

Farallon Islands Monthly Report

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

July 2020

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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, Steve Dougill, Katie Douglas, Cole Jower, Mike Johns, Theresa Rizza, Amanda Spears and Pete Warzybok.

July 18th: **“Hokahey”** (skipper Jan Passion) brought out Steve Dougill and Pete Warybok. Departed with Mario Balitbit, Mike Johns, and Cole Jower.

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 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 again dominated this month, with occasional sustained winds of up to 30 knots. The island received no rain in July. The range of midday air temperatures fell within the long-term normal range for this month, with an average of 15.0°C. This was 0.35°C higher than the long-term average for July. Sea surface temperature (SST) readings from the island fell slightly below the long-term normal range for this month, with an average of 12.32°C. This is 0.37°C less than the long-term average for July.

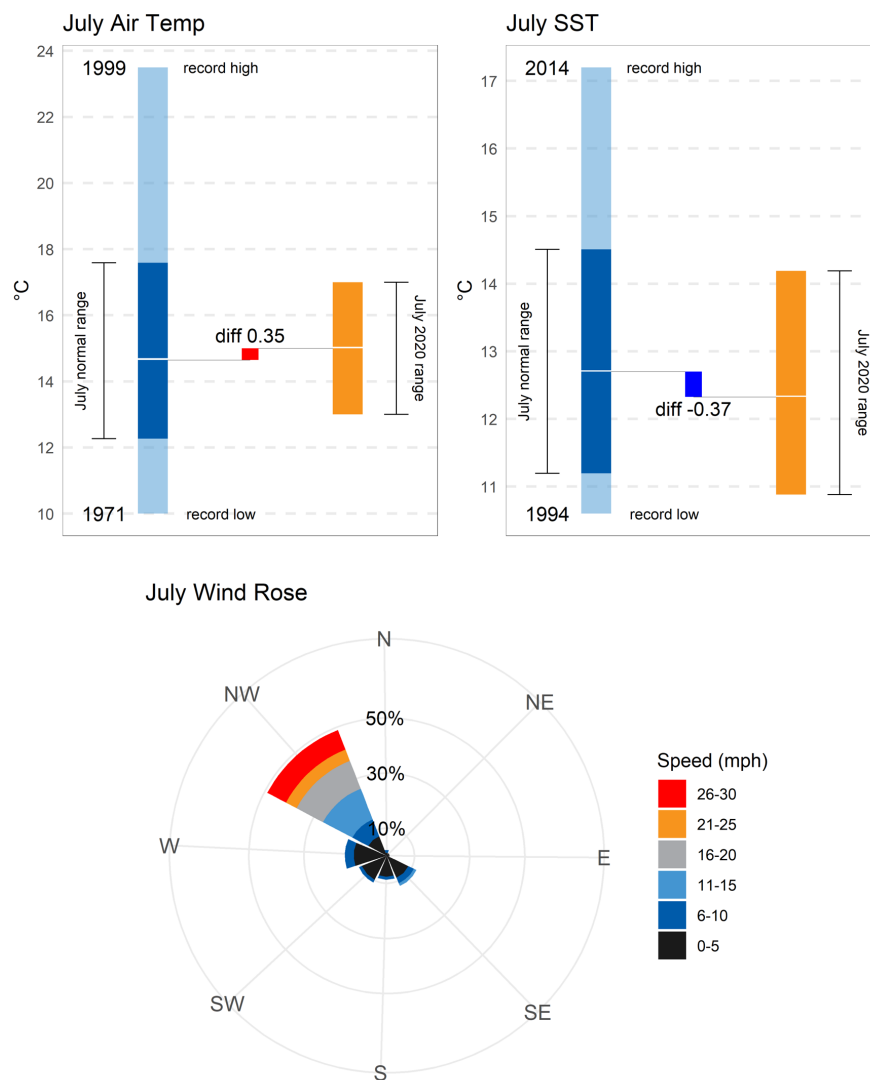


Figure 1. Noon air and sea surface temperature data summary. Light blue depicts the long-term (1971 – 2019) range of observations with years given for record highs and lows; dark blue shows the long-term range of averages for July. Orange depicts the range of current (2020) observations. Differences 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 male, an adult female, and five 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 Carp Shop on July 15th and resulted in a total of 102 ash storm-petrels (95 new and 7 recaptures). The second session was conducted at the Lighthouse Hill site on July 26th and resulted in a total of 84 ash storm-petrels (58 new and 26 recaptures) and three new Leach's storm-petrels.

