

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon 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: Russ Bradley, Nina Duggan, Vivienne Hastie, Mike Johns, Lauren Lescure, Claudia Tapia, Chris Tyson, Jackson Vanfleet-Brown, Pete Warzybok

San Jose State: Scott Shaffer

May 12: **“Mirthmaker”** (skipper Kirk Denebeim) a sailboat hailed on 16 took Point Blue personnel Russ Bradley and Chris Tyson back to the mainland. Vessel was used last-minute due to a mechanical issue with the scheduled patrol vessel “Steadfast”.

May 14: **“OG II”** (skipper Jamis McNiven) brought out Point Blue personnel Vivienne Hastie and Lauren Lescure. There was no tour.

May 27: **“Hokahey”** (skipper Jan Passion) brought out Point Blue personnel Pete Warzybok and Chris Tyson, as well as Scott Shaffer from San Jose State. Point Blue personnel Nina Duggan and Jackson Vanfleet-Brown departed. Five people toured the island.

**West End Island Visitors**

There were no trips to West End this month.

**Weather/Ocean**

Strong spring northwesterly winds dominated the first half of May, followed by a week of exceptionally calm wind and a southerly influence. No substantial rainfall was recorded, totaling only 0.04 inches of precipitation in fog. Mean noon day air temperature was 13.7°C, with a standard deviation of 0.88°C. The highest air temperature was 16.5° C recorded at 1200 hours on the 27th, while the lowest was 10.0° C recorded at 0600 hours on multiple days. Mean sea surface temperature was 10.89°C, with a standard deviation of 0.52°C, a high of 12.36°C on the 29th, and a low of 10.16°C on the 7th. Mean SST was approximately 0.56°C lower than the long-term mean for this month and 1.06°C lower than May of last year.

**Oiled & Entangled Wildlife**

A Cassin’s auklet with a 5% oiled belly was found during Ashy Storm-petrel netting at Lighthouse Hill on the 20th. An adult male California Sea Lion was sighted with monofilament embedded in its neck on the 25th.

**Breeding Birds**

**Storm-Petrels –** Storm-petrels remained sparse during weekly breed checks, with only a few crevices containing attending birds; however, calls were often heard at night and many birds with bare brood patches were captured during netting. No eggs were observed. We increased our netting effort in order to maximize the number of PIT tags deployed on storm-petrels for Chris Tyson’s graduate work. Netting occurred at on 6 nights, at standard sites Lighthouse Hill (4th, 20th, 26th) and Carp Shop (21st), as well as at new sites below the gravity tank on Lighthouse Hill (23rd) and on the old trail on Lighthouse Hill west of h-plot west (25th). A total of 249 storm-petrels were caught, representing 182 new and 62 recaptured Ashy Storm-petrels, along with 5 Leach’s Storm-petrels. Aside from the breeding species, in an unprecedented event a large number of Fork-tailed Storm-petrels were observed flying extremely close to the island on the 8th and for several days thereafter. Some individuals were even seen flying just off the shore break and into Garbage Gulch and Fisherman’s Bay. The appearance of Fork-tailed Storm-petrels coincided with reports of large flocks in Monterey Harbor and thousands more throughout Monterey Bay.

**Brandt’s Cormorant** – Brandt’s cormorants began breeding in average numbers at all monitored colonies throughout the island. The first egg was seen from both the Corm Blind and Sea Lion Cove Blind on the 6th. Regular resighting work was conducted throughout the month of May.

**Pelagic Cormorant –** Breeding activity remained low for Pelagic Cormorants throughout the month, with only a small fraction of well built nests at followed sites and no eggs observed.

**Double-crested Cormorant** – Double-crested Cormorants remain confined to a colony on the top 1/3 of Maintop. Nesting activity leveled off by mid-May at roughly 90 well-built nests, counted with a scope from Lighthouse Hill. There were no chicks observed.

