**Farallon Island NWR**

**Monthly Report**

**November 2016**

Biologists: Jim Tietz

**Island Visitors**

Point Blue crew this month included: Laurel Ann Curry, Jacob Drucker, Garrett Duncan, Zack Mikalonis, Alyssa Olenberg-Meltzer, Jim Tietz

USFWS crew included: Jonathan Shore

**Nov 7:** “**Outer Limits”** (skipperJim Robertson) brought out Jacob Drucker, Jonathan Shore, Scott Webster, and Ben Sanchez. Three crew members toured the island. Zack Mikalonis departed.

**Nov 9:** Coast Guard cutter **“Tern”** departed with Jonathan Shore and Scott Webster.

**Nov 11:** “**Specialized Aviation**” departed with Ben Sanchez on a helicopter.

**Nov 14: “Outer Limits”** (skipper Jim Robertson) brought out Gerry McChesney and Jonathan Shore, who toured the island with Mike McGoey. All three departed later in the day.

**Nov 21: “OGII”** (skippered by Dylan and Jamis MacNiven) brought out Zack Mikalonis. Four crew members toured the island. Garrett Duncan departed.

**West End Island Visitors**

**Nov 21**: Curry, Mikalonis, Olenberg-Meltzer, and Tietz visited West End to conduct pinniped research.

**Weather/Ocean**

The month of November started out unusually warm as the sea surface temperature increased two degrees Celsius from October, but decreased to more normal temperatures by the end of the morth. Total precipitation recorded this month equaled 2.66 inches, which fell mostly during two significant storms and several minor disturbances. The wind direction was northwest on 55% of weather observations. Mean noon day air temperature was 15.2°C, with a standard deviation of 1.29°C, a high of 19.0° C recorded at 1500 on the 2nd, and a low of 10.0 recorded at 0600 on the 24th. Mean sea surface temperature was 14.55°C, with a standard deviation of 0.80°C, a high of 15.67°C on the 12th and a low of 13.21°C on the 30th. This mean sea surface temperature is 0.06°C below the long term (45 year) mean for October.

**Oiled & Entangled Things**

**California Sea Lion** – Nine individuals with embedded entanglements (4 monofilament, 2 nylon net, 3 unknown) around the neck were observed this month.

**Breeding Birds**

**Ashy Storm-Petrel –** One individual was captured in a mistnet while netting for Burrowing Owls, and a second individual was observed flying offshore.

**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** – None were seen this 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 –** Murres first landed on the island in the morning on the 1st, when several hundred on Phil’s Hill and the islets. Numbers landing on the island increased greatly afterwards.

**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 declined this month compared to previous months. Few zalophus were observed on the Marine Terrace this month. The mean lighthouse count was 2693, with a high count of 3227 on the 17th. The highest pup count was 112 on the 3rd, with most counted on Dead Sea Lion Flat.

**Steller Sea Lions** – Overall numbers declined slightly throughout the month, but remained stable compared to October. The mean lighthouse count was 88, with a high of 99 counted on the 3rd. The highest pup count was 21 on the 17th.

**Northern Elephant Seal –** Numbers peaked early in the month and declined thereafter. The mean lighthouse count was 216, with a high count of 252 on the 3rd. These numbers are about average for the past ten years.

**Harbor Seal –** Numbers were low due to persistent large swells and coincident high tides (high tide or swell result in reduced haul out areas). The mean lighthouse count was 6, with a high of 14 counted on the 17th.

**Northern Fur Seals** –Overall numbers decreased as more of the colony heads out to sea for the winter. The mean lighthouse count was 361, with a high of 400 counted on the 3rd. Because yearlings appear similar to freshly molted pups, no pups were counted from the lighthouse

One ground counts was conducted on West End Island on the 22nd. This survey counted 869 individuals. This survey read tags from 10 individuals, but only tags from 8 were completely legible.

**Cetaceans**

There were 18 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 276 individuals. The high count was 32 observed on the 17th.

