

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service Farallon Islands National Wildlife Refuge

June 2020

Amanda Spears, Mike Johns
aspears@pointblue.org

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.

Island Visitors

Point Blue crew: Mario Balitbit, Katie Douglas, Sean Gee, Cole Jower, Mike Johns, Theresa Rizza, and Amanda Spears.

June 20th: “**Outer Limits**” (skipper Jim Robertson) brought out Katie Douglas and Cole Jower. Departed with Sean Gee.

COVID-19: In response to ongoing concerns over impacts of this global pandemic, certain precautionary measures were taken this month to minimize the risk of COVID-19 infecting island personnel: The use of PPE was required by newly arriving summer interns prior to and during the landing; the frequency of regular supply runs was reduced from twice a month to once a month; no off-island breaks were granted to crew members; and no visitors were permitted to tour the island. Only essential personnel are currently permitted on the island until further notice.

Weather/Ocean

Monthly weather is summarized in Figure 1. Light to moderate NW winds dominated this month, with occasional sustained winds of up to 30 knots. The island received only trace amounts of rain in June. The range of midday air temperatures fell above the long-term normal range for this month, with an average of 15.1 °C. This was 1.1 °C higher than the long-term average for June. Sea surface temperature (SST) readings from the island fell within the long-term normal range for this month, with an average of 12.0°C. This is 0.39°C greater than the long-term average for June.

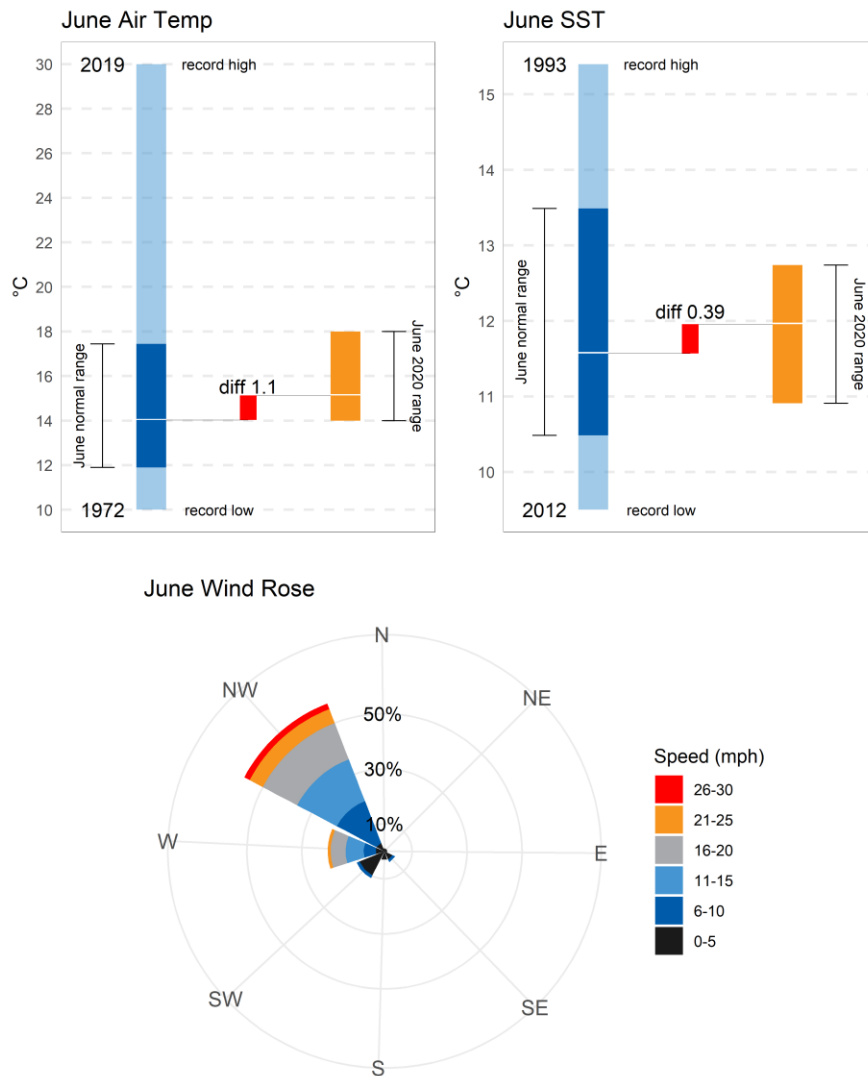


Figure 1. Noon air and sea surface temperature data summary. Light blue depicts the long-term (1971 – 2019) range of observations with years given for record highs and lows; dark blue shows the long-term range of averages for June. Orange depicts the range of current (2020) observations. Differences between the long-term and current means are shown in red if above normal, and blue if below normal. Daily wind speed (color scale) and direction binned into sectors for morning, noon, and afternoon observations for this month. Larger bars indicate more wind from that direction.