Social attraction efforts continued at the Ashy Castle on the 22nd. Playbacks occurred throughout the night during the week following the new moon. The first ash chick on Lighthouse Hill was observed on the 3rd.

Brandt's Cormorant – Many mostly- to fully-feathered chicks were observed wandering from nest sites on the 4th. On the 17th, some fully-feathered chicks fledged into the water at North Landing. By the end of the month, all chicks at followed nest sites at the Sea Lion Cove colony were considered fledged; a few young downy- and partly-feathered chicks remained at the Corm Blind colony.

Banding of chicks at both colonies was delayed beyond the optimum period when most chicks were at the partly- to mostly-feathered stage due to a high number of murres attending young around the perimeter of the cormorant colonies. Despite the delay, banding sessions occurred at both the Sea Lion Cove and Corm Blind colonies on 17th and 27th, respectively. We banded 145 chicks at Sea Lion Cove and 65 chicks at Corm Blind. The banding combo this year was km00.

Pelagic Cormorant – The first fledge was observed at Orca Ridge on the 14th. Eight, or 18%, of the 45 followed and active sites were abandoned this season.

Double-crested Cormorant – The first fledgling was observed at North Landing on the 14th. The final count of the Maintop colony occurred on the 15th, as all chicks were fully-feathered and wandering from nests. The high count of well-built nests this season was 38, and the high count of chicks seen was 74.

Western Gull – The first confirmed fledgling island-wide was observed on the 7th. For the followed plots, the first fledges in H-east were confirmed on the 16th, and in H-west and K-plot on the 21st. Chick resighting began in all followed plots on the 18th. In an effort to boost our sample of potential future known-age recruits, C-plot, K-plot and H-east saturation banding

occurred on the 22nd, and H-west on the 25th. Despite many of the chicks being mostly- to fully-feathered, 184 chicks were banded during these sessions.

California Gulls – A noticeable increase in dispersing juveniles occurred mid-month. Three fully-feathered chicks were observed on West Marine Terrace when the last count was conducted on the 31st.

Common Murre – Monitoring efforts concluded for the season this month at the Upper Shubrick study plot when the last remaining chick was found dead on the 25th. Breed checks at the Upper Upper study plot continue into August with one chick remaining.

Diet watches concluded on the 8th. Preliminary results show Northern Anchovy dominated the chick diet this season, making up 61% of all observed feeding events. Juvenile rockfish made up 33% of the diet, an increase in proportion from the last two years.

This month we learned that the Peninsula Humane Society euthanized a banded murre on June 23rd that bred at Upper Shubrick site 274. This bird had a lost a chick recently, and was seen earlier that day during the daily breed check. The reason for euthanasia remains unknown.

Pigeon Guillemot – The first chick fledged from a followed Garbage Gulch site on the 6th. Many chicks from followed sites around the island fledged this month, with a noticeable increase in juveniles observed in the water on the 16th. Of the 69 pairs with chicks, 7 of those successfully fledged two chicks.

Diet watches at both Garbage Gulch and Lighthouse Hill concluded on the 25th. Preliminary results show the diet mostly consisted of sculpin (38%), flatfishes (27%), and juvenile rockfish (25%). Interestingly, the distribution of rockfish occurrence in the diet appears bimodal, with a peak in mid-June, a drop in early-July, and another peak in late-July.

One geolocator was recovered this month with a noose mat handcrafted by island biologist Johns.

Rhinoceros Auklet – The final round of standard netting sessions to collect diet samples began at the PRBO Catacombs on the 14th and concluded at the Rabbit Cave Catacombs on the 21st. While juvenile rockfish appeared prevalent early in the season, northern anchovy dominated the diet through the majority of the chick provisioning period. The first fledge in a followed nest box occurred on the 15th.

Tufted Puffin – Late season puffin surveys began on the 27th. Many sightings of adults carrying fish is a hopeful sign of a productive season.

Cassin's Auklet – Most birds remaining in the nest boxes continued to incubate or attend to chicks of their second broods. It is expected that many adults will continue to brood and provision their chicks through August. Sixteen diet samples were collected this month.

Black Oystercatchers – The first confirmation of breeding occurred on the 11th when an adult was observed carrying food at Blowhole Peninsula. On the 10th, an adult in incubation posture was observed at the Sea Lion Cove site, and a pair with two fully-feathered chicks were observed at Sea Pigeon Point.

Pinnipeds

California Sea Lion – On average there were 5,846 (std \pm 1732) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 8,294 individuals on the 24th. The high count for pups was 563 on the 30th.

