**Farallon Island NWR**

**Monthly Report**

**August 2016**

Biologists: Jim Tietz & Pete Warzybok

**Island Visitors**

Point Blue crew this month included: Ryan Berger, Jacob Drucker, Sarah Guitart, Alyssa Olenberg-Meltzer, Jim Tietz, Bradley Wilkinson, Claire Wallis, and Pete Warzybok.

USFWS crew included: Earl Cummings, Rob Doster, John Herndon, Jack Rabe, and Jonathan Shore

**Aug 1:** “**Sea Wolf”** (skipper Jon Yamomoto) picked up Ryan Berger

**Aug 5: “Salty Lady”** (skipper Jared Davis) picked up USFWS “Team Spinach” including: Earl Cummings, Rob Doster, John Herndon, Jack Rabe, and Jonathan Shore. One person toured the island.

**Aug 13: “French Kiss”** (skipper Don Bauer) brought out Jacob Drucker, Alyssa Olenberg-Meltzer, and Jim Tietz, and they departed with Claire Wallis, Pete Warzybok, and Bradley Wilkinson. Nobody toured the island.

**Aug 20: “Salty Lady”** (skipper Jared Davis) brought out Claire Wallis, and departed with Sarah Guitart.

**Aug 27: “Starbuck”** (skipper John Wade) did a resupply run for the island. The crew, consisting of 7 people, toured the island.

**West End Island Visitors**

No trips to West End were conducted in August.

**Weather/Ocean**

The month of August had mostly light to moderate winds, with persistent fog during the first half of the month that lifted for the second half to provide higher stratus level clouds and good visibility. The wind direction had a southerly component during 42% of weather observations. There was a total of 0.10 inches of precipitation recorded this month, mostly as condensed fog. Mean noon day air temperature was 15.5°C, with a standard deviation of 1.23°C, a high of 20.0° C recorded at 1500 hours on the 28th, and a low of 11.0 recorded at 0600 on the 12th. Mean sea surface temperature was 13.87°C, with a standard deviation of 1.09°C, a high of 16.18°C on the 30th and a low of 12.50°C on the 9th. This mean sea surface temperature is 0.38°C above the long term (45 year) mean for August.

**Oiled & Entangled Things**

**Common Murre** – On Aug 15 one oiled murre seen in Garbage Gulch had 15% of its body oiled – thick, black oil formed a solid patch on its belly (photos by J. Tietz). On Aug 18, one oiled murre at East Landing had 15% its body oiled – thick, blackish oil on flanks (photos by Jacob Drucker).

**Northern Fulmar** – On Aug 27, one off East Landing was 30% covered, with brown, thick oil confined to belly below waterline.

**California Sea Lions** – Seven individuals with embedded entanglements around the neck were observed this month.

**Breeding Birds**

**Ashy Storm-Petrel –** Storm-petrel breeding activity continued to advance throughout August with most followed sites hatching chicks and the first fledges later in the month. The last night of mist-netting was conducted at the Carp Shop on August 2nd, with 44 new birds captured and 8 recaptures. The Ashy wing walk study was concluded for the season on the 30th. A total of 5 wings and 2 whole birds were discovered – one of the whole birds was killed by a gull and the other was crushed by a rock wall. The cause of the other Ashy deaths was unknown.

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

**Brandt’s Cormorant** – Subcolony counts concluded on the 3rd because nearly all nests had finished and chicks were wandering. By Aug 18th, all followed Corm Blind sites had fledged or failed. On Aug 23rd, the last of all followed nests (one at Sea Lion Cove) fledged.

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

**Double-crested Cormorant** – Several juveniles were observed around the island. Most birds were observed roosting on Maintop or flying to or from this location.

**Western Gull** – Gull breeding activity wrapped up for the season with the last chicks fledged from all study plots by mid-August. By the end of the month fewer adults were remaining on territory, instead joining communal roosts.

**California Gulls –** All birds were observed at gull roosts. Juvenile numbers fluctuated greatly indicating these were all migrants from the mainland, while adult numbers were stable indicating these were probably failed breeders.

**Common Murre –** All healthy birds were seen offshore, either rafting with other birds or in parent-chick pairs. A few sick or oiled birds were seen roosting along the shoreline.

**Pigeon Guillemot** – Many nests were still active at the beginning of the month, with adults frequently flying to nests to provision chicks.

**Cassin’s Auklet –** The PRBO study concluded on the 9th when the final followed chick fledged. On the 14th, the final chick fledged from the Habitat Sculpture.