Oiled & Entangled Wildlife

- An adult female *Zalophus* was seen with polypropylene rope embedded tightly around the neck.
- An adult male and immature *Zalophus* were seen with monofilament embedded tightly around the neck.

Breeding Birds

Storm-petrels – Two standard 3-hour mist netting sessions were conducted this month. One was conducted at the Lighthouse Hill site on June 14th and resulted in a total of 116 ashy storm-petrels (96 new and 20 recaptures), 2 new Leach's storm-petrels, and one FORK-TAILED STORM-PETREL. The second session was conducted at the Carp Shop on June 19th and resulted in a total of 156 ashy storm-petrels (145 new and 11 recaptures) and one recaptured Leach's storm-petrel.

Social attraction efforts continued at the Ashy Castle on the 24th. Playbacks occurred throughout the night during a 2-week window around the new moon. An adult incubating an egg was discovered in the Ashy Castle on June 8th. This is the first breeding attempt documented for this site. The first chick was discovered on June 28th in the Habitat Sculpture during a regular breed check.



Figure 2: A Fork-tailed Storm-Petrel captured on June 14th, 2020. Photo by Mario Balitbit.

Brandt's Cormorant – Adults continued to brood large chicks at both the Sea Lion Cove and Corm Blind colonies. By the end of the month, many chicks were in the advanced partly-feathered stage and began to wander about the colonies. No major losses of chicks have been documented this year at either site.

Pelagic Cormorant – Breeding activity continues to be high for this species compared to the last few seasons. Adults at followed breed sites continued to attend to their partly-feathered chicks through the end of the month.

Double-crested Cormorant – Well-built nests remain at a count of roughly 36. Most nests had two to four partly- to mostly-feathered chicks by the end of the month, and the chicks have begun to wander about the colony.

Western Gull – The first chicks for K plot were discovered on June 6th. Chicks at followed known-age nests were large enough to band starting June 9th. Color bands were received mid-month and were distributed among previously metal banded chicks on June 21st. The cohort band combo for 2020 is 00ym. Counts of well-built nests in H, K, C, and J plot were completed

on June 8th. The annual all-island census was conducted on June 3rd, for an adjusted population estimate of 13,013 breeding adults. On June 7th, an adult western gull with only a white color band was noosed off an active nest in H-plot east. It was given a metal band in the band combo wm00. We assume the bird is a new recruit from 2015, banded as a chick when the leg was too small resulting in the metal band slipping off the foot.

California Gulls – The first chicks were seen on June 11th. By June 30th, three nests were confirmed to have chicks on the West Marine Terrace.

Common Murre – The first chick in the Upper Upper sub-colony was seen on June 2nd. Daily 2-hour diet watches began on June 4th. Anchovy and juvenile rockfish dominated the chick diet this month, with the occasional flatfish, market squid, smelt, lingcod, and medusafish observed. Diet switched to predominately northern anchovy by the end of the month. The annual index plot photos were completed on June 5th. The first presumed fledges in the Upper Shubrick and Upper Upper sub-colonies occurred on June 15th and June 27th, respectively.

Sean Gee continued to deploy and retrieve GPS tags and TDR (temperature and depth recorders) on adults captured with a noose pole from Sea Lion Cove and Upper Shubrick. This round during the chick rearing period 8 GPS and 5 TDR tags were deployed. All murrelets were recaptured and tags recovered by June 12th.

Pigeon Guillemot – The first chick was banded at Garbage Gulch June 16th. Diet watches began on June 12th. Diet consisted mostly of sculpin and juvenile flatfish, with some juvenile rockfish. Fifteen geolocators were recovered this month.

Rhinoceros Auklet – Annual index plots were completed on June 2nd. Standard netting sessions to collect diet samples began on June 12th. As with common murrelets, northern anchovy dominated the chick provisioning diet.

Tufted Puffin – Early season puffin surveys were completed on June 4th. Provisional numbers suggest a larger number of puffins attending the colony compared to last season.