Twenty-seven scat samples were collected this month from various locations around the island. Several dead individuals were observed on the Marine Terrace at the end of the month.

Steller Sea Lion – On average there were 149 (std \pm 31) individuals counted, with the high count of 181 on the 11th. The high count for pups was 38 on the 11th.

Northern Elephant Seal – Numbers remained low this month, with an average count of 12 (std \pm 5) individuals. A high count of 18 individuals occurred on the 24th. One class 4 and several class 3 and 2 sub-adult males arrived and hauled out on Sand Flat this month.

Harbor Seal – On average there were 48 (std \pm 9) individuals counted, with a high count of 57 on the 30th.

Northern Fur Seal – Numbers continued to grow for the colony on West End this month. On average there were 1449 (std \pm 350) individuals counted, with the high count of 1,789 observed on the 30th. The high count for pups was 752 on the 30th.

Cetaceans

Standard Survey – Twelve one-hour standard whale watches were conducted this month from the Lighthouse using the Spotter App. Daily high counts from standard watches combined with incidental observations are summarized in Figure 2. Numbers of humpback whales increased towards the latter half of the month, when many feeding groups were observed east and southeast of the island. Notably, the first fin whales of the year were observed approximately 3 miles southwest of the island on the 27th. Also, four minke whales were observed nearshore of the island on July 17th. Pacific white-sided dolphins and Risso's dolphins continued to be seen periodically throughout the month, with a high count of 50 and 22 individuals, respectively.

July 2020 Cetacean Sightings

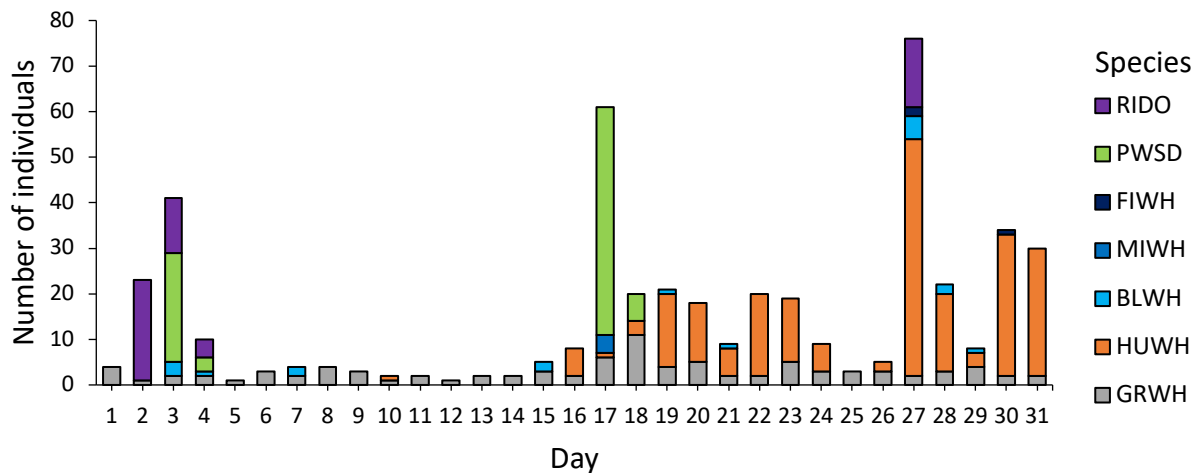


Figure 32. Daily high counts of cetaceans from SEFI for July 2020. GRWH = gray whale, HUWH = humpback whale, BLWH = blue whale, MIWH = minke whale, FIWH = fin whale, PWSD = Pacific white-sided dolphin, RIDO = Risso's dolphin.

Sharks

On the 19th an immature *Zalophus* was observed with a large, fresh shark bite on its right side.

Salamanders

No salamander surveys were conducted this month.

Owls

No burrowing owls were observed this month.

Crickets

A quarterly cricket survey was conducted this month at Rabbit Cave and the Corm, Gap, and North Landing pocket caves. It began on the 22nd and ended on the 26th. Rabbit Cave had an average of 207 individuals counted on the inside, and 2 on the outside; Corm Blind Cave had an average of 18 individuals on the inside, and 2 on the outside; Gap Cave had an average of 39 individuals on the inside, and 17 on the outside; and the North Landing Cave had an average of 44 individuals on the inside, and 3 on the outside.

Bats

No bats were observed this month.

Mice

The first mouse was observed inside the PRBO house on the 15th.

