

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon National Wildlife Refuge

June 2017

Pete Warzybok, Mike Johns, Russ Bradley

rbradley@pointblue.org

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

June 3: **“Kitty Kat”** (skipper Joe Nazar) brought out Jonathan Shore and Alice Lopes from USFWS and departed with Scott Schaffer from SJSU.

June 10: **“Salty Lady”** (skipper Jared Davis) brought out Gerry McChesney (USFWS), Thomas Peschak and Jonathan Franzen (photographer and writer for National Geographic piece), Matthew McKown (Conservation Metrics) and departed with Jonathan Shore. Also, **“Starbuck”** (skipper John Wade) brought out Nina Duggan, Jackson Vanfleet-Brown, Cerren Richards, and Point Blue volunteer Jessie Ditmore. Starbuck departed with Claudia Tapia, Matthew McKown, and Jessie Ditmore.

June 17: “**Salty Lady**” (skipper Jared Davis) picked up Gerry McChesney, Alice Lopes, Thomas Peschak, and Jonathan Franzen.

June 24: “**Mi Vida**” (skipper Tom Charron) brought out Russ Bradley and Claudia Tapia and departed with Pete Warzybok, Mike Johns, and Vivienne Hastie. Three toured the island.

**West End Island Visitors**

There were no trips to West End this month.

**Weather/Ocean**

June saw fairly typical conditions of moderate to strong Northwest winds, along with substantial periods of light winds and a more southerly influence. There was 0.17 inches of rain recorded, mostly from one small event early in the month. Mean midday air temperature was 14.70°C, with a standard deviation of 1.11°C. The highest air temperature was 18.5° C recorded at 1300 hours on the 26th, while the lowest was 11.0° C recorded at 0700 hours on multiple days. Mean sea surface temperature was 11.83°C, with a standard deviation of 0.91°C, a high of 14.42°C on the 27th, and a low of 10.80°C on the 6th. Mean SST was approximately 0.36°C higher than the long-term mean for this month, but 0.49°C lower than last June.

**Oiled & Entangled Wildlife**

A Common Murre that was 20% oiled on its breast was seen in the Upper Upper colony on the 7th. Four California Sea Lions with monofilament or packing straps wrapped around their necks were seen in June.

**Breeding Birds**

**Storm-Petrels –** The first confirmed egg of the season was seen at a site at the Helopad on the 3rd. Matthew McKown from Conservation Metrics deployed seven song meters to record storm petrel calls at standard sites used in previous years plus one new site. Netting occurred at on 3 nights, at standard sites Lighthouse Hill (22nd, 26th) and Carp Shop (19th), as well as along the lower Lighthouse Hill trail (23rd). A total of 158 storm-petrels were caught, representing 123 new and 32 recaptured Ashy Storm-petrels, along with 2 Leach’s Storm-petrels and 1 Fork-tailed Storm-petrel. Despite some technical issues with the storm petrel RFID tags, the first tagged nesting bird was found at a breeding site on the 30th.

**Brandt’s Cormorant** – First chicks were seen at both study blinds on the 8th and the all island census was completed on the 9th. Main colony areas showed reduced numbers while newer sites like above North Landing showed growth. By month’s end most chicks had hatched and were growing, with very little nest abandonment.

**Pelagic Cormorant –** Breeding activity was still slow for Pelagic Cormorants in June. The first eggs were seen on the 6th and an all island census was conducted on the 9th.

**Double-crested Cormorant** – Double-crested Cormorants remain confined to a colony on the top 1/3 of Maintop. First chicks were seen on the 5th. Numbers of well-built nests peaked at 113 on the 10th. By month’s end many chicks were beginning to get large.

**Western Gull** – An all island census was completed on the 6th, with a corrected total of 13,241 breeding birds counted. Surviving chicks continued to grow throughout the month, and chicks of followed known age birds were banded in all plots.

**California Gulls –** California Gulls have abandoned their small colony this year, with the few nests all gone by the 5th and all birds gone by the 24th.

**Common Murre –** The first chick of the season was seen at the Murre blind on the 4th. UCSC, in collaboration with CDFW and USFWS, conducted the annual aerial survey on the 4th, and index plot counts were conducted from the 5th to the 16th. The first diet watch was conducted on the 14th, and all day watches were conducted on the 23rd and 29th. Diet was primarily juvenile rockfish and anchovy. The first fledge from the Shubrick Point study plot was on the 26th. In late June there was some chick loss in the Shubrick study plot, apparently due to both starvation and gull predation. On the 21st California Sea Lion intrusion into murre areas under the Corm Blind caused the loss of at least 40 eggs.

**Pigeon Guillemot –** Resighting of banded birds at nest boxes and crevices began on the 10th. The first chick of the year was found on the 21st on Lighthouse Hill. 30 light sensing geolocation (GLS) tags were deployed on incubating birds on the 23rd and 24th.

**Cassin’s Auklet –** Throughout June, chicks grew at high rates with an apparent strong diet of krill. The first fledge from nest boxes occurred on the 22nd. We deployed light censing geolocation (GLS) tags on 36 birds in known age study boxes on the 20th. Index plot occupancy was assessed through late June in index plots, with very high rates detected.

