

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

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

July 8: **“Starbuck”** (skipper John Wade) brought out Mike Johns and Viv Hastie and departed with Lauren Lescure. Five people toured the island.

July 15: **“Salty Lady”** (skipper Jared Davis) took Jackson Vanfleet-Brown off the island.

July 22: **“Ketch 22”** (skipper Tom Marlow) brought out Lauren Lescure and Pete Warzybok and departed with Chris Tyson and Russ Bradley. Robert Devaney (Ketch 22 crew) toured the island.

**West End Island Visitors**

There were no visits to West End this month.

**Weather/Ocean**

The weather in July was dominated by thick fog and northwesterly wind, with occasional periods of warm damp southerly flow. There were 0.07 inches of rain recorded, all from heavy fog. Mean midday air temperature was 13.84° C, with a standard deviation of 1.48°C. The highest air temperature was 17.5° C recorded at 1200 hours on the 26th, the lowest was 11.0° C recorded at 0600 hours on the 13th. Mean sea surface temperature was 11.76°C, with a standard deviation of 0.63°C, a high of 12.99°C on the 15th, and a low of 10.66°C on the 2nd. Mean SST was approximately 0.98°C lower than the long-term mean for this month, and 0.62°C lower than last July.

**Oiled & Entangled Wildlife**

Five California Sea Lions with either monofilament or netting embedded in their necks were seen in July. No oiled wildlife was observed.

**Breeding Birds**

**Storm-Petrels –** The first confirmed chicks of the season were found in the Habitat Sculpture on the 18th. We managed to fit in one standard netting session at the Carp Shop on the 24th. A total of 53 ashy storm-petrels were caught, with 50 new and 3 recaps. Given the amount of failed RFID tags discovered on recaptured birds, we decided not to deploy any additional tags during this netting session.

**Brandt’s Cormorant** – Nesting activity remained steady throughout the month of July, with no signs of major nest failure or abandonment. Chicks were large enough to begin wandering from nest sites and form creches by mid-month. We banded 210 chicks with stainless steel and plastic field readable bands at Sea Lion Cove on the 27th, and an additional 212 chicks at the Corm Blind on the 30th.

**Pelagic Cormorant –** Although late to initiate and in low numbers, some nests remained active by the end of the July. The first chicks were seen at Tower Point on the 4th.

**Double-crested Cormorant** – Chicks were large enough to be left unattended and started wandering from nest sites by the 15th. A fledgling was seen in the water on the 19th, and the standard breed chick was concluded on the 31st as chicks were longer distinguishable from parents. Season high counts were 113 adults on June 10th, 105 well-built nests on June 17th, and 103 chicks on July 15th.

**Western Gull** – Saturation banding was conducted in the first week of July, with h-plot west on the 2nd, h-plot east on the 4th, k-plot on the 5th, and c-plot on the 6th. A total of 260 chicks were banded during these four sessions. The first fledglings were observed on the water on the 11th.

**California Gulls -** No breeding activity was noted this season. Weekly counts were ended this month.

**Common Murre –** The final all-day diet watch was completed on the 3rd, and the final diet watch session of the season was completed on the 16th. Diet continued to be dominated by juvenile rockfish and anchovies. The first fledge in Upper Upper occurred on the 3rd. The banded bird study at Upper Shubrick was completed on the 17th, and the last chick to fledge in the Upper Shubrick study plot happened on the 30th.

**Pigeon Guillemot –** Diet watch began at Garbage Gulch on the 2nd, and at Lighthouse Hill on the 12th. Early diet contained mostly juvenile rockfish, with an increase in flatfish observed by the end of the month. First chicks were banded on the hill on the 21st. The first confirmed fledge occurred on the 31st.

**Cassin’s Auklet –** Index plot occupancy counts were completed on the 1st of the month. High occupancy of natural crevices and burrows were noted at all plots, corresponding to the high number of occupied nest boxes in the KA and PRBO studies. The first double brood was noted on the 7th. By the end of July there were 2 confirmed double broods in the PRBO study and 7 double brooded pairs in the KA study.

**Rhinoceros Auklet –** Three sessions of 4 consecutive nights of netting were conducted at PRBO, Stonewall, Coast Guard, and Rabbit Cave Catacombs on the 3rd, 12th, and 22nd. Early season diet was comprised of predominately juvenile rockfish, and transitioned to almost exclusively small bill loads of Pacific Saury towards the end of the chick rearing period.. Index plot burrow occupancy surveys were completed on the 10th.

**Tufted Puffin –** The first puffin carrying fish was observed on the 26th.The late season breeding survey began on the 29th.

**Black Oystercatchers** – Numerous followed sites were destroyed by sea lions this year, and only 4 pairs managed to fledge at least 1 chick by the end of July. The first fully feathered chick was observed on the 9th, and the first fledge confirmed on the 18th on Fertilizer Flat near the ponds. We were able to access and band 1 chick on the 26th at site 24 by the Murre Blind. A second chick on Blowhole Peninsula was too large and mobile to catch for banding.

**Pinnipeds**

**California Sea Lion***–* On average there were 3,333 (stdev ± 1,235) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 4,986 individuals on the 28th. The high count for pups was 500 on the 28th.

**Steller Sea Lions** –On average there were 156 (stdev ± 77) individuals counted, with fewer adult male sightings compared to June. The high count for Steller sea lions was 254 on the 13th. The high count for pups was 44 on the 13th.

