**Farallon Island NWR**

**Monthly Report**

**October 2016**

Biologists: Russ Bradley and Jim Tietz

**Island Visitors**

Point Blue crew this month included: Ryan Berger, Russ Bradley, Jacob Drucker, Garrett Duncan, Elizabeth Max, Dan Maxwell, Zack Mikalonis, Alyssa Olenberg-Meltzer, Adam Searcy, Jim Tietz

USFWS crew included: Jonathan Shore

**Oct 4:** “**John A.B. Dillard Jr.”** (skipperKixon Meyer) brought out NexGen contractors Luis Bernal, Dylan Hammergren, Mike McGoey, and E.H. Roy, and FWS Jonathan Shore.

**Oct 7: “Coast Guard”** helicopter departed with Jonathan Shore

**Oct 8: “Outer Limits”** (skipper Jim Roberts) brought out Ryan Berger, Russ Bradley, and Elizabeth Max. Six volunteers toured the island. They departed with Alyssa Olenberg-Meltzer and Jim Tietz.

**Oct 10: “Bayliss”** (Captain Don Saxby) departed with four NexGen contractors.

**Oct 11: “Bayliss”** (Captain Don Saxby) departed with Ryan Berger and Elizabeth Max.

**Oct 17: “SF Helo Tours”** (skipper Jared Davis) brought out NexGen contractors: Mike McGoey and Paul Holzberger.

**Oct 19: “SF Helo Tours”** brought out additional NexGen contractors: Luis Bernal, E.H. Roy, and Kelly Shincke

**Oct 23:** “**Stillwater”** (skipperRichard Weber) brought out Boo Curry, Alyssa Olenberg-Melzer, and Jim Tietz. Three crew members toured the island. The boat departed with Russ Bradley, Jacob Drucker, Dan Maxwell, and Adam Searcy.

**Oct 28:** “**Specialized Aviation**” landed a helicopter on the Helo Pad to deliver a tool. Nobody got off the helicopter and no island personnel departed.

**West End Island Visitors**

**Oct 1**: Drucker, Searcy, and Tietz visited the island for 8 hours to conduct pinniped research.

**Oct 20:** Bradley and Duncan visited the island to conduct pinniped research.

**Weather/Ocean**

The month of October was unusually rainy, with five significant storms. Total precipitation recorded this month equaled 4.52 inches. The wind direction had a southerly component during 49% of weather observations. Mean noon day air temperature was 15.7°C, with a standard deviation of 1.0°C, a high of 17.5° C recorded at 1600 on the 30th, and a low of 11.0 recorded at 0700 on the 9th. Mean sea surface temperature was 13.90°C, with a standard deviation of 0.57°C, a high of 14.97°C on the 31st and a low of 13.01°C on the 7th. This mean sea surface temperature is 0.06°C below the long term (45 year) mean for October.

**Oiled & Entangled Things**

**Common Murre** – On Oct 6 one murre seen in Sea Pigeon Gulch had 20% of its body covered with dark, tar-like oil located on belly. On Oct 12, one murre in Sea Pigeon Gulch had <10% black oil.

**California Sea Lion** – Eight individuals with embedded entanglements (4 monofilament, 1 nylon net, 3 unknown) around the neck were observed this month.

**Breeding Birds**

**Ashy Storm-Petrel –** Final nests fledged on the 21st. One active site in the Auklet Trail collapsed when the rock wall supporting the trail failed during a rain event.

**Leach’s Storm-Petrel** – None were noted this month.

**Brandt’s Cormorant** – Many were observed roosting on offshore islets and foraging in feeding flocks around the island.

**Pelagic Cormorant –** Adults were observed roosting at normal roost sites.

**Double-crested Cormorant** – A few were observed flying near the island at the beginning of the month.

**Western Gull** – The number of birds roosting at night on the Marine Terrace fluctuated.

**California Gulls –** The number of birds roosting at night on the Marine Terrace and in the bays fluctuated.

**Common Murre –** All healthy birds were seen offshore, either rafting in small groups or foraging with other birds. A few sick or oiled birds were seen roosting along the shoreline.

**Pigeon Guillemot** – None were seen this month.

**Cassin’s Auklet –** Many were heard at night vocalizing and seen digging. Several were captured while mistnetting for Burrowing Owls.

**Rhinoceros Auklet –** None were seen this month.

**Tufted Puffin –** None were seen this month.

**Black Oystercatchers** – Birds were observed roosting at usual locations along shoreline.

**Canada Goose –** None observed this month.

**Pinnipeds**

The lighthouse pinniped census was conducted four times this month.

