

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

August 2019

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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 Residents**

**Point Blue crew**: John Garrett, Eva Hasegawa, Mike Johns, Grace Kumaishi, Joey Negreann, Theresa Rizza, Miles Sheuering, Amanda Spears, Maya Sterett, and Jim Tietz.

**Island Visitors**

August 12th: “**Freda B”** (skipper Paul Dines) brought out Jim Tietz and departed with Mike Johns. Eight people toured the island.

August 17th: “**MiVida”** (skipper Tom Charron) brought out Joey Negreann and Amanda Spears. They departed with Eva Hasegawa, Miles Sheuering, and Maya Sterett. Two people toured the island.

August 31st: “**French Kiss**” (skipper Harmon Schragge) brought out John Garrett and departed with Grace Kumaishi. Five crew toured the island.

**Weather & Ocean**

The weather on the island this month was mostly overcast with moderate northwest winds and occasional light south winds. The newly functioning wind vane meter in the PRBO house appears to be shifted 20-30 degrees clockwise, which accounts for a much greater proportion of our wind directions coming from the north-northwest instead of northwest and west-northwest as is more typical at the Farallones. The island received 0.06 inches of precipitation, which fell over six days as drizzle. Fog occurred on 31% of weather observations. The average midday air temperature was 17.0 ± 1.4 °C, which was 1.65 °C higher than the long-term average for August. The low for the month was 12.5 °C at 7 AM on the 26th, and a high of 23.0 °C was recorded at 4 PM on the 29th. The average sea surface temperature was 13.8 ± 1.0 °C, with a low of 12.1 °C on the 20th and a high of 16.7 °C on the 30th. This was 0.06 °C lower than the long-term average for August.

**Oiled & Entangled Wildlife**

Thirteen California Sea Lions were observed to be entangled with either monofilament, nylon netting or strapping, or unknown material. Most individuals were males or immature, but one was an adult female with a pup. Two adult female Steller Sea Lions, which were nursing pups, were observed with salmon flashers embedded in their mouths. All entanglements were photo-documented, and photos were sent to Tony Orr at the Marine Mammal Laboratory.

**Breeding Birds**

**Storm-Petrels** – Of the 89 nest crevices initially monitored this breeding season, 54 had some activity this year and 35 did not. Only one of the active nests was confirmed to have a Leach’s Storm-Petrel, while the remaining 53 had Ashy or were not identified to species. By the end of the month, 33 of the 53 active Ashy sites had chicks, 6 nests still had adults incubating or brooding, while 2 had cold eggs and may have failed. The status of the remaining 12 nests is uncertain because we have not detected activity in the past month. No activity was seen at the Leach’s site this month either. After the initial crevice camera broke on 28 July, we switched to an older crevice camera which is negatively affecting our ability to monitor at least 10 nests, and explains why we could not detect recent activity at them. Only one nest was added in August, which was found by visually spotting an adult incubating an egg. The RFID unit did not locate any new nests this month, and birds have yet to start using the Ashy Castle.

**Brandt’s Cormorant** – On 1 Aug, 205 chicks were banded at the Corm Blind Colony. On 13 Aug, monitoring concluded at the Sea Lion Cove Colony. On 23 Aug, 57 pellets were collected from the Sea Lion Cove Colony. The Corm Blind Colony still had partly and mostly feathered chicks on nests at the end of the month.

**Pelagic Cormorant** – A nest with two mostly feathered chicks was spotted on 30 Aug on the north side of Little Lighthouse Hill above the “Gap”. This unmonitored nest was the only one to reach this stage of development in 2019. All other nests detected by Point Blue failed this year.

**Double-crested Cormorant** – Large numbers of chicks remained on Maintop through August, with flocks of adults observed flying to the coast to obtain food for provisioning their chicks. Numbers of fledglings increased throughout the month at roosting sites such as North Landing.

**Western Gull** – Most nests on the island had fledged or failed by the end of the month, with H East and West and C Plots concluding on 20 Aug, and K Plot concluding on 26 Aug. Most adults and fledglings are using the island to roost at typical locations for this time of year, such as Sea Pigeon Point and West Marine Terrace.

**California Gulls** – Apparent adults from the breeding colony continued roosting on the island. First-year birds from mainland colonies began showing up in large numbers to roost on the island as well.

**Common Murre** – All chicks either fledged or disappeared from the Upper Upper Plot by 10 Aug, which was the final plot to be monitored this year. Several murres, however, continued to occupy nesting sites in other areas of the island through the third week of Aug.

**Pigeon Guillemot** – There were 21 active nests this month, which fledged 13 chicks. At the end of the month, only six followed nests were still active on Lighthouse Hill, and many fledglings were observed in the water around the island.

