

Farallon Islands Monthly Report

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

August 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: Steve Dougill, Katie Douglas, Evan Lipton, Mike Mahoney, Theresa Rizza, Amanda Spears, Jim Tietz, and Pete Warzybok.

August 15th: **“Nido del Mar”** (skipper Kevin McRae) brought out Evan Lipton, Mike Mahoney, and Jim Tietz. Departed with Katie Douglas, Theresa Rizza, Amanda Spears, and Pete Warzybok.

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, but turned to the southeast during the final week. The island received 0.19 inches of precipitation this month, of which 0.14 inches fell during an intense lightning storm on the 17th. The range of midday air temperatures fell within the long-term normal range for this month, with an average of 15.3 °C. This was 0.06 °C lower than the long-term average for the month. Sea surface temperature (SST) readings from the island were lower than the long-term normal range for this month, with an average of 13.02 °C. This is 0.84 °C below the long-term average for the month.

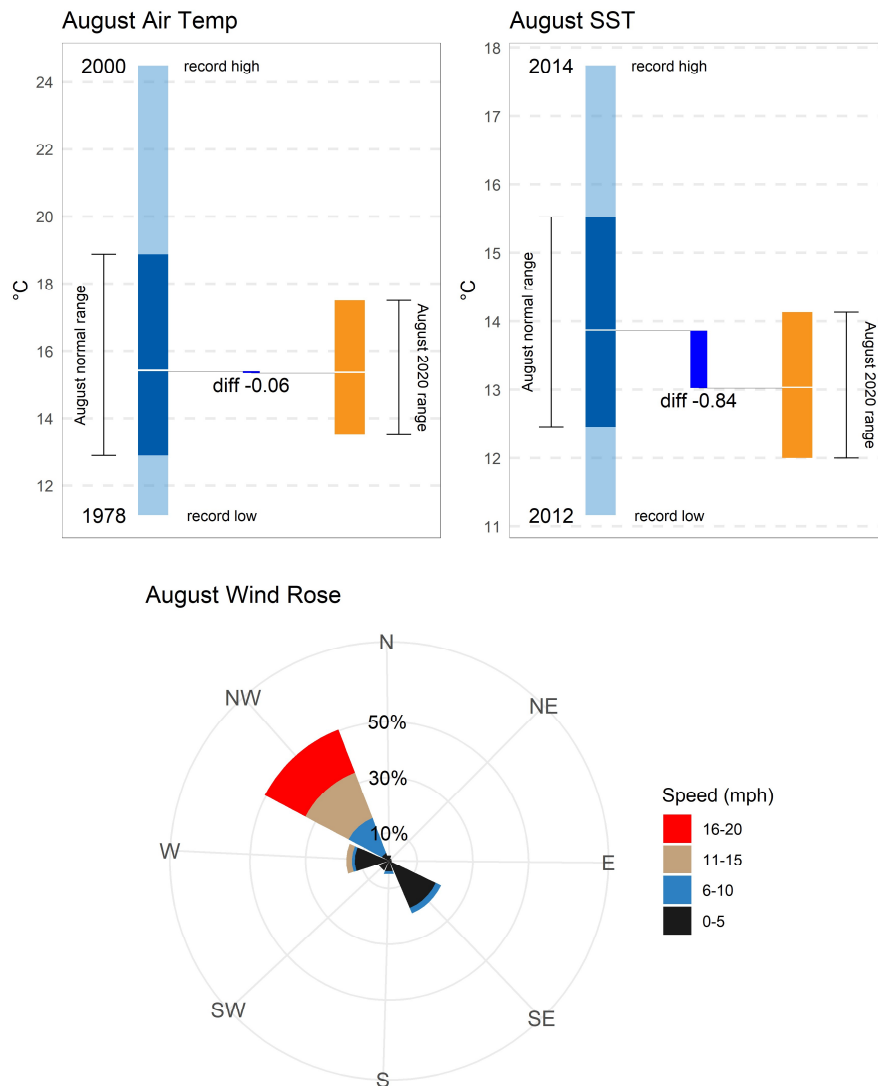


Figure 1. Noon air and sea surface temperature data summary. Light blue depicts the long-term (1971 – 2019) range of observations with years given for record highs and lows; dark blue shows the long-term range of averages for August. Orange depicts the range of current (2020) observations. Differences 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

Five *Zalophus* (3 sub-adult males, 1 adult female nursing a pup, and 1 unknown age/sex) were seen with monofilament or unknown material embedded tightly around their necks.

Breeding Birds

Storm-petrels – Of the 57 nest crevices initially monitored this breeding season, 43 had some activity this year and 14 did not. Of the active nests, two were confirmed to have Leach's Storm-Petrel, while the remaining 41 had Ashy or were not identified to species. By the end of the month, 35 of the 41 active Ashy sites had chicks, four had cold eggs and probably failed, and three had no activity this month and were assumed as failures. Of the two Leach's nests, one fledged mid-month, while the other had no activity this month and was assumed to be a failure.

One standard mist netting session was conducted this month at the Carp Shop on the 11th and resulted in the capture of 52 ash storm-petrels (48 new and 4 recaptures).

Brandt's Cormorant – Monitoring of nests concluded at the Corm Blind Colony on the 30th, when the last chicks from followed sites had fledged. At the end of the month, large numbers of chicks were still creching along the shoreline and in the colonies, while a few nests with partly- and mostly-feathered chicks continued.

Pelagic Cormorant – Nest monitoring concluded on the 13th. A few dozen birds were observed daily roosting on cliffs.

