**Farallon Island NWR**

**Monthly Report**

**April 2016**

Biologists: Russ Bradley & Pete Warzybok

**Island Visitors**

Point Blue crew this month included: Carlo Acuña, Russ Bradley, Sarah Guitart, Cotton Rockwood, Kiah Walker, and Pete Warzybok.

**Apr 3:** “**Outer Limits”** (skipper Jim Robertson) picked up USFWS “Team Spinach” Jonathan Shore, Peter Winch, Suzy Romanowicz, Marie Strassburger, Kelsey Richardson, Isaiah Thalmayer, and Olivia Andrus. Quentin Clark from the SFSU plant mapping team also departed.

**Apr 9:** **“Starbuck”** (skipper John Wade) brought out supplies. Seven people toured the island.

**Apr 23:** **“Starbuck”** (skipper John Wade)brought out Russ Bradley and Cotton Rockwood and departed with Pete Warzybok and Sarah Guitart. Five people toured the island.

**West End Island Visitors**

No trips to West End were conducted in April

**Weather/Ocean**

The month of April saw generally light winds and favorable seas for the first few weeks followed by strong northwesterly winds and big seas near the end of the month. There was a total of 1.08 inches of rainfall recorded this month. Mean noon day air temperature was 14.86°C, with a standard deviation of 2.64°C. The highest air temperature was an anomalously hot 28.5° C recorded at 1500 hours on the 6th. Mean sea surface temperature was 11.86°C, with a standard deviation of 0.99°C, a high of 13.39°C on the 21stst and a low of 9.96°C on the 30th. This mean sea surface temperature is 0.56°C above the long term (44 year) mean for April.

**Oiled & Entangled Things**

**Western Gull** – Two oiled gulls were seen this month, one with 5% oiling on the head and one with 80% of its body covered in a light oil.

**Common Murre** – One oiled murre seen at East Landing with about 30% of it body oiled on the breast and sides at the water line.

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

**Breeding Birds**

**Ashy Storm-Petrel –** There have been few storm-petrels observed this month. A total of 17 wings were noted this month, predated by both Burrowing Owls and Western Gulls.

**Leach’s Storm-Petrel** – None observed.

**Brandt’s Cormorant** – Numbers were very low this month, with birds in breeding colonies virtually absent. In the very days of the month, increased attendance in breeding colonies was noted. Resighting of banded birds began at the end of the month.

**Pelagic Cormorant –** Very few birds were present at breeding sites in April. The first breed check was conducted on April 20th.

**Double-crested Cormorant** – The first birds were observed on Maintop on the 14th. Breed checks began on the 26th, with 36 birds observed. Numbers and nest building increased through the end of the month.

**Western Gull** – Resighting of banded birds in nest plots began on the 4th. Courtship and pre-breeding behavior continued through April. Nest checks in plots began on the 22nd. The first egg was observed on the 23rd near the Coast Guard House.

**California Gulls –**Surveys beganon the 1st for birds in the normal breeding areas on the Marine Terrace and Sea Pigeon Point. Very low numbers of birds and no nesting activity were seen this month, there were still many sea lions hauling up in these areas.

**Common Murre –** Murres continued to attend in large numbers nearly daily throughout the month. Daily nest attendance in plots began on the 16th. The first egg was seen on the 24th, but unfortunately it was in the bill of a gull flying by Sea Lion Cove.

**Pigeon Guillemot** – Counts of birds rafting around the island began on the 3rd and continued through the month. Peak numbers of birds were just over 2000, a marked decline from recent years. The first check of breeding sites was on the 27th, which was also the first day birds were seen at breeding sites on Lighthouse Hill.

**Cassin’s Auklet –** Cassin’s bred in large numbers throughout April. By month’s end there was 93% occupancy in the 44 long term productivity study boxes, and 79% occupancy in the 402 known age study boxes.

**Rhinoceros Auklet –** Nest box checks began on the 1st and camera check of burrows began on the 2nd. The first egg was observed in a camera site on the 18th. The first egg in a nest box was found on the 21st. Rates of egg laying at followed sites increased through the end of the month.