**Blue Whale** – There were 4 individuals observed during Nov on 3 days. The high count was 2 observed on the 9th.

**Fin Whale** – Two were seen on 23rd.

**Gray Whale –** The first of the fall season was seen on the 11th when 3 were seen. A single individual was seen on 9 days thereafter.

**Risso’s Dolphin** – There were 200 observed during Nov on 2 days. The high count was 120 observed on the 21st.

**Common Dolphin** – A pod of ~250 was seen on the 2nd.

**Sharks**

Five attacks were seen this month.

**Bats**

Bat surveys were concluded at the end of October. No bats were seen in November.

**Salamanders**

Two standard surveys were conducted. The survey on the 1st detected 15 salamanders, while the survey on the 15th detected 25. The island-wide survey was conducted on the 30th and detected 23 individuals: 2 small and 21 large.

**Owls**

Two Burrowing Owls arrived this month to SE Farallon and two were observed on West End Island bringing the total arrivals for the fall up to 23 individuals. Three Burrowing Owls were banded this month. One Barn Owl was detected several times throughout the month.

**Crickets**

No cricket surveys were conducted this month.

**Mice**

Two island-wide trapping surveys were conducted this month. The first three-night session was concluded on the 6th and had a 74% success rate, while the second session was concluded on the 30th and had 51% success.

**Violations**

**Nov 14th** – A white Striper (CF 8034 PT) was fishing in Fisherman’s Bay.

**Nov 17th** – A yellow sea plane flew ~75 meters over the lighthouse. The plane was photographed, but identifying marks were visible. Nobody observed whether wildlife were disturbed.

**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 8 Nov, AllCal replaced the East Landing crane wire rope and several pieces of the load block. On 14 Nov, NexGen concluded Phase 2 of electrical power transmission rehab project. On 25 Nov, Zack, Jacob, and Jim cleaned the gutters of the PRBO and Coast Guard houses. On 29 Nov Boo and Jim patched a hole in the Zodiac that occurred on 14 Nov.

**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): 4.2 hours

Black Kohler (Speedwagon): 17.8 hours

PV Kohler: 6.8 hours

Webasto: Not working

Power Used: Start of month = 56,390; end of month = 56,934 for a total of 544 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: 17.9 gallons

**Water Reserves**

Cistern: ~81,660 gallons (6’5”)

Gravity Tank: empty

Settling Tank: 6.25 feet

No water was pumped this month. Water use at PRBO house water meter was 1,970 gallons. Usage decreased slightly this month due to fewer island personnel.

**Sightseeing Boats**

Numbers of people on board are estimates.

**Kitty Kat** was sightseeing on 5 days with an average of 36 people on board.

**Salty Lady** was sightseeing on 2 days with an average of 23 people on board.

**Akula** was shark diving on 3 days with an average of 5 people on board.

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

**Bayliss** was shark diving on 1 day with 8 people on board.

**Highlight Bird Observations**

**Black Scoter –** Nov 29

**Red-necked Grebe** – Nov 26

**Brown Booby –** Up to seven individuals seen during the month

**Blue-footed Booby –** One adult present all month

**Northern Gannet – S**een on 8 days this month

**Flesh-footed Shearwater** – Nov 14

**Surfbird –** Nov 29

**Rock Sandpiper –** Nov 30

**Chestnut-collared Longspur –** Nov 13

**American Redstart –** Nov 2

**Blackburnian Warbler –** Nov 1

**American Tree Sparrow –** Nov 22

**White-throated Sparrow** – Nov 2

**Slate-colored Junco** – Nov 2

**Bobolink** – Nov 4

**Landbirds Banded**

33 individuals of 16 migratory bird species were banded this month: Burrowing Owl (2), Black Phoebe (1), Golden-crowned Kinglet (1), Ruby-crowned Kinglet (1), Nashville Warbler (1), American Redstart (1), Blackburnian Warbler (1), Palm Warbler (8), Yellow-rumped Warbler (1), Lark Sparrow (1), Dark-eyed Junco (8), White-throated Sparrow (4), White-crowned Sparrow (1), Golden-crowned Sparrow (1), Brewer’s Blackbird (1)