

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon National Wildlife Refuge

April 2017

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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: Russ Bradley, Marjorie Cox, Nina Duggan, Vivienne Hastie, Josh Hull, Mike Johns, Claudia Tapia, Chris Tyson, Jackson Vanfleet-Brown and Pete Warzybok

USFWS crew included: Joe Kahrnoff, Stephen Knuttel, Gerry McChesney, Adam Quade, Jonathan Shore and Xulia Suero,

NPS crew included: Michael Evans, Rudy Gustafson and Jill Milestone

April 1: **“Outer Limits”** (skipper Jim Robertson) brought out Point Blue personnel Nina Duggan and Pete Warzybok along with 2017 Team Spinach crew consisting of Jonathan Shore, Gerry McChesney, Joe Kahrnoff, Stephen Knuttel, Adam Quade and Xulia Suero. Also arriving were Michael Evans, Rudy Gustafson and Jill Milestone from the National Park Service Trail Crew to make repairs to the Lighthouse Hill trail. Russ Bradley and Marjorie Cox departed.

April 9: **“Outer Limits”** (skipper Jim Robertson) brought out Tony Jennings, Rain Credle, Christian McGrath, Kara Moore-O’Leary and Quentin Clark for a day visit. Quentin collected soil depth samples as part of his ongoing Master’s research project while all others toured the island. All day visitors departed along with Jonathan Shore, Gerry McChesney, Joe Kahrnoff, Stephen Knuttel, Adam Quade, Xulia Suero from FWS and Michael Evans, Rudy Gustafson and Jill Milestone from NPS. Bubba and Alyssa, crew for the Outer Limits, also toured the island.

April 15: **“French Kiss”** (skipper Brad Jacobson) attempted a patrol run to the island but were forced to turn back due to engine troubles. We truly appreciate the efforts of Brad and his crew and hope that their next trip will be less eventful.

April 19: USACE vessel **“John A.B. Dillard Jr.”** (skipper Kixon Meyer) stepped in as a replacement run to bring out Jackson Vanfleet-Brown and Chris Tyson. Claudia Tapia departed.

April 22: **“Kitty Kat”** (skipper Joe Nazar) brought out Josh Hull from U.C. Davis.

April 29: “**Kanpai III”** (skipper Andy Jones) brought out Russ Bradley, Mike Johns and Claudia Tapia. Viv Hastie, Josh Hull and Pete Warzybok departed.

**West End Island Visitors**

There were no trips to West End this month.

**Weather/Ocean**

The weather this month was unusually wet with many days of rain and southerly storm systems. The lack of northwesterly winds and resultant reduction in upwelling, caused the sea surface temperature to increase by more than 2°C in only a few days. However, more typical spring conditions returned towards the end of the month resulting in a pulse of upwelling and reduced water temperature. There was a total of 3.68 inches of rain recorded this month, including 1.87 inches during a large storm event on April 7th. Mean noon day air temperature was 13.96°C, with a standard deviation of 1.2°C. The highest air temperature was 17° C recorded at 1500 hours on the 18th and 19th, while the lowest was 9.5° C recorded at 0600 hours on the 9th. Mean sea surface temperature was 11.89°C, with a standard deviation of 0.97°C, a high of 13.94°C on the 21st and a low of 10.63°C on the 30th. This month’s mean SST was approximately 0.23°C higher than the long-term mean for this month and 0.03°C higher than April of last year.

**Oiled & Entangled Wildlife**

A partially oiled Cassin’s auklet was found nesting in a box near the PRBO house. It was coated with a thick, heavy oil on the side of the breast, wings and head for a total of approximately 20% oiling.

There were also three entangled California Sea Lions observed with monofilament wrapped around the neck.

**Breeding Birds**

**Storm-Petrels –** Ashy and Leach’s storm-petrels began regularly attending the colony during April with birds often heard calling at night and individuals occasionally encountered at breeding sites throughout the month. The first mist-netting session of the season was conducted on the 23rd on Lighthouse Hill with a total of 17 Ashy’s captured (13 new and 4 recaptures). During this time, we began deploying small, ultra-light radio frequency identification tags (RFID) tags on storm-petrels in addition to their regular metal bands. These will help us to locate nest sites for breeding birds and study their colony attendance and foraging patterns. This work is part of Chris Tyson’s PhD work at UC Davis. Standardized wing walk surveys were conducted every five days throughout the month. A total of 17 wings were found during wing walk and owl roost surveys, the majority of which were the result of Burrowing Owl predation.