**Tufted Puffin –** The first puffin on land was observed on the 10th. Small numbers of birds on land and on the ocean were observed throughout April.

**Black Oystercatchers** – Oystercatchers have been seen pairing up on territories around the island during the last month and foraging in the intertidal.

**Canada Goose –** Three pairs nested on the south side of the island, by the end of the month two of them had hatched goslings.

**Pinnipeds**

**California Sea Lion** –Overall numbers continued to decline in April but animals continued to haul out high on the marine terrace, though not as high as previously observed this year. On average there were 2,317 animals counted during pinniped census from the lighthouse. The high count was 2,900 on the 7th. There were more emaciated individuals observed around the island this month and aborted fetuses continued to be seen, though at much lower rates than in March. By the end of the month there were a total of 22 aborted fetuses observed around the island, bringing the total for the year to 213. There were also three dead immature animals of seen around the island this month.

**Steller Sea Lions** –Overall numbers remained low during April but increased at the end of the month. The first adult male was seen on the 30th. On average there were 59 animals. The high count was 99 on the 30th.

**Northern Elephant Seal –** Numbers of molting immatures continued to increase in April. On average there were 303 animals counted during census. The high count was 355 on the 30th.

**Harbor Seal –** As usual overall numbers were highly variable this month and heavily dependent upon tide and swell conditions (high tide or swell results in reduced haul out areas).The average count for the month was 55 with a high count of 109 on the 30th.

**Northern Fur Seals** –Overall numbers continued to be low through the month. The average count from standard lighthouse surveys was 39 animals. The high count was 68 on the 7th.

**Cetaceans**

There were 8 one hour standardized whale watches conducted this month using the Apple iPad and Spotter App, along with daily incidental observations. The high count for Gray Whales this month was 6 on the 1st. Humpback whales were seen regularly in low numbers throughout the month, with a high count of 9 on the 6th. .

**Gray Whale** – there were a total of 22 detected this month, most headed north, one apparently resident.

**Humpback Whale** – there were 26 seen during April on 9 days

**Sharks**

No shark attacks noted

**Salamanders**

The standard surveys were conducted on the 2nd and 14th. We found 10 salamanders on the 2nd (6 large, 2 small, 2 tiny) and after rain 38 on the 14th (36 large, 2 small). The last island wide survey of this rain year was conducted on the 30th and resulted in 4 individuals seen (1 large, 2 small and 1 tiny). It appears that by the end of the month, drying soils have resulted in reduced numbers of salamanders present on the surface.

**Owls**

We have continued to monitor Burrowing Owls by conducting daily roost surveys for presence/absence of owls at active burrows. For the first half of the month there were one to three owls observed daily. After the 12th, only one owl was seen, and no owls were observed after the 20th.There was also one Barn owl present on the island throughout the month based on occasional auditory detections and the presence of predated carcasses.

**Crickets**

Nothing of note this month.

**Inverts and Intertidal**

Nothing of note this month.

**Plants**

Team Spinach continued spraying efforts of invasive plants (NZ Spinach, Malva, Plantain, Dwarf Nettle, Sow Thistle, and Pigweed) in most accessible areas of the island early in the month. On the 28th a major branch on the Coast Guard tree broke in a wind storm.

**Violations**

On the 17th three small sportfishing boats were observed in the no take reserve. No identification was obtained, but Kitty Kat spoke to one and them moved outside the closed area. A similar situation occurred on the 20th, when a 23 ft Bayliner (no ID numbers obtained) was fishing off North Landing and the New Eldorado 3 got them to move.

**Maintenance**

Island biologists Bradley and Warzybok 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. Also of importance: conducted crane, safety, and fire extinguisher training for Point Blue volunteers, repaired sea lion damage to Sea Lion Cove wall, performed annual maintenance on “Speedwagon” generator, replaced kill switch on Honda 15 hp SAFEboat kicker engine, annual service on the main outboard engines for SAFEboat and North Landing Zodiac, replaced faulty spark plug on North Landing Honda engine, replaced RACOR filter on powerhouse diesel fuel pump. We are still using the demand pump to supply water to the house until the gravity tank can be repaired (needs a confined space permit).

