

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

November 2018

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**Island Visitors**

**Point Blue crew**: Preston Duncan, Rae Engert, John Garrett, Joey Negreann, Alyssa Olenberg-Meltzer, Jim Tietz, and Siena Watson.

November 3: **“Bonkers”** (skipper Keith Sedwick) brought out Alyssa Olenberg-Meltzer. It departed with Rae Engert. Nine crew toured the island.

November 10: “**Sarah Sea”** (skipper Dan Murch) brought out Jose Leyva and Charles Whitefield.

November 11: “**Salty Lady”** (skipper Jared Davis) brought out Siena Watson.

November 17: “**Steadfast”** (skipper Kixon Meyer) brought out Rae Engert and departed with Alyssa Olenberg-Meltzer and Siena Watson. Two crew toured the island.

November 21: **US Coast Guard helicopter** landed on Helo Pad and delivered a repaired Zodiac and 12 5-gallon jugs of water

November 26: **“San Francisco Helicopters”** brought out Scott Webster to perform annual inspection and maintenance on the cranes.

November 26: **US Coast Guard helicopter** brought out Louis Terrazas from USFWS.

November 29: **US Coast Guard helicopter** picked up Louis Terrazas.

November 30: **“San Francisco Helicopters”** picked up Scott Webster.

**West End Island Visitors**

No visits conducted in November.

**Weather/Ocean**

The wind this month was blowing west to northwest for 54% of the weather observations, while 21% of the weather observations had a northeast component. Skies averaged 44% overcast and fog was recorded on only 4% of weather observations. Haze was recorded on 37% weather observations due to the smoke that blanketed the area from the Camp Fire near Chico, California.

A total of 2.44 inches of rain fell during a few different storms during the final ten days of the month. Mean midday air temperature was 15.6° C, with a standard deviation of 1.18° C. The highest air temperature was 19.5° C recorded at 15:00 on the 12th, the lowest was 9.5° C recorded at 0600 hours on the 10th. Mean sea surface temperature was 13.83° C, with a standard deviation of 0.75° C, a high of 15.36° C on the 22nd, and a low of 12.82° C on the 18th. Mean SST was approximately 1.0° C lower than the long-term mean for this month, and 0.86° C lower than last October.

**Oiled & Entangled Wildlife**

No oiled wildlife were observed this month.

Seven Zalophus were observed with monofilament or nylon rope either embedded or tight around their necks. Four Western Gulls were entangled with monofilament around their wings or feet, while one had a balloon string entangled around its wing.

**Breeding Birds**

**Storm-Petrels** – At the beginning of the month, 3 sites had active Ashy nests. By the 5th, all monitored sites had confirmed fledges. One new Ashy nest site was discovered on the 18th by tracking the begging calls of a mostly/fully feathered chick. This nest was in rubble piled along the Cart Path between the trail to the Carp Shop and East Landing.

**Brandt’s Cormorant** – 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** – Seven individuals were seen on 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** – Numbers rapidly increased around the island this month, and they landed on their colonies in large numbers on most days.

**Pigeon Guillemot** – One individual was seen swimming offshore this month.

**Rhinoceros Auklet** – Several were being seen in the water around the island or flying by throughout the month.

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

**Cassin’s Auklet** – Several individuals were seen on the water around the island most days. Few adults returned to the island at night to vocalize.

**Black Oystercatchers** – Pairs were seen foraging along the intertidal or roosting in flocks during high tides.

**Pinnipeds**

**California Sea Lion***–* On average there were 2,232 (SD ± 127) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 2,426 individuals on the 1st. The high count for pups was 341.

**Steller Sea Lions** –On average there were 90 (SD ± 13) individuals counted, a high count of 105 on the 8th. The high count for pups was 37.

**Northern Elephant Seal –** Numbers of elephant seals gradually increased this month, with an average total count of 309 (SD ± 45) individuals counted. The

**Harbor Seal –** Harbor seal numbers were relatively low, reflecting high tide and large swell conditions during the weekly census. On average there were 21 (SD ± 26) individuals counted.

**Northern Fur Seals** – Fur seal numbers remained high during the month. The mean count was 530 (SD ± 242) individuals, with a high of 829 on the 4th. Pups were not counted this month because most have molted out of their natal pelage which makes identifying that age class too difficult from the distance of the lighthouse. No trips were made to West End.

**Cetaceans**

**Standard Survey** – Eight one-hour standard whale watches were conducted this month from the Lighthouse using the Apple iPad and Spotter App. Smoky conditions due to the Camp Fire prevented us from conducting surveys from the 9th to the 21st. Daily high counts from standard watches and incidental observations are summarized below.

A few gray whales (1-4) were seen almost daily this month. Humpback whales were seen on six days this month, with a high count of 12 on the 24th.

**Sharks**

Seven predation events on pinnipeds were observed this month at various locations around the island. The final survey of the season was conducted on the 28th.

**Salamanders**

Two surveys were conducted this month: three small were found on the first survey, but none were seen on the second survey.