**California Sea Lion** – Overall numbers peaked on the third survey and declined only slightly for the fourth. Usage of the Marine Terrace as a haul out declined rapidly in late Oct. The mean lighthouse count was 4265, with a high count of 4983 on the 19th. The highest pup count was 109 on the 26th, with most counted on Dead Sea Lion Flat.

**Steller Sea Lions** –Overall numbers fluctuated throughout the month. The mean lighthouse count was 89, with a high of 102 counted on the 26th. The highest pup count was 14 on the 13th and 26th.

**Northern Elephant Seal –** Numbers continued increasing this month, mostly from immatures and sub-adult males. The mean lighthouse count was 196, with a high count of 239 on the 26th. These numbers are about average for the past ten years.

**Harbor Seal –** As usual overall numbers are heavily dependent upon tide and swell conditions (high tide or swell results in reduced haul out areas). The mean lighthouse count was 36, with a high of 62 counted on the 26th.

**Northern Fur Seals** –Overall numbers decreased through the month. The mean lighthouse count was 418, with a high of 687 counted on the 13th. The highest pup count was 65 on the 13th. Because yearlings appear similar to freshly molted pups, pups were only identified to this age class if they were still in their natal pelage or they were observed suckling from their mother.

Two ground counts were conducted on West End Island on the 1st and the 20th. Both surveys counted 1430 individuals. The first survey read tags from 29 individuals, a record high number for a single-day, while the second survey read tags from 9 individuals.

**Cetaceans**

There were 16 one-hour standardized whale watches conducted this month using the Apple iPad and Spotter App. Numbers below include individuals seen incidentally and hourly 5-minute scans from the lighthouse during shark watch.

**Humpback Whale** – They were observed everyday this month, for a total of 637 individuals. The high count was 95 observed on the 12th. Many animals were seen breaching, pectoral fin and tail slapping and lunge feeding all month around the island.

**Blue Whale** – There were 32 individuals observed during Oct on 11 days. The high count was 13 observed on the 12th.

**Risso’s Dolphin** – There were 155 observed during Oct on 5 days. The high count was 59 observed on the 13th.

**Pacific White-sided Dolphin** – There were 9 observed during Oct on two days.

**Common Dolphin** – A pod of ~600 was seen on the 30th.

**Dall’s Porpoise** – There were 25 observed during Oct on two days.

**Sharks**

Eleven attacks were seen this month.

**Bats**

Bat surveys were conducted daily through the month, but no bats were seen.

**Salamanders**

Two standard surveys were conducted. The first on the 4th detected zero salamanders, while the survey on the 17th detected ten. The island-wide survey was conducted on the 31st and detected 13 individuals.

**Owls**

Thirteen Burrowing Owls arrived this month bringing the total arrivals for the fall up to 19 individuals. Twelve of these owls were banded this month.

**Crickets**

October cricket surveys were conducted from the 12th to the 18th: including two surveys at Cricket Cave and three surveys at all other caves. The first survey at Cricket Cave counted 3867 individuals, and the second counted 4,042.

**Mice**

Two island-wide trapping surveys were conducted this month. The first three-night session was initiated on the 6th and had a 62% success rate, while the second session was initiated on the 25th had 68% success.

**Plants**

**Oct 1st,** 50 New Zealand spinach plants were pulled from lower Maintop. The spinach population on Maintop continues to worsen year-after-year.

**Violations**

**Oct 10th** – In the morning a white 22’ Boston Whaler with blue canopy (CF 3517 RW) had three men on board fishing in Maintop Bay. Bayliss chased them away.

**Oct 12th** – In the morning a white 24’ fiberglass sport fishing boat (CF 2111 SV) was fishing in Mirounga Bay.

**Maintenance**

Island biologists 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. On 4 Oct, NexGen started phase 2 of electrical power transmission rehab project. The Dillard transferred 5 pallets of tools to the island. On 7 Oct, Jonathan took the 25 hp Honda to the mainland to be serviced. On 9 Oct, a new landing pole was cut for North Landing. On 13 Oct, Russ shoveled debris off water catchment pad. On 18 Oct, Aris helicopter brought out 4 sling loads of gear for electrical project and removed old cable. On 19 Oct, materials from shipment were organized. On 20 Oct, new electrical panel was installed at Carp Shop. And, conduit was run from Powerhouse to East Landing, Carp Shop, and Pump House. On 21 Oct, conduit from Powerhouse to CG House replaced. On 28 Oct, Garrett put a new striker plate in the downstairs bathroom door jamb of the PRBO house and repaired a couple chairs.