**Maintenance Needs**

* Repair liner in the Gravity tank
* Repair gray water system. The pump will not build enough pressure to flush the toilets anymore. We think the problem may be with the expansion tank but troubleshooting needs to be done to confirm the issue. With no functioning gray water system, we are using fresh water to flush toilets which greatly increases our water use.
* Regular door on the power house is broken and needs to be replaced. A temporary repair was done in late March by FWS volunteer Peter Winch and it is working for now. However, the frame is split and the concrete block around the door frame is broken at two of the attachment points.
* The 30Kwh Kohler “Speedwagon” has a small but persistent coolant leak apparently emanating from the water pump. The bolts on the water pump need to be tightened with a torque wrench to the proper specifications to see if that will stop the leak. Otherwise, it is likely that the water pump gasket will need to be replaced.
* 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.
* On-demand hot water heater in PRBO house is not functioning at all
* Webasto heater is not functioning and needs a new fuel pump.
* Water supply lines have developed several leaks over the last few months and need to be replaced.
* 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. It is currently on clean water and we are employing the rule of “its yellow so let it mellow”.
* 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 PV checks went well and the system appears to be functioning properly.

**Generator run times**

White Kohler (Buffy): 0 hours

Black Kohler (Speedwagon): 19.6 hours

PV Kohler: 0 hours

Webasto: Not working

Power Used: Start of month = 52,373; just past end of month (5/3) = 52,903 for total of 530kwh

**Fuel Reserves**

Fuel Remaining:

Drums: 6 3/4 X 55g = ~370 gallons

PV Kohler Tank: Full

White Kohler Tank: Full

Black Kohler Tank: Full

Webasto Tank: 1/4 full

Diesel Fuel used in April: 8.4 gallons

**Water Reserves**

Cistern: ~105,720 gallons (7’8”)

Gravity Tank: empty

Settling Tank: 2.40 feet

No water was pumped this month. Water use at PRBO house water meter was 5,462 gallons. Using fresh water for toilets has more than doubled our water use compared to this time last year.

**Sightseeing Boats**

Kitty Kat seen six times this month (2nd, 3rd, 9th , 16th, 17th, 23rd ) with 20-50 POB. Hyperfish with 8 POB was seen on the 2nd, including 5 who dove in Fisherman’s Bay. Huck Finn was here on the 19th with 20 POB. New Eldorado 3 was here on the 20th with 35 POB.

**Non-breeding birds**

Pacific Loon, Red-necked Grebe, Eared Grebe, Sooty Shearwater, **Brown Booby (decreasing throughout the month), Blue-footed Booby**, Northern Gannet, Surf Scoter, Canada Goose (mostly breeders but a couple of migrants), Brant, Peregrine Falcon, Killdeer, Wandering Tattler, Whimbrel, Black Turnstone, Surfbird, **Laughing Gull (found fresh dead)**, Herring Gull, Glaucous-winged Gull, Glaucous Gull, **Kelp Gull (second island record)**, Eurasian Collared Dove, Barn Owl, Burrowing Owl, Anna’s Hummingbird, Rufous Hummingbird, Allen’s Hummingbird, Belted Kingfisher, Pacific Slope Flycatcher, Western Kingbird, Cassin’s Vireo, Golden-crowned Kinglet, Ruby-crowned Kinglet, Blue-gray Gnatcatcher, Swainson’s Thrush, Hermit Thrush, American Robin, Varied Thrush, European Starling, American Pipit, Orange-crowned Warbler, Audubon’s Warbler, Myrtle Warbler, Black-Throated Gray Warbler, Townsend’s Warbler, Common Yellowthroat, Wilson’s Warbler, Western Tanager, Chipping Sparrow, Sooty Fox Sparrow, Lincoln’s Sparrow, White-crowned Sparrow Golden-crowned Sparrow, Oregon Junco, Black-headed Grosbeak, Brown-headed Cowbird, Hooded Oriole, Bullock’s Oriole, Purple Finch, House Finch, Lesser Goldfinch.