekly census. On average there were 21 (SD ± 25) individuals counted, a high count of 63 on the 10th.

**Northern Fur Seals** – Fur seal numbers were quite low. The mean of the weekly lighthouse census counts was 94 (SD ± 42) individuals, with a high of 159 on the 18th. On the trips to West End, 187 and 195 individuals were observed on the 4th and 26th respectively. A male Fur Seal was seen in Sea Cave. (Near Mirounga Beach)

**Cetaceans**

**Standard Survey** – 28 one-hour standard whale watches were conducted this month from the Lighthouse using the Spotter App. There were 2 surveys, one in the morning and one in the evening 10 of those days. Daily high counts from standard watches and incidental observations are summarized below.

Gray Whales were seen 19 days this month and an average of 10 (SD ± 10) individuals. A high count of 40 was observed on the 23rd.

**Sharks**

One predation event on pinnipeds was observed north of Sugarloaf on the 7th.

**Salamanders**

Two surveys were conducted this month: 14 were found on the January 1st survey (9 large and 5 small) and 40 were found on the January 18th survey (26 large, 10 small and 4 tiny).

**Owls**

A total of 13 Burrowing Owls were seen in the daily surveys of known roosting locations. A high count of 10 was recorded on the 24th and 31st. Two incidental owls were seen, one was discovered stuck in the door of the PRBO propane closet on the 22nd and one was flushed from near Garbage Gulch on the 24th.

**Crickets**

Cave surveys were conducted from the 19th to the 25th with an average of 1376 in Cricket Cave and 255 in the other small caves.

**Bats**

None were observed.

**Mice**

Two mouse trapping sessions were conducted this month starting the 1st with a 24% capture rate and the 17th with a 12% capture rate.

**Inverts and Intertidal**

An unidentified cluster of fishlike eggs were found on Marine Terrace Mirounga Beach.

**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.
* 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 plans 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.
* 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. The powered grease gun is also starting to have issues with priming and having more difficulties getting a good seal on the fittings. It may be time to talk seriously about auto-greasing mechanisms or a new style of grease fittings.
* 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 to prevent further leaks once water service is restored.
* 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 seems to be reading erroneously high usage values. During refilling water jugs it read ~4x the water used. I suggest switching to water readings from the pump house meter. This will account for water usage at East Landing as well.
* 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 reserves: 88 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 10.9 hours

Kohler 30REOZJC (Speedwagon): 6.6 hours

Kohler 40REOZK (Zeke): 6.0 hours

Kohler 15ROY61 (Peevey): 22.2 hours

Webasto: 0 hours

Power Used this month: Start = 74,000; End =74,689; for total of 689 kwh

**Fuel Reserves**

Diesel fuel used in January: 30 gallons

Drums: 0x 55g = 0 gallons

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: Full

Kohler 40REOZK (Zeke) Tank: Full

Kohler 15ROY61 (Peevey) Tank: ½ Full

Webasto Tank: ¼ Full

Surplus gasoline for boat motors: 3 gallons

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Cistern: 7.25’ on the 4th of February.

Gravity Tank: empty

Settling Tank: 2’

Water was pumped to the house for 11 hours this month

**Sightseeing Boats**

No sightseeing boats were seen around the island.

**Non-breeding birds**

Common Loon, Eared Grebe, Nazca Booby(!), Brown Booby, Northern Gannet, Brown Pelican, Canada Goose, Surf Scoter, Peregrine Falcon, Wandering Tattler, Whimbrel, Ruddy Turnstone, Black Turnstone, Heermann’s Gull, Mew Gull, California Gull, Herring Gull, Iceland Gull, Glaucous-winged Gull, Ancient Murrelet, Rock Pigeon, Barn Owl, Burrowing Owl, Black Phoebe, Rock Wren, Ruby-crowned Kinglet, Hermit Thrush, American Robin, European Starling, Cedar Waxwing, Audubon’s Warbler, Myrtle Warbler, Fox Sparrow, White-crowned Sparrow, Golden-crowned Sparrow, Dark-eyed Junco, and Western Meadowlark.