**Brandt’s Cormorant** – Brandt’s cormorants have largely been absent from the colony for much of April. Birds started attending the colony during March, but departed during the period of stormy weather and have only just started to return to the colony during the last week of April. Resighting of banded birds began late in March and birds have begun nest building, but no evidence of breeding has been noted to this point.

**Pelagic Cormorant –** Pelagic cormorants have been sporadically attending the colony throughout the month. The first breed check was conducted on April 20. Birds are attending historic nest sites and starting to construct nests, but no evidence of breeding has been observed.

**Double-crested Cormorant** – The double-crested colony nests only on the top 1/3 of Maintop. Birds were first noted attending the colony on April 3 and nest building was observed on April 4. The first breeding census of the season was conducted on April 21st with 78 birds and 20 nests observed.

**Western Gull** – Gull breeding activity has increased throughout the month with many birds attending the colony, fighting over territories and initiating nest building. The first egg was discovered on 22 April.

**California Gulls –** California gull numbers have remained low throughout April with very few birds attending breeding areas on the Marine Terrace above Mirounga Beach and Sea Pigeon Point. Regular breeding bird surveys began on April 5th.

**Common Murre –** Murres continued to attend the colony most days during April but as of the end of the month no breeding activity was observed.

**Pigeon Guillemot –** Raft counts to assess guillemot breeding populations started on April 5th. There was an all island raft count high of 2044 guillemots on 24 April. The first breed check occurred on the 27th, with no breeding birds noted by month’s end.

**Cassin’s Auklet –** Onset of breeding for Cassin’s was slightly late this year than recent years. The first egg was seen on the 11th, however the bulk of laying occurred late in the month. On the 28th with 201 new eggs found during the known age study check. 16 GLS tags from 2016, which track the bird’s winter movements, were recovered by the month’s end. Roughly 60 RFID tags were deployed on known-age pairs, and RFID readers installed in the entrance tubes of the boxes. This is also part of Chris Tyson’s work on parental attendance at breeding sites.

**Rhinoceros Auklet –** A prospecting pair was seen in nest boxes on the 6th during a regular breed check, and the first egg was confirmed on the 17th in a natural crevice with the burrow cam. First breeding birds found in nest boxes on the 21st.

**Tufted Puffin –** No breeding activity to report. First individual on land was sighted on the 4th.

**Black Oystercatchers** – Birds were seen regularly roosting in intertidal sites.

**Pinnipeds**

**California Sea Lion***–* Overall numbers were low but increased steadily during the month of April. The high count was 2,155 on the 27th. On average there were 1,645 animals counted during pinniped census from the lighthouse.

**Steller Sea Lions** –As with the California sea lions, numbers have been low but generally increasing throughout the month. The high count was 115 individuals on the 20th. On average there were 84 animals counted census.

**Northern Elephant Seal –** Numbers of animals increased throughout the month with an influx of molting immatures. The high count was 353 individuals on the 27th. On average there were 245 animals counted during census.

**Harbor Seal –** As usual overall numbers were highly variable this month and heavily dependent upon tidal conditions (high tide results in less haul out areas). The high count was 75 individuals on the 20th. On average there were 25 animals counted during census. The first pup of the season was seen at North Landing on April 8th.

**Northern Fur Seals** – Fur seal numbers have been fairly steady during April with variation in the census counts resulting mostly from animals moving to the water on warmer days. The mean count from Lighthouse censuses was 111 animals, with a high count of 136 on the 7th.

**Cetaceans**

**Standard Survey** – There were 10 one hour whale watches conducted this month using the Apple iPad and Spotter App.

Gray Whales were seen daily in low numbers throughout the month on April. There were up to 3 apparent residents, along with occasional northbound migrants. The high count was 6 on April 9th and 22nd. There were also small numbers of Humpback Whale sightings in April, a total of 14 individuals, as well as a pod of 50 Risso’s Dolphins on the 5th.

**Sharks**

No Shark attacks observed.

**Salamanders**

Standard surveys were conducted twice in April, with 10 large animals on the 3rd and 20 large on the 14th. The first female with eggs was discovered in an auklet box on the 17th.

**Owls**

One burrowing owl was regularly seen roosting in the PRBO Catacombs until April 8th when it was found dead, likely killed by a Barn Owl. Additional burrowing owls were seen at Pointy Cliff on the 4th, Rabbit Cave Catacombs on the 17th, and Sewer Gulch on the 19th. No sightings were observed after that.