Cassin's Auklet – Fledge success was high this month, with most chicks from the followed nest boxes fledging within the first week of June. Twenty-nine percent of active nest boxes within the Known-Age study initiated a second brood. Twenty-six diet samples were collected this month.

Black Oystercatchers – No active nests have yet been confirmed, however, there has been little to no effort in finding nests.

Pinnipeds

California Sea Lion – On average there were 2,903 (std \pm 462) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 3,537 individuals on the 19th. The high count for pups was 530 on the 29th.

Steller Sea Lion – The first pups were observed during the weekly pinniped survey on the 6th. On average there were 164 (std \pm 43) individuals counted, with the high count of 200 on the 19th. There are least 15 bull males at several sites around the island. A high count of 43 pups occurred on the 29th.

Northern Elephant Seal – Numbers declined rapidly this month, with an average count of 25 (std \pm 17) individuals. A high count of 41 individuals occurred on the 6th, and a low count of 2 individuals occurred on the 29th.

Harbor Seal – On average there were 44 (std \pm 5) individuals counted, with a high count of 51 on the 19th.

Northern Fur Seal – Numbers grew dramatically for the colony on West End this month, and the first pups were observed on Indian Head Beach on the 19th. On average there were 468 (std \pm 289) individuals counted, with the high count of 822 observed on the 29th. Eighty-two pups were counted on the 29th.

Cetaceans

Standard Survey – Only three one-hour standard whale watches were conducted this month from the Lighthouse using the Spotter App due to persistently winds and poor viewing conditions. Daily high counts from standard watches combined with incidental observations are summarized in Figure 3. Notably, an astounding 47 Blue Whales were observed traveling and feeding near the island on the 13th. Risso's Dolphins continued periodically throughout the month, with a high count of 22 individuals observed on the 2nd.

June 2020 Whale Sightings

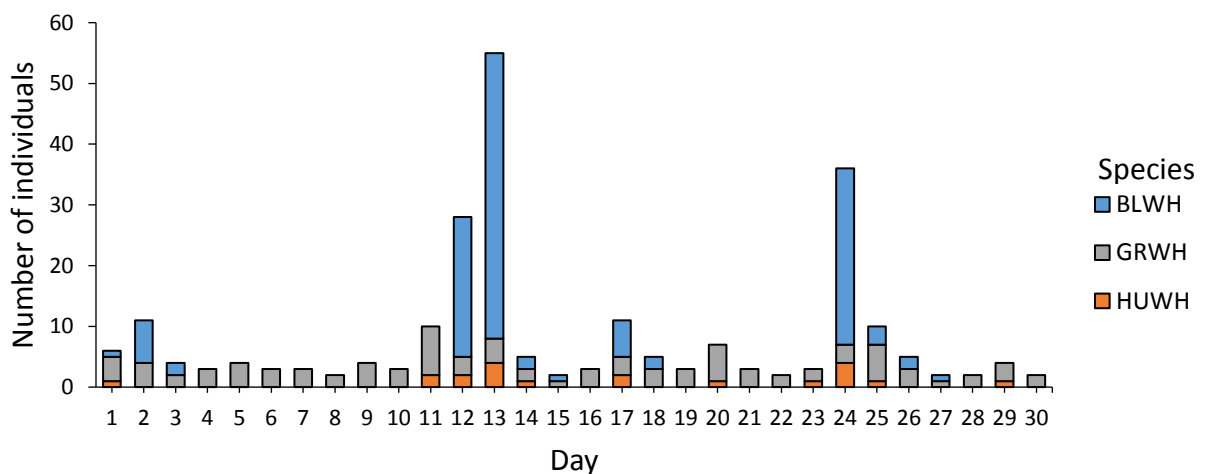


Figure 3. Daily high counts of Cetaceans from SEFI for June 2020. HUWH = humpback whale, GRWH = gray whale, BLWH = blue whale.

Sharks

No predation events were observed this month.

Salamanders

No salamander surveys were conducted this month.

Owls

No burrowing owls were observed this month.

Crickets

No cricket surveys were conducted this month.

Bats

No bats were observed this month.

Mice

Mice are increasing in numbers again this month, as evidenced by observations of individuals around the island at night.

Inverts and Intertidal

Nothing to report.

Oceanic Events

Nothing to report.

Plants

Theresa found and removed a single wild radish plant growing at North Landing. It was flowering, but had no seeds.