**Rhinoceros Auklet –** First chicks in nest boxes were found on the 5th. In mid-June 12 GPS tracking tags were deployed on birds and all were recovered. The first mist netting sessions for diet and mark recapture were conducted from the 22nd-25th with 14 new and 21 recaptured birds. The first session diet was mostly rockfish, with some variation – particularly at the Coast Guard Catacomb site.

**Tufted Puffin –** Early breeding season census concluded on the 6th with an estimated 77 active sites.

**Black Oystercatchers** – The first chick of the season was seen on the 19th. Several active nest sites were lost due to sea lion disturbance.

**Pinnipeds**

**California Sea Lion***–* On average there were 2,206 (stdev ± 298) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 2,472 individuals on the 9th. The high count for pups was 393 on the 22nd.

**Steller Sea Lions** –On average there were 132 (stdev ± 47) individuals counted, with at least 23 bull males at several sites around the island. The high count for Steller sea lions was 194 on the 22nd. The first pup was seen on the 2nd and the high count for pups was 32 on the 29th.

**Northern Elephant Seal –** Numbers of elephant seals continued to decline in June, with an average total count of 47 (stdev ± 33) 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 69 (stdev ± 44) individuals counted. The high count was 128 on the 29th and low count of 22 on the 22nd. Two pups were also noted on the 2nd, and a fresh pup was observed at Garbage Gulch on the 14th. The same pup was found dead on the 20th.

**Northern Fur Seals** – Fur seal numbers increased rapidly at the end of the month. The mean count was 290 (stdev ± 252) individuals, with a high of 659 on the 29th. The first pups (36) were seen on the 22nd and by the 29th, 240 pups were observed.

**Cetaceans**

**Standard Survey** – A total of 6 one hour whale watches were conducted this month from the Lighthouse using the Apple iPad and Spotter App, due to poor survey conditions. Daily incidental observations were also recorded.

Gray whales were seen daily, with 1 to 4 resident whales observed. When conditions allowed, moderate numbers of humpback whales and low numbers of blue whales were observed. 50 Risso’s dolphins were seen on the 9th. The 26th was a record whale day with 251 seen! A 2 hour lighthouse survey in excellent conditions counted 216 Humpbacks, 18 Blues, 3 Grays, and 18 unidentified whales. This is the high single day whale count in our history on the Farallones.

**Sharks**

No Shark attacks observed.

**Salamanders**

No salamander surveys were conducted in June, and there were only occasional sightings of animals during burrow cam checks.

**Owls**

No owls were seen this month.

**Crickets**

No surveys were conducted this month.

**Inverts and Intertidal**

Nothing to note.

**Plants**

USFWS staff conducted targeted invasive plant management from the 4th to the 17th, using herbicide spraying as the primary method. Primary targets were New Zealand Spinach, *Malva, Plantain, Chenopodium, Ehrarta,* and *Sonchus*. A plant phenology survey was conducted on the 7th and 8th. Most of the plantain sprayed during the spring trip was dead. *Erharta* appeared to be in higher numbers than usual among the cliffs of Lighthouse Hill. Treatement of this potentially serious invasive plant only began this year following results of the 2016 Invasive Plant Inventory.

**Violations**

Ten small fishing boats fishing illegally inside the MPA were noted in June. CF numbers were only obtained for one vessel, a 25ft aluminum vessel with 3 POB on the 26th (CF8396TR). Two vessels responded to our radio hails and moved on after we explained the regulations to them. On the 12th, a small single engine Cessna plane (N7873U) circled the island at well below 1000ft. No wildlife was disturbed but the event was reported to USFWS law enforcement.

**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. Crane operator training was conducted on the 7th. New communications cabinets and network switches were installed on the 8th.

**Maintenance Needs**

* New VOIP box for PRBO house phone
* 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): 0 hours

Kohler 30REOZJC (Speedwagon): 2.9 hours

Kohler 40REOZK (Zeke): 13.4 hours

Kohler 15ROY61 (PV): 0 hours

Webasto: Not working

Power Used: Start of month = 60457; end of month = 61074 for total of 617 kwh

**Fuel Reserves**

Fuel used: 44 gallons

Fuel Remaining:

Drums: 7.7 X 55g = 416 gallons

Kohler 15ROY61 (PV) Tank: Full

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: 7/8

Kohler 40REOZK (Zeke) Tank: 3/4

Webasto Tank: 1/4

**Water Reserves**

Cistern: ~110,000 gallons (7’11”)

Gravity Tank: empty

Settling Tank: 6’ 7’’

Water use at house water meter was 3,583 gallons.

**Sightseeing Boats**

**Kitty Kat** was seen on 2 occasions this month (3rd, 10th) with 20-35 POB. **Salty Lady** was seen on 2 occasions this month (10th, 24th) with 25-35 POB. **Happy Days** was seen on the 24th with 20 POB.

**Non-breeding birds**

**Cook’s Petrel**, Pink-footed Shearwater, Sooty Shearwater, Fork-tailed Storm-petrel, Northern Gannet, Brown Booby, **Blue-footed Booby**, Brown Pelican, Canada Goose, Peregrine Falcon, Glaucous-winged Gull, Glaucous Gull, Rock Pigeon, Eurasian Collared Dove (breeding), White-winged Dove, Western Wood Pewee, Gray Catbird, Orange-crowned Warbler, Audubon’s Warbler, Common Yellowthroat, Summer Tanager, Rose-breasted Grosbeak, Indigo Bunting