**Western Gull** – Timing and breeding activity for Western Gulls appeared normal in May, however, there were fewer breeding birds counted in index plots on the 24th compared to last year. The first egg within the study plots was discovered on the 1st, followed by the first chicks found on the 25th. Scott Shaffer deployed 15 GPS devices on Western Gulls in late May as part of a tracking study to examine foraging strategies during the breeding season.

**California Gulls –** Attendance and breeding behavior remained extremely low this year for California Gulls, with only 5 nests observed on the Marine Terrace. Along with a lack of nests, very few birds have been seen on island.

**Common Murre –** The first eggs of the season were sighted from the Murre and Corm Blinds on the 4th. Most of the followed murres in study plots were incubating eggs by mid-month. Breeding activity appears stable, with no major abandonment of breeding effort noticed.

**Pigeon Guillemot –** Island attendance and breeding of Pigeon Guillemots was late this year. The first egg was found on the 27th, which is the same as 2015. Both these years had the latest first egg since the 1998 El Niño year.

**Cassin’s Auklet –** Occupancy for the known-age study boxes was at 89% and in the long term productivity study boxes was 88% by the end of May. The first confirmed chicks in the followed boxes were discovered on the 18th. Diet sampling began on the 29th. May was a big month for archival tagging work on Cassin’s. Seven time depth recorders (TDR) were deployed on known-age birds that contained young chicks on the 28th, and were recovered on the 30th. Chris Tyson finished deploying RFID tags/readers on the 30th, for a total sample size of 40 individuals. We also recovered 24 of the 33 light censing geolocation (GLS) tags deployed last summer from known-age study boxes, which are likely the final number of recoveries for the year.

**Rhinoceros Auklet –** Peak nest box occupancy was reached on the 6th, with 37% of the followed boxes containing breeding pairs. The first chick of the season was found in a natural crevice during burrow cam monitoring on the 27th.

**Tufted Puffin –** Tufted Puffin attendance on the island gradually increased during the final weeks of May. The early breed census began on the 24th.

**Black Oystercatchers** – There were 9 active Black Oystercatcher sites discovered this month. The first eggs were confirmed on the 22nd.

**Pinnipeds**

**California Sea Lion***–* On average there were 1,912 (stdev ± 645) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 2,516 individuals on the 11th. The first pup was sighted on the 18th, with a high count of 31 pups by the end of the month.

**Steller Sea Lions** –On average there were 133 (stdev ± 89) individuals counted, with at least 4 bull males at several sites around the island. The high count for Steller sea lions was 255 on the 18th.

**Northern Elephant Seal –** Numbers of cow-sized and immature individuals sharply declined by the end of the month, with an average total count of 147 (stdev ± 61) individuals counted. The

**Harbor Seal –** Harbor seal numbers were highly variable, reflection tide height and weather conditions during the weekly census. On average there were 38 (stdev ± 34) individuals counted. The high count was 85 on the 11th and low count of 10 on the 25th. Several pups were also noted during the counts.

**Northern Fur Seals** – Fur seal numbers were lower compared to counts made in April, but consistent throughout the month of May. The mean count was 55 (stdev ± 11) individuals, with a high of 69 on the 5th.

**Cetaceans**

**Standard Survey** – A total of 9 one hour whale watches were conducted this month from the Lighthouse using the Apple iPad and Spotter App.

Gray whales were seen daily when conditions allowed for sightings, most of which were of 3 whales that seem to be resident to the island. Sighting conditions were poor during the first half of the month for viewing offshore, however increasing numbers of humpback and blue whales were sighted later in the month when conditions improved. A conservative estimate of 19 humpbacks out to the west was made on the 27th, with at least 5 blue whales concentrated mostly south of the island. Blue whale were more numerous by the end of the month. At least 10 were sighted on the 31st, one of which approached less than 0.5 miles from the island, and many more blue whale sized blows on the horizon. Although May is getting into the end of the gray whale migration north, a large group of at least 20 mothers with calves was observed heading east on the 31st. Behaviors and smaller blows nearby indicated possible harassment by killer whales, but the animals were too distance to confirm this.