Violations

Several recreational fishing boats were documented in violation of the State Marine Reserve and Special Closure restrictions this month. Specific violators include at least three recreational vessels fishing within the MPA on June 13th, and a recreational fishing vessel catching rockfish in Mirounga Bay on June 27th. Several attempts were made to contact the skippers, to no avail.

Maintenance

Island biologists Spears and Johns conducted routine weekly maintenance checks on the PV system and generators. Monthly changes of water filters and crane greasing were conducted as usual. Additional fixes performed by the Island Biologist include replacing the brackets and

fixing the stairs going to the PRBO Catacombs and troubleshooting the grey water filtration system.

Maintenance Needs

- The Peevey and Buffy generators have been decommissioned and the island is in need of a new PV backup generator.
- The cistern and other elements of the water catchment system are showing their age and are need of major repairs or replacement. The cistern continues to lose water at a rate ~250 gallons per month.
- The Settling Tank also appears to have a leak in it when water is above 5.1 feet.
- The PRBO house kitchen counters especially around the sink continue to deteriorate. Replacement sometime in the next year is recommended.
- **The HADS weather station is no longer transmitting data to the web. Attempts to reset the unit have failed, and will require expert guidance to fix.**
- The gutters and flashing on both houses is degrading and will need to be improved or replaced.
- Aluminum railings at East Landing and lighthouse need repair.
- The PRBO shower faucet is beginning to fail, may need to be replace. The PRBO shower drain clogs frequently and may need new plumbing.
- The load cell antenna on the hook end of the East Landing crane is heavily corroded and needs to be replaced.
- New main telecommunications dish needs to be mounted and aligned at the Lighthouse.
- PRBO house is having issues making calls, may need to replace internet phone adaptor.
- Powerhouse roof-access ladder mounts are badly corroded and need to be replaced.
- There is now a small leak in the closet next to the downstairs bathroom in the PRBO house. It only leaks when it rains, which may mean there is a failure in the roof above.
- The Dumper Jet is in need of a new small back tire.

Solar/Electric

PV System

Distilled water used:	13.5 gallons
Distilled water reserves:	70 gallons

Generator run times

Kohler 15ROZ (Buffy):	0 hours	(1830.5 on meter)
Kohler 30REOZJC (Speedwagon):	3.3 hours	(660.3 on meter)
Kohler 40REOZK (Zeke):	10.5 hours	(477.6 on meter)
Kohler 15ROY61 (Peevey):	0 hours	(3954.2 on meter)
Webasto:	0 hours	

Power use

Facilities power use: Start = 85,015; End = 85,617; for total of 602 kWh

Fuel Reserves

Diesel used:	8.3 gallons
Diesel drums: 10.25 @55gal:	564 gallons
Kohler 15ROZ (Buffy) Tank:	Full
Kohler 30REOZJC (Speedwagon) Tank:	Full
Kohler 40REOZK (Zeke) Tank:	Full
Kohler 15ROY61 (Peevey) Tank:	½
Webasto Tank:	Full
Surplus gasoline for boat motors:	3 gallons
Gasoline for portable generator:	15 gallons
6 gallon boat tank:	Full
3 gallon boat tank:	Full

Water Reserves

Water used this month: Start = 289,233; End = 291,117; for a total of 1,884 gallons	
Cistern:	7' 1" or ~94,980 gallons
Gravity Tank:	empty
Settling Tank:	empty

Sightseeing Boats

The **Seawolf** was seen two times with an average of 9 POB.

Non-breeding birds

Pacific Loon, Common Loon, Northern Fulmar, Pink-footed Shearwater, **Buller's Shearwater**, Sooty Shearwater, **FORK-TAILED STORM-PETREL**, Brown Booby, Northern Gannet, Brown Pelican, **Great Egret**, Canada Goose, Peregrine Falcon, Whimbrel, Glaucous-winged Gull, **HORNED PUFFIN**, **Rock Pigeon**, Eurasian Collared-Dove, Rufous Hummingbird, Western Wood-Pewee, **Least Flycatcher**, "Western" Flycatcher, Barn Swallow, Red-breasted Nuthatch, **Brown Thrasher**, Northern Parula, Magnolia Warbler, "Audubon's" Warbler, Common Yellowthroat, Wilson's Warbler, Chipping Sparrow, **White-throated Sparrow**, House Sparrow.