**Rhinoceros Auklet –** On Aug 19th, all PRBO sites had fledged. On Aug 24th, Brad Wilkinson’s final GPS tagged site had its chick fledge.

**Tufted Puffin –** The late season puffin census was conducted from Aug 2-12. On the 6th, a chick was observed at a nest site. On the 31st, the first fledgling was observed in the water surrounding the island.

**Black Oystercatchers** – On Aug 15th, one fledgling was observed at Sea Lion Cove. All other birds were observed at usual roost locations during shorebird walk.

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

**Pinnipeds**

Persistent dense fog allowed only one lighthouse pinniped census during the first half of the month, with a total of three conducted over the entire month.

**California Sea Lion** – Overall numbers increased in August, with more individuals moving up the Marine Terrace. The mean lighthouse count was 3610, with a high count of 4147 on the 18th. The highest pup count was 243 on the 18th, with most counted on Dead Sea Lion Flat.

**Steller Sea Lions** –Overall numbers continued declining as breeding activity ended. The mean lighthouse count was 73, with a high of 85 counted on the 25th. The highest pup count was 21 on the 4th.

**Northern Elephant Seal –** Numbers remained low through the month with an average count of 15. A few bulls and sub-adult males were observed amongst immatures on all surveys.

**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 64, with a high of 103 counted on the 25th. No pups were conclusively noted.

**Northern Fur Seals** –Overall numbers decreased through the month. The mean lighthouse count was 821, with a high of 976 counted on the 4th. The highest pup count was 447 on the 4th.

**Cetaceans**

There were 18 one-hour standardized whale watches conducted this month using the Apple iPad and Spotter App.

**Gray Whale** – A single resident whale was present around the island for the first 8 days of the month. None were seen thereafter.

**Humpback Whale** – There were 268 animals observed during Aug on 30 days. The high count was 40 observed on the 5th. Many animals were seen breaching, pectoral fin and tail slapping and feeding all month around the island. On the 31st, a line of 20 were observed heading north 4 km southwest of the island.

**Blue Whale** – There were 8 animals observed during Aug on 6 days. The high count was 2 observed on the 1st and 2nd.

**Sei Whale** – One was observed on the 28th.

**Risso’s Dolphin** – There were 35 observed during Aug on 7 days. The high count was 14 observed on the 20th.

**Pacific White-sided Dolphin** – Five were observed on Aug 19.

**Harbor Porpoise** – There were 8 observed on two days, with a high count of 6 seen on the 27th.

**Sharks**

No sharks were noted this month.

**Bats**

Bat surveys started on the 15th. Two hoary bats were observed in the Coast Guard Tree on three consecutive days from the 21st to the 23rd.

**Salamanders**

There were no surveys conducted this month. One was observed in the graywater-leech field valve box on the 22nd.

**Owls**

No owls detected this month.

**Crickets**

No crickets were noted this month.

**Inverts and Intertidal**

Many egg-yolk jellies were noted around the island at the end of the month.

**Plants**

**On the 1st**, USFWS sprayed herbicide on the entire Marine Terrace for noxious weeds, including plantain, pigweed, New Zealand spinach,Malva, and sow thistle.

**On the 2nd**, USFWS sprayed herbicide around the houses, Russia house, Corm Blind, K-Plot, Sea Lion Cove, Habitat Sculpture, North Landing, north Little Lighthouse Hill, Heligoland, Lower and Upper Lighthouse Hill. Jack Rabe conducted a phenology study and noted that no New Zealand spinach had gone to seed.

**On the 3rd**, the USFWS sprayed herbicide at Shubrick Cove and Fertilizer Flat. Earl Cummings and Rob Doster collected three 30-gallon bags full of spinach seeds to test the efficacy of removing seeds to reduce seed banks. Some were brought back to the mainland for a propagation study, while the rest were incinerated.

**On the 4th**, USFWS sprayed herbicide at Garbage Gulch and Rabbit Cave Ridge, and high plants on Powerhouse Hill, NE side of Point Cliff, and most of Orca Cove.

**Violations**

**Aug 13th** – A small unidentified motorboat was fishing in the MPA off East Landing during the crew transfer. The biologist was unaware of this until that evening, so no action was taken

**Aug 21st** – An 18’ foot Boston Whaler (CF 3475 RW) had a single person fishing within the MPA. He was also observed speeding between Saddle Rock and SEFI, although no wildlife disturbance was observed. This violation was reported.