**Sharks**

No Shark attacks observed.

**Salamanders**

Drier summer conditions lead to a reduction in salamanders. An all island census was conducted on the 1st, with a total of only 4 individuals. Two standard surveys were conducted on the 3rd and 18th. No salamanders found on the last survey, marking the end of surveys for the season.

**Owls**

No owls were seen this month.

**Crickets**

No surveys were conducted this month.

**Inverts and Intertidal**

Nothing to note.

**Plants**

No plant mitigation activities were conducted this month.

**Violations**

A 20ft sport boat was seen actively fishing in Mirounga Bay on the 11th, but no CF number was obtained. Sport fishing boat Reg# CF211SU was seen catching fish in Mirounga Bay for approximately 2 hours on the 24th.

**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 a complete North Landing zodiac and crane operation training. A new AIS unit was installed at the Lighthouse to extent tracking of vessel traffic within the Gulf of the Farallones National Marine Sanctuary. Two antennas and a receiver were fitted to an existing tower on the west-facing wall of the Lighthouse structure, which was linked into the network via Ethernet.

**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
* Replace stern line of safeboat that was wrapped in the prop with new double-braided poly.
* Replace window blinds in PRBO downstairs bathroom.

**Solar/Electric**

**PV System**

**Generator run times**

Kohler 15ROZ (Buffy): 1 hour

Kohler 30REOZJC (Speedwagon): 1 hour

Kohler 40REOZK (Zeke): 11.6 hours

Kohler 15ROY61 (PV): 1 hour

Webasto: Not working

Power Used: Start of month = 59962; end of month = 60457 for total of 495 kwh

**Fuel Reserves**

Fuel used: 44 gallons (2 months)

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: 3/4

Webasto Tank: 1/4

**Water Reserves**

Cistern: ~112,860 gallons (8’1”)

Gravity Tank: empty

Settling Tank: 6’ 7’’

Water use at house water meter was 1,489 gallons.

**Sightseeing Boats**

**Kitty Kat** was seen on 5 occasions this month (13th, 14th, 21st, 27th, 28th) with 10-26 POB. **Salty Lady** was seen on 6 occasions this month (11th, 20th, 21st, 26th, 27th, 28th) with 10-32 POB. **Happy Daze** was seen on the 20th with 30 POB.

**Non-breeding birds**

Pacific Loon, Common Loon, Eared Grebe, Black-footed Albatross, Pink-footed Shearwater, Sooty Shearwater, **Fork-tailed Storm-petrel**, Northern Gannet, Brown Booby, Brown Pelican, Canada Goose, Surf Scoter, **Bufflehead**, **Osprey**, Peregrine Falcon, Wandering Tattler, Whimbrel, **Red-necked Phalarope**, Phalarope sp., Herring Gull, Glaucous-winged Gull, Eurasian Collard Dove**, Western Wood Pewee**, **Pacific-slope Flycatcher**, ***Empidonax sp***., **Cassin’s Vireo**, **Tennessee Warbler**, **Orange-crowned Warbler**, Northern Parula, **Yellow Warbler**, **Chestnut-sided Warbler**, **Magnolia Warbler**, Audubon’s Warbler, Myrtle Warbler, **Black-throated Gray Warbler**, **Townsend’s Warbler**, **American Redstart**, **Ovenbird**, **MacGillivray’s Warbler**, Common Yellowthroat, **Wilson’s Warbler**, **Summer Tanager**, **Western Tanager**, **Chipping Sparrow**, **Clay-colored Sparrow**, **Rose-breasted Grosbeak**, **Lazuli Bunting**, **Indigo Bunting**, **Dickcissel**, **Yellow-headed Blackbird**, Brewer’s Blackbird, **House Finch**