**Rhinoceros Auklet** – There were 21 nests active at the beginning of the month: 15 in boxes and 6 in natural crevices that were checked with a crevice camera. A total of 19 chicks fledged, 13 from boxes and 6 from natural crevices. The two remaining chicks failed to fledge, one from a box and one from a natural crevice. All chicks either fledged, died, or disappeared from monitored sites by 29 Aug.

**Tufted Puffin** – The late season breed check that began on July 28th was concluded on 15 Aug. There were 187 nest sites classified as “active” during the late season survey. The estimating breeding population this year was 374. Several birds were observed carrying fish toward nesting areas this month. Many puffins were observed prospecting for future nest sites at the end of the month, as is typical in late August.

**Cassin’s Auklet** – Only 10 nests were still active at the beginning of the month, 6 from Known-Age boxes and 4 from PRBO boxes. Of these active nests, all fledged except for one in a PRBO box which was still active at the end of the month. The 5-day Known-Age monitoring concluded on 11 Aug, It was also noted on this date that many of the 15-day boxes contained dead chicks or dead eggs.

**Pinnipeds**

**California Sea Lion***–* On average there were 5,781 (SD ± 1653) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 7,789 individuals on the 22nd. There was a high count of 569 pups on the 15th. Large numbers (>10,000) of sea lions were covering the Marine Terrace in the early mornings, but most had departed for the water by the late morning, when the weekly surveys began.

**Steller Sea Lions** –On average there were 124 (SD ± 84) individuals counted, with a high count of 248 on the 8th. There was a high count of 24 pups on the 29th.

**Northern Elephant Seal** –Only four individuals counted for the first three counts in Aug. On the 29th, 18 immatures were counted.

**Harbor Seal –** Harbor seal numbers were variable, due to the variety of tide and swell conditions during the weekly census. On average there were 22 (SD ± 32) individuals counted, with a high count of 69 on the 8th.

**Northern Fur Seals** – Numbers counted increased through the month from 1198 on the 8th to 1847 on the 29th. However, >1500 of the fur seals on the 29th were in the water off Indian Head Beach and in the Jordan Channel as it was warm and sunny during the survey. The average number counted for the month was 1477 (SD ± 300). Pup numbers decreased through the month from 494 on the 8th to 142 on the 29th. The decrease in pup number counts is likely due to pups increasingly getting into the water, where they are lumped with adults into an unidentified age class.

**Cetaceans**

**Standard Survey** – 11 one-hour standard whale watches were conducted from the Lighthouse using the Spotter App when conditions allowed. Numbers from standard watches were combined with incidental observations to create daily estimated totals. Humpback Whales were seen on most days during the final three weeks, with a high count of 106 on the 10th. Two to three Blue Whales were seen on 3 consecutive days during the second week. Fin Whales were seen on two days: 3 on the 25th and 4 on the 29th. Gray Whales were seen most days, which consisted of the same there whales circling the island. On the 19th, a pod of 200 Pacific White-sided Dolphins and a pod of 15 Risso’s Dolphins were seen.

**Sharks**

On the 27th, a shark bit a California Sea Lion off Sea Pigeon Point, and it bled to death in Mirounga Bay. On the 29th, a shark was observed thrashing briefly in Fisherman’s Bay, but no blood was seen, so it may have thrashed a carcass.

**Salamanders**

No surveys were conducted.

**Owls**

No burrowing owls were observed.

**Crickets**

Surveys were conducted from the 14th to the 17th at Rabbit Cave and pocket caves at Corm Blind, the “Gap”, and at North Landing.

**Bats**

The first survey of the fall season was conducted on the 18th. Unfortunately, none were observed this month.

**Mice**

House mice numbers increased during the month and invaded the house in mid August.

**Inverts and Intertidal**

Two species of butterflies were seen: Painted Ladies were common throughout the month, while a few West Coast Ladies were present during the final week of the month. Four species of dragonflies were recorded: Green Darner, Blue-eyed Darner, Black Saddlebags, and Spot-winged Glider.

**Oceanic Events**

Nothing to report.

**Plants**

A large swath of invasive *Lythrum hyssopifolia* was noted east of the Weather Station.

**Violations**

On the 23rd, the Spellbound (CF 14K40741) sailed in between Saddle Rock and Southeast Farallon Island while waving merrily at the crew. On the 31st, a Striper (CF 9788 PJ) was fishing off Fisherman’s Bay, and a Grady White (CF not legible) was fishing off Shubrick. As the Striper violation occurred during a resupply, I was able to approach them in our skiff and tell them that they could not fish near the island.

**Maintenance**

Island biologist Johns and Tietz conducted routine weekly maintenance checks on the PV system and generators. Monthly changes of water filters, water testing, and crane greasing were conducted. In addition, the shed door on the CG house was fixed. The PRBO house bathtub drain was unclogged. The MSDS binder was updated and liquids were MSDS labeled. The PRBO Walk-through Room and ceiling of the Living Room were painted with anti-mold paint. Mike replaced the thermostat on the Safeboat’s Honda 60 hp engine. PRBO floors were scrubbed to reveal original color. The pilot light on the PRBO oven was fixed.