**Crickets**

Quarterly cricket surveys were conducted for 3 nights staring April 25th at all sites except cricket cave on Shubrick Point. Results were slightly variable with weather, and seemed relatively similar to January surveys.

**Inverts and Intertidal**

Island crew made a brief visit to Jewel Cave on the 28th and noted a relative absence of fauna.

**Plants**

Team Spinach arrived on island on the 1st of April and began spraying on the 2nd. Spraying efforts covered all accessible areas of the island, targeting primarily NZ spinach, Malva, and Plantago.

**Violations**

Sport fishing boats Reg# WN8929RI and Reg# CF8700PG both with 2 POB seen fishing in the no-take marine reserve. Bothe vessels were reported to CALTIPS and photo identification was obtained.

**Maintenance**

Island biologists Bradley, Warzybok, and Johns conducted routine maintenance checks on the PV system and generators weekly. Monthly changes of water filters, crane greasing, and outboard motor operation were also conducted. Point Blue volunteers were given crane operation and safety training. Trail crew repaired rock wall blowout on Lighthouse Hill Trail near the PIGU Blind, and also installed a set of rock steps on the trail to repair erosion. A new battery disconnect was installed on Kohler 30REOZJC (Speedwagon). Both the Kohler 15ROZ (Buffy) and Kohler 15ROY61 (PV) generators received an oil change and fuel filter replacement. A new muffler was installed in the exhaust system on Buffy.

**Maintenance Needs**

* Repair liner in the Gravity tank
* Wing-nut bolt needs to be drilled out of the threading and replaced on the NL derrick winch handle as it broke during a landing
* The dumper jet battery appears to be losing its charge quickly despite regular recharges. The reason for the rapid discharging is not known. The batteries are fairly new so the issue may be with the charger not bringing them up to full capacity.
* 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 appeared to have a leak in it when water is above 5.1 feet, but is now holding steady at 6’8”.
* Some of the wooden railing on Light House Hill needs repair.
* Webasto heater is not functioning and needs a new fuel pump.
* Clean water line going to upstairs in PRBO house needs to be cleared to increase water pressure.
* PRBO upstairs toilet needs to be fixed so it flushes properly.
* PRBO downstairs toilet runs continuously when valve is left open. Cause is unknown and troubleshooting attempts have failed to fix the problem.
* Drain line from PRBO kitchen sink 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.
* Refurbishment of North Landing platform
* Resolve water usage discrepancy between cistern and water meter

**Solar/Electric**

**PV System**

**Generator run times**

Kohler 15ROZ (Buffy): 0.2 hours

Kohler 30REOZJC (Speedwagon): 4.1 hours

Kohler 40REOZK (Zeke): 10.5 hours

Kohler 15ROY61 (PV): 0.5 hours

Webasto: Not working

Power Used: Start of month 59,427; end of month 59,830; for total of 403 kwh

**Fuel Reserves**

Fuel Remaining:

Drums: 8.5 X 55g = 460 gallons

Kohler 15ROY61 (PV) Tank: Full

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: 1/2

Kohler 40REOZK (Zeke) Tank: 5/8

Webasto Tank: 1/4

**Water Reserves**

Cistern: ~115,720 gallons (8’3”)

Gravity Tank: empty

Settling Tank: 6’7’’ feet

Water use at house water meter was 4,542 gallons.

**Sightseeing Boats**

Kitty Kat was seen six times this month (1st, 8th, 9th, 15th, 22nd, 29th) with 10-40 POB. An unknown whale watching vessel (likely Outer Limits) was seen on the 15th with 40 POB. NOAA vessel R228 Reuben Lasker was seen passing south of the island on the 20th. Coastguard patrol boat 87312 was seen patrolling around the island on the 29th.

**Non-breeding birds**

Pacific Loon, Common Loon, Eared Grebe, **Black-footed Albatross**, Sooty Shearwater, **Pink-footed Shearwater**, Brown Booby, Brown Pelican, Canada Goose, **Northern Shoveler**, Surf Scoter, Peregrine Falcon, Western Willet, Wandering Tattler, Whimbrel, Black Turnstone, **Pectoral Sandpiper**, Herring Gull, Glaucous-winged Gull, Glaucous, Black-legged Kittiwake, **Caspian Tern**, Ancient Murrelet, Eurasian Collared Dove, Burrowing Owl, Black Phoebe, Rock Wren, American Robin, Northern Parula, Audubon’s Warbler, Myrtle Warbler, Common Yellowthroat, Savannah Sparrow, White-crowned Sparrow, **Brewer’s Blackbird**, **Cassin’s Finch**