Inverts and Intertidal

The first dragonflies of the year were observed this month, including several variegated meadowhawks and black saddlebags in the last two weeks. A single unidentified grasshopper was observed during H-west saturation banding on the 25th.

Oceanic Events

An incursion of unidentified jellyfish or salps was noticed just northwest of the island on the 18th.

Plants

Nothing to report.

Violations

Several recreational fishing boats were documented in violation of the State Marine Reserve and Special Closure restrictions this month. Specific violators are listed below. Several attempts were made to contact the skippers, to no avail. All violators who disturbed wildlife were reported.

1. On July 3rd sailboat C30 closely approached the east side of the island, flushing approximately 200 murres from Upper Shubrick Point.
2. On July 26th a small white plane with tail number N37FG was observed flying low near the island, possibly over West End at 15:00. They made three complete passes around the island before departing. No obvious disturbances to wildlife were noticed.
3. On July 26th a recreational powerboat CF3340NG passed between Saddle Rock and Mussel Flat. They made a circumnavigation, stopping occasionally to fish.
4. On July 30th a small sailboat CF1435JA passed between Saddle Rock and Mussel Flat. No disturbance to wildlife was noticed.

Maintenance

Island biologists Johns, Spears, and Warzybok 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 Biologists include replacing the load cell battery and antenna on the EL crane and unclogging the drain in the PRBO bathroom shower. The UPS, located in the telecommunications locker at the lighthouse, experienced a hardware failure on the 23rd, causing all communication for the island except for the satellite phone to go down for the day. All communication devices now bypass the UPS and are plugged directly into the wall. Many thanks to Tim Pozar for helping us diagnose and troubleshoot this issue. The solar panels were cleaned on the 28th. Several crane training sessions were conducted this month, aside from scheduled landings, including two at North Landing on the 5th and the 23rd, and two at East Landing on the 13th and the 29th.

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 National Weather Service has been contacted.
- 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.
- 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.
- The load cell battery and antenna at the EL crane were replaced, but now the load cell needs to be recalibrated.
- The GPS unit housed in the SafeBoat bow locker no longer works and needs to be replaced.
- The HONDA portable gas generator has a mysterious leak behind the air filter and is currently unusable.
- The UPS located in the lighthouse communications locker does not work and needs to be replaced.

Solar/Electric

PV System

Distilled water used:	0 gallons
Distilled water reserves:	70 gallons

Generator run times

Kohler 15ROZ (Buffy):	0 hours	(1830.5 on meter)
Kohler 30REOZJC (Speedwagon):	0 hours	(660.3 on meter)
Kohler 40REOZK (Zeke):	10.3 hours	(477.6 on meter)
Kohler 15ROY61 (Peevey):	0 hours	(3954.2 on meter)

Webasto: 0 hours

Power use

Facilities power use: Start = 85,617; End = 86,237; for total of 620 kWh

Fuel Reserves

Diesel used:	9.0 gallons
Diesel drums: 10.09 @55gal:	555 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:	12 gallons
6 gallon boat tank:	Full
3 gallon boat tank:	Full

Water Reserves

Water used this month: Start = 291,117; End = 293,934; for a total of 2,817 gallons	
Cistern:	6' 10" or ~90,000 gallons
Gravity Tank:	empty
Settling Tank:	empty

Sightseeing Boats

The **New Captain Pete** made several visits to the island this month for wildlife viewing, it is unclear how many people were on board. On the 19th, commercial fishing boat **Susan Lee** (CF5744SS) was anchored at North Landing.

Non-breeding birds

Black-footed Albatross, Northern Fulmar, Pink-footed Shearwater, **Flesh-footed Shearwater**, Sooty Shearwater, **NAZCA BOOBY**, Brown Booby, Northern Gannet, Brown Pelican, Peregrine Falcon, **Semipalmated Plover**, Wandering Tattler, Whimbrel, **LONG-BILLED CURLEW**, Ruddy Turnstone, Black Turnstone, **Western Sandpiper**, **Least Sandpiper**, Red-necked Phalarope, **Pomarine Jaeger**, **Heermann's Gull**, **HORNED PUFFIN**, Eurasian Collared-Dove, **Long-eared Owl**, **Dusky Flycatcher**, **Warbling Vireo**, **Western Kingbird**, Red-breasted Nuthatch, **Northern Mockingbird**, Cedar Waxwing, Northern Parula, **Hermit Warbler**, Ovenbird, Black-headed Grosbeak, Red-winged Blackbird, Brown-headed Cowbird, **Bullock's Oriole**.