**Maintenance Needs**

* The PV and Buffy generators are supposed to automatically start to give themselves monthly exercise. This is not happening, requiring they 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.
* The Settling Tank measuring stick came undone and fell into the tank.
* Many sections of the wooden railing on Lighthouse Hill need repair.
* Several separations have been seen on the East Landing derrick slewing rope, possibly from jogging the slew.
* Substantial corrosion of the wedge-socket on the East Landing block.
* Several inches of water accumulate in the pipe shop after a good rain. A new threshold is needed to seal the door. Also, there could be a crack in the foundation.
* Several grease points on the crane are having difficulty taking grease.
* There are several broken sections of pipe around the island which have received temporary repairs with compression sleeves. **Island-wide, the water pipes are in dire shape and need to be replaced.**
* The kitchen drain is not draining well despite multiple attempts to clear it. Due to the age of the plumbing and the ongoing difficulty servicing pipes under the house, it may be necessary to abandon the current plumbing and install new pipes outside the house to connect the sinks and showers to the gray water system.
* The PRBO house kitchen counters especially around the sink continue to deteriorate. Replacement sometime in the next year is recommended.
* Very small coolant leak in 30kw Speedwagon generator radiator fins. Radiator needs to be replaced.
* Slow but steady leak in the PRBO fire hose spigot.
* The HADS weather station is no longer transmitting data to the web. Attempts to reset the unit have failed, and will require expert guidance to fix.

**Solar/Electric**

**PV System**

Distilled water used: 0 gallons

Distilled water reserves: 23 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 2.3 hours (1744.1 on meter)

Kohler 30REOZJC (Speedwagon): 0 hours (611.7 on meter)

Kohler 40REOZK (Zeke): 20.9 hours (344.7 on meter)

Kohler 15ROY61 (Peevey): 2.4 hours (3886.8 on meter)

Webasto: 0 hours

**Power use**

Facilities power use: Start = 78,990; End = 79,640; for total of 650 kWh

**Fuel Reserves**

Diesel used: 19.9 gallons

Diesel drums: 14.2 @55gal: 781 gallons

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: Full

Kohler 40REOZK (Zeke) Tank: Full

Kohler 15ROY61 (Peevey) Tank: Full

Webasto Tank: Full

Surplus gasoline for boat motors: 5 gallons

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Water used this month: Start = 266,486; End = 269,200; for a total of 2,714 gallons

Cistern: 7’4” or ~100,000 gallons

Gravity Tank: empty

Settling Tank: empty

**Sightseeing Boats**

The Salty Lady was seen on 6 occasions with an average of 29 POB, Outer Limits was seen 3 times with an average of 39 POB, the Seawolf was seen 3 times with an average of 14 POB, the Huck Finn was seen one time with 20 POB, the New Cap’n Pete was seen 2 times with an average of 21 POB, and the Seaward was seen once with 10 POB.

**Non-breeding birds**

Laysan Albatross, Pink-footed Shearwater, Buller’s Shearwater, Sooty Shearwater, Short-tailed Shearwater, Brown Booby, Northern Gannet, Brown Pelican, Great Blue Heron, Canada Goose, Surf Scoter, American Kestrel, Peregrine Falcon, Black-bellied Plover, Semipalmated Plover, Wandering Tattler, Spotted Sandpiper, Whimbrel, Ruddy Turnstone, Black Turnstone, Semipalmated Sandpiper, Western Sandpiper, Least Sandpiper, Pectoral Sandpiper, Red-necked Phalarope, Red Phalarope, California Gull, Sabine’s Gull, Elegant Tern, Arctic Tern, Ancient Murrelet, Rock Pigeon, Eurasian Collared-Dove, Mourning Dove, Willow Flycatcher, Least Flycatcher, Western Flycatcher, Western Kingbird, Cassin’s Vireo, Hutton’s Vireo, Warbling Vireo, Violet-green Swallow, Cliff Swallow, Northern Rough-winged Swallow, Barn Swallow, Red-breasted Nuthatch, House Wren, Blue-gray Gnatcatcher, Northern Mockingbird, Cedar Waxwing, Orange-crowned Warbler, Yellow Warbler, Black-throated Gray Warbler, Townsend’s Warbler, Hermit Warbler, Northern Waterthrush, MacGillivray’s Warbler, Common Yellowthroat, Wilson’s Warbler, Chipping Sparrow, Lark Sparrow, Savannah Sparrow, Black-headed Grosbeak, Lazuli Bunting, Red-winged Blackbird, Brown-headed Cowbird, Hooded Oriole, Bullock’s Oriole, Lesser Goldfinch.