**Maintenance Needs**

* Replace East Landing hoist wire rope due to two separations that revealed the central core of the wire rope.
* Repair liner in the Gravity tank
* The 30Kwh Kohler “Speedwagon” has a small but persistent coolant leak apparently emanating from the water pump. While the leak seems to have subsided in the last couple of months, it should still be monitored carefully.
* 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.
* Webasto heater is not functioning and needs a new fuel pump.
* Cistern is losing water at a rate ~250 gallons per month and needs to be inspected.
* 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 still needs repair.
* Cart path rail line needs several major repairs.
* Clean water line going to upstairs bathroom in PRBO house needs to be cleared to increase water pressure.
* PRBO upstairs toilet needs to be fixed so it flushes properly.
* 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

**Solar/Electric**

**PV System**

Weekly checks were conducted on Wednesdays. All five arrays were on this month.

**Generator run times**

White Kohler (Buffy): 5.2 hours

Black Kohler (Speedwagon): 3.7 hours

PV Kohler: 4.4 hours

Webasto: Not working

Power Used: Start of month = 55,698; end of month = 56,390 for a total of 692 kwh

**Fuel Reserves**

Fuel Remaining:

Drums: 6 X 55g = ~330 gallons

PV Kohler Tank: Full

White Kohler Tank: Full

Black Kohler Tank: Full

Webasto Tank: 1/4 full

Diesel Fuel used in September: 11.4 gallons

**Water Reserves**

Cistern: ~84,980 gallons (6’7”)

Gravity Tank: empty

Settling Tank: empty

No water was pumped this month. Water use at PRBO house water meter was 2,204 gallons. Usage increased greatly this month due to the increase in personnel.

**Sightseeing Boats**

Numbers of people on board are estimates.

**Kitty Kat** was sightseeing on 7 days with an average of 36 people on board.

**Salty Lady** was sightseeing on 6 days with an average of 30 people on board.

**Silver Fox** was sightseeing on 2 days with 30 people on board.

**Akula** was shark diving on 5 days with an average of 6 people on board.

**Outer Limits** was sightseeing on 1 day with 30 people on board

**Bayliss** was shark diving on 2 days with an average of 20 people on board.

**New Captain Pete** was sightseeing on 1 day with 4 people on board.

**Wacky Jacky** was sightseeing on 2 days with an average of 17 people on board.

**Highlight Bird Observations**

**Greater Scaup –** Oct 12

**Red-necked Grebe** – Oct 22

**Brown Booby –** Six individuals seen during the month

**Blue-footed Booby –** One adult present for last 3 weeks of month

**Northern Gannet – S**een on 9 days during the latter half of the month

**Laysan Albatross –** Oct 14

**Flesh-footed Shearwater** – Oct 19 and 22

**Buller’s Shearwater –** Oct 2

**Great Egret –** Two on Oct 8

**Pectoral Sandpiper –** Oct 9

**South Polar Skua** – Oct 15

**Hammond’s Flycatcher –** Oct 11

**Tropical Kingbird –** Oct 10

**Gray Catbird –** Oct 11

**Red**-**throated Pipit** – Oct 10

**Lapland Longspur –** Oct 13

**Ovenbird –** Oct 11

**Chestnut-sided Warbler –** Oct 1 and 11

**Black-throated Blue Warbler** – Oct 11

**Magnolia Warbler** – Oct 10

**Blackburnian Warbler –** Oct 26

**Blackpoll Warbler –** Two on Oct 11

**Landbirds Banded**

130 individuals of 30 migratory bird species were banded this month: Burrowing Owl (12), Anna’s Hummingbird (2), Western Flycatcher (3), Black Phoebe (5), Tropical Kingbird (1), Cassin’s Vireo (2), Ruby-crowned Kinglet (5), Swainson’s Thrush (4), Hermit Thrush (12), Gray Catbird (1), Orange-crowned Warbler (1), Nashville Warbler (2), Magnolia Warbler (1), Black-throated Blue Warbler (1), Blackburnian Warbler (1), Blackpoll Warbler (1), Palm Warbler (8), Yellow-rumped Warbler (13), Black-throated Gray Warbler (1), Chipping Sparrow (3), Clay-colored Sparrow (2), Black-throated Sparrow (1), Fox Sparrow (1), Dark-eyed Junco (3), White-crowned Sparrow (14), Golden-crowned Sparrow (26), Vesper Sparrow (1), Savannah Sparrow (1), Lincoln’s Sparrow (1), Bullock’s Oriole (1)