**Owls**

Standardized surveys were conducted daily and it was determined that 11 individuals had arrived by the end of the month. The high-count for the month was nine on the 1st and 2nd. Eleven new individuals were captured in mist nets using playback and banded. We continued to monitor two owls banded in previous years: 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**

No surveys were conducted.

**Bats**

None were observed.

**Mice**

Two mouse trapping sessions were conducted this month. The first from the 9th to the 12th had 81% overall trapping success. The second from the 24th to the 27th had 63% overall trapping success.

**Inverts and Intertidal**

A few species of migratory insects were seen during the month. Several individuals of a species of dragonfly called the Variegated Meadowhawk (*Sympetrum corruptum*) were seen mid-month. Single individuals of two butterfly species were identified: Common Buckeye (*Junonia coenia*) and Monarch (*Danaus plexippus*).

**Plants**

The rain in early October allowed the Farallon weed (*Lasthenia maritima*) to sprout, but the lack of subsequent rain prevented them from growing much. Several native and exotic species were also observed sprouting. The dwarf nettle (*Urtica urens*), an invasive non-native, seems to be particularly abundant this year.

**Violations**

Two fishing violations were reported to California Fish and Wildlife this month.

**Maintenance**

Island biologist Tietz 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. The North Landing Zodiac was returned to the island after receiving a scheduled maintenance. Scott Webster weight-tested the North Landing and East Landing cranes (both passed). Louis rebuilt the fine-filter screen on the settling tank. Charles and Jose excavated the dirt from the threshold below the Powerhouse roll-up door to prevent water from getting underneath it. They also greased up the vice in the Powerhouse so it grips again. Charles replaced the weather stripping under the back door of the Coast Guard house to prevent mice from entering. The Point Blue crew cleaned out the house gutters, removed debris from the catchment pad, and scrubbed the pad during the first storm of the rainy season on the 21st.

**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 electrical circuit that powers the downstairs overhead lights in the PRBO house appears to have a short somewhere causing the breaker to trip. After attempting to locate the problem and replacing the breaker, it was determined that the short must be in the wall and will require the attention of a certified electrician. For now, the Farallon crew are making due with a few lamps.
* 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.
* 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: 85 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 14.0 hours

Kohler 30REOZJC (Speedwagon): 40.1 hours

Kohler 40REOZK (Zeke): 14.7 hours

Kohler 15ROY61 (Peevey): 33.2 hours

Webasto: 0 hours

Power Used this month: Start = 72,592; End = 73,432; for total of 840 kwh

**Fuel Reserves**

Diesel fuel used in August: 83.2 gallons

Drums: 0.4 x 55g = ~20 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: 5 gallons

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Cistern: ~ 63,750 gallons (5’3”)

Gravity Tank: empty

Settling Tank: 6.8’

Water use at house meter was 2331 gallons

**Sightseeing Boats**

The **Kitty Kat** was seen 4 times with an average of 40 people; **Salty Lady** was seen 4 times with an average of 27 people. White shark tour boats included: **Silver Fox** seen once with 15 people; **Akula** seen 4 times with an average of 5 people; **Derek M Baylis** seen once with 12 people.

**Non-breeding birds**

Red-throated Loon, Pacific Loon, Common Loon, Red-necked Grebe, Eared Grebe, Western Grebe, Northern Fulmar, Pink-footed Shearwater, Sooty Shearwater, **Masked Booby**, **Brown Booby,** **Red-footed Booby**, **Northern Gannet**, Brown Pelican, Great Egret, Snow Goose, Canada Goose, Brant, Northern Pintail, Canvasback, Surf Scoter, Northern Harrier, Merlin, Peregrine Falcon, Killdeer, Wandering Tattler, Spotted Sandpiper, Whimbrel, Black Turnstone, Ruddy Turnstone, Wilson’s Snipe, Red Phalarope, Bonaparte’s Gull, Heermann’s Gull, Mew Gull, Ring-billed Gull, California Gull, Herring Gull, Iceland Gull, Glaucous-winged Gull, Glaucous Gull, Black-legged Kittiwake, Ancient Murrelet, Barn Owl, Burrowing Owl, Long-eared Owl, Anna’s Hummingbird, Northern Flicker, Black Phoebe, Say’s Phoebe, Violet-green Swallow, Rock Wren, Golden-crowned Kinglet, Ruby-crowned Kinglet, Mountain Bluebird, Townsend’s Solitaire, Hermit Thrush, American Robin, Varied Thrush, European Starling, American Pipit, Cedar Waxwing, Nashville Warbler, Audubon’s Warbler, Myrtle Warbler, **Blackburnian Warbler**, Palm Warbler, Clay-colored Sparrow, Savannah Sparrow, Fox Sparrow, Lincoln’s Sparrow, White-throated Sparrow, White-crowned Sparrow, Golden-crowned Sparrow, Dark-eyed Junco, Western Meadowlark, Brewer’s Blackbird, Brown-headed Cowbird, Purple Finch, House Finch, and Lesser Goldfinch.