**Northern Elephant Seal –** Elephant seal numbers remained low to virtually absent for the month of July, with an average total count of 15 (stdev ± 4) individuals. Sub-adult males began arriving this month, with a high count of 13 males on the 20th.

**Harbor Seal –** Harbor seal numbers were highly variable, a reflection of tide height and weather conditions during the weekly census. On average there were 108 (stdev ± 33) individuals counted. The high count was 142 on the 6th and low count of 74 on the 13th.

**Northern Fur Seals** – Fur seal numbers peaked by the end of July. The mean count was 1,053 (stdev ± 96) individuals, with a high of 1,185 on the 20th. The high count for pups occurred on the 20th with 522 individuals. A large number of females and young animals were seen hauled out on Weather Service Peninsula, but no pupping was observed.

**Cetaceans**

**Standard Survey** – A limited number of 7 one hour whale watches were conducted this month from the Lighthouse using the Apple iPad and Spotter App, due to thick fog and poor survey conditions. Daily incidental observations were also recorded.

Gray whales were seen daily, with 1 to 4 residents observed. Despite reports of many whales feeding within the Gulf of the Farallones, fairly low numbers of humpback whales were seen given many days of reduced visibility offshore, with a few days of 30 – 40 individuals. Frequent sightings of blue whales were also noted when conditions allowed. Two minke whales were seen traveling very close to the island, one on the 13th and another on the 25th. A small group of Risso’s and Pacific-white sided dolphins were spotted on the 26th.

**Sharks**

No shark attacks or sightings.

**Salamanders**

No salamander surveys were conducted in July. Some individuals were observed in caves during cricket surveys and in damp locations throughout the island.

**Owls**

No owls were seen this month.

**Crickets**

Three consecutive nights of standardized quarterly cricket surveys were conducted beginning on July 18th, in Rabbit Cave and pocket caves at Corm Blind Hill, the Gap, and North Landing. Very low numbers were observed, typical for late summer.

**Inverts and Intertidal**

Nothing to note.

**Plants**

Nothing to note.

**Violations**

A small sport fishing boat with 2 POB was seen illegally fishing inside the MPA off East Landing on July 4th.

**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. Media converter for fibers, main network switch, and remaining communications equipment were permanently installed in the data room. A new VOIP converter box and phone was installed in the phone room. An additional wireless phone was added upstairs in case of late night emergency calls. The main water pipe behind the PRBO House finally burst on the 25th, with minimal water loss due to early detection. The entire corroded galvanized section from the first turn leading behind the house to the valve in the water shed was replaced with PVC. The water separator on the Safeboat was inspected and cleared, with no sign of major water accumulation. Replaced the ozonator diffuser bulb and filter in the cistern.

**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 appears to have a leak in it when water is above 5.1 feet.
* Some of the wooden railing on Light House Hill needs repair.
* Webasto heater is not functioning and is currently off island for repair.
* 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.
* New screens are needed on the PRBO house to keep out flies on “warm” days.
* Refurbishment of North Landing platform
* Replace window blinds in PRBO bathrooms and kitchen.
* 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.
* Washing machine door lock is beginning to fail. It requires a bit of finesse to close and sometimes will get stuck in lock mode.

**Solar/Electric**

**PV System**

**Generator run times**

Kohler 15ROZ (Buffy): 5.0 hours

Kohler 30REOZJC (Speedwagon): 2.9 hours

Kohler 40REOZK (Zeke): 11.0 hours

Kohler 15ROY61 (PV): 0 hours

Webasto: Not working

Power Used: Start of month = 61074; end of month = 61745 for total of 671 kwh

**Fuel Reserves**

Fuel used in July: 26.1 gallons

Drums: 7.7 X 55g = 416 gallons

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: Full

Kohler 40REOZK (Zeke) Tank: Full

Kohler 15ROY61 (PV) Tank: Full

Webasto Tank: 1/4

**Water Reserves**

Cistern: ~107,150 gallons (7’9”)

Gravity Tank: empty

Settling Tank: empy

Water use at house water meter was 4,497 gallons.

**Sightseeing Boats**

**Kitty Kat** was seen on 8 occasions this month (2nd, 8th, 9th, 15th, 16th, 22nd, 29th, 30th) with 20-40 POB. **Salty Lady** was seen on 6 occasions this month (2nd, 9th, 15th, 22nd, 29th, 30th) with 30-35 POB. **Outer Limits** was seen birding on the 16th. **New Captain Pete** was seen on the 8th with 30 POB. **Sea Wolf** was seen likely fishing on the 26th with 20 POB. A single handed sail around the Farallones occurred on the 5th.

**Non-breeding birds**

Black-footed Albatross, Pink-footed Shearwater, Sooty Shearwater, Fork-tailed Storm-petrel, **Black Storm-petrel**, Northern Gannet, Brown Booby, Blue-footed Booby, Brown Pelican, **Great Blue Heron**, Canada Goose, Peregrine Falcon**, Yellowlegs sp**., Wandering Tattler, Whimbrel, Black Turnstone, **Sanderling**, Red-necked Phalarope, **Red Phalarope**, **Heermann’s Gull**, Rock Pigeon, Eurasian Collared Dove, Western Wood Pewee, **Western Kingbird**, Warbling Vireo, Cassin’s Vireo, **Warbling Vireo**, **Tree Swallow**, Gray Catbird, **Northern Mockingbird**, Wilson’s Warbler, Lazuli Bunting, Wilson’s Warbler, Brewer’s Blackbird, **Bullock’s Oriole**