**Aug 27th** – Bayrunner Baja (CF 4611 UH) was observed fishing in Mirounga Bay. Four people were observed fishing and had caught several fish. This happened to occur during a resupply, so the biologist took the Safeboat over to them and provided them with an MPA brochure, which they accepted and then moved on to the Mid-Farallones.

**Aug 28th** – A white Sea Ray with a blue top (CF 4070 GA) was observed fishing in the MPA. Three whalewatching boats (Kitty Kat, Salty Lady, and New Captain Pete) had to talk to the violators before they moved on to the Mid-Farallones.

* A beige Parker-class motorboat (CF 2906 SR) with 3 passengers also fished briefly within the MPA before the previously mentioned white Sea Ray talked to them. The Parker motorboat departed immediately.

**Aug 30th** *–* A large, dark military jet with four engines and a cargo door at the rear flew low over the island, possibly below the 1000’ ceiling, and flushed >1000 gulls off the island. No pinniped disturbance was noted.

**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. The 25hp motor on the boat at NL has been temperamental all season but started and ran well when tested in early August. However, since that engine has been unreliable, we decided to remove the 15-hp Honda “kicker” motor from the Safeboat and move it to NL to be available as a back-up in the case of a north landing. The 8-hp Honda “kicker” was put back on the Safeboat to be the emergency back-up for that vessel. Both the 8-hp and 15-hp were inspected and tank tested after the switch and were operating well. On Aug 16th, the fire hydrant valves were tested at the houses. The pressure was low at the PRBO House and may be due to the on-demand pump having less constant pressure than the gravity tank.

**Maintenance Needs**

* 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. Likely cause is low water pressure and very old pipes.
* 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): 2.3 hours

Black Kohler (Speedwagon): 24.1 hours

PV Kohler: 3.2 hours

Webasto: Not working

Power Used: Start of month = 54,507; end of month = 55,192 for a total of 685 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 August: 18.4 gallons

**Water Reserves**

Cistern: ~93,320 gallons (7’0”)

Gravity Tank: empty

Settling Tank: empty

No water was pumped this month. Water use at PRBO house water meter was 1,573 gallons.

**Sightseeing Boats**

Numbers of people on board are estimates.

**Kitty Kat** was sightseeing on 8 days with an average of 40 people on board.

**Salty Lady** was sightseeing on 10 days with an average of 39 people on board.

**New Captain Pete** was sightseeing on 1 day with 30 people on board.

**Outer Limits** was sightseeing on 2 day with an average of 20 people on board.

**Highlight Bird Observations**

**Cinnamon Teal –** four on Aug 21

**Blue-footed Booby –** Aug 1-9

**Brown Booby –** Aug 6-9, 25

**Northern Gannet –** Continuing bird still being seen most days

**Great Blue Heron –** Aug 28

**Osprey –** Aug 16, 28

**Long-eared Owl** – Aug 29

**Black Swift –** Aug 21

**Least Flycatcher** – Aug 26

**Hammond’s Flycatcher** – Aug 28

**Red-eyed Vireo** – Aug 29

**Pacific Wren** – Aug 30

**Blue-gray Gnatcatcher** – Aug 15, 20

**Swainson’s Thrush (olive-backed**) – Aug 27th

**Tennessee Warbler** – Aug 17, 21, 25

**Mourning Warbler** – Aug 23

**American Redstart** – Aug 17, 21, 24

**Blackburnian Warbler –** Aug 27

**Brewer’s Sparrow** – Aug 20

**Grasshopper Sparrow** – Aug 24

**Lark Bunting** – Aug 6

**Orchard Oriole** – Aug 21

**Landbirds Banded**

105 individuals of 28 migratory bird species were banded this month: Rufous Hummingbird (1), Western Wood-Pewee (3), Willow Flycatcher (1), Least Flycatcher (1), Hammond’s Flycatcher (1), Pacific-Slope Flycatcher (7), Ash-throated Flycatcher (2), Cassin’s Vireo (1), Warbling Vireo (4), Swainson’s Thrush (1), Northern Mockingbird (1), Tennessee Warbler (2), Orange-crowned Warbler (4), MacGillivray’s Warbler (2), Mourning Warbler (1), Common Yellowthroat (1), American Redstart (2), Blackburnian Warbler (1), Yellow Warbler (25), Black-throated Gray Warbler (4), Townsend’s Warbler (17), Hermit Warbler (4), Wilson’s Warbler (8), Chipping Sparrow (3), Lark Sparrow (2), Western Tanager (3), Brown-headed Cowbird (2), Orchard Oriole (1)