Double-crested Cormorant – Large numbers of chicks remained on Maintop through August, with flocks of adults observed flying to the coast to obtain food for provisioning their chicks.

Western Gull – The last chicks fledged from C Plot on the 5th, K Plot on the 20th, H-west on the 20th, and H-east on the 26th. A few partly- to fully-feathered chicks were still being provisioned by their parents at the end of the month. Many fledged juveniles were seen daily in the evening roost flocks on the Marine Terrace.

California Gulls – Juveniles dispersing from the mainland were observed throughout the month.

Common Murre – The last chick fledged from the Upper Upper plot on the 5th. A few hundred murre were seen mid-month, but numbers declined rapidly thereafter.

Pigeon Guillemot – There were 16 active nests this month, which fledged 14 chicks. Ten of the 13 chicks were from 2-chick nests, however, most second chicks did not survive to fledging or disappeared before achieving sufficient weight to successfully fledge. The last monitored chicks fledged between the 20th and 25th. A few unmonitored nests continued until the end of the

month. Several fledglings were observed in the water around the island mid-month, but numbers declined rapidly by the end of the month.

Rhinoceros Auklet – There were five nests active in the monitored nest boxes at the beginning of the month. All chicks from monitored nest sites fledged by the 14th. Near the end of the month, a few partly-feathered chicks from non-monitored nests were found wandering the island. Very few adults or chicks were seen on the water around the island at the end of the month.

Tufted Puffin – The late season breed check that began on July 27th concluded on Aug 9th. The combined early and late breeding surveys indicated that the number of nest sites likely active this year was 235, with an estimated breeding population of 470; an all-time high since Point Blue monitoring began (historically, the population was much larger). Several birds were observed carrying fish toward nesting areas this month. In late August, many puffins were observed prospecting for future nest sites, as is typical for this time of year.

Cassin's Auklet – There were 65 monitored nests still active with second broods or relays at the beginning of the month, 50 from the Known-Age boxes and 15 from the PRBO boxes. Among the Known-Age boxes, 23 chicks fledged and 7 died or disappeared, while 20 were still active at the end of the month. Among the PRBO study boxes, 6 chicks fledged, 1 died, and 8 remain active with chicks at various stages of development. In addition to the monitored sites, 53 chicks from unfollowed sites were banded this month to increase the known-age population.

Four diet samples were collected on the 9th to complete our sampling and reach our goal of 100 samples for the season. The late-season samples appeared different in composition from prior samples indicating that the adults were feeding their chicks larval fishes and mysids rather than krill.

Five adults were found dead in an old junction box between the Coast Guard house and the Powerhouse. This box was filled with rubble in September so birds can no longer get trapped there.

Black Oystercatchers – A few adult pairs escorting fledged chicks were seen around the island this month.

Pinnipeds

California Sea Lion – On average there were 7,023 (std \pm 1366) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 8,607 individuals on the 6th. The high count for pups was 528 on the 6th.

Two new dead individuals were discovered on the island this month and several were seen floating in the water around the island. One sub-adult male was observed coughing up copious amounts of blood on the 19th.

Steller Sea Lion – On average there were 94 (std \pm 40) individuals counted, with the high count of 133 on the 6th. The high count for pups was 18 on the 6th.

Northern Elephant Seal – Numbers remained low this month, with an average count of 8 (std \pm 5) individuals. A high count of 15 individuals occurred on the 27th. A bull and 2 SA4s hauled out on the 6th, but all subsequent observations were of immatures.

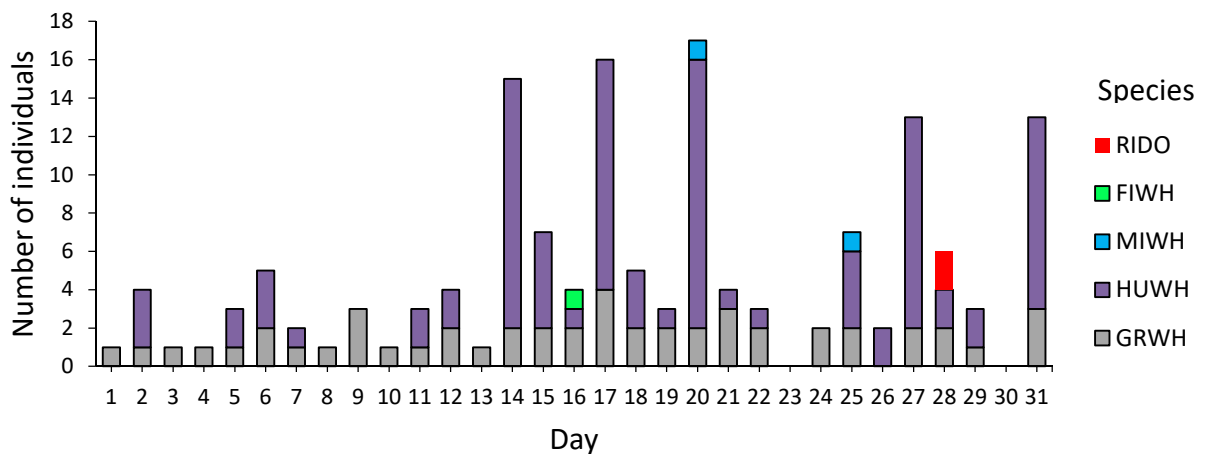
Harbor Seal – On average there were 34 (std \pm 18) individuals counted, with a high count of 56 on the 27th.

Northern Fur Seal – Numbers continued to grow for the colony on West End this month. On average there were 1100 (std \pm 306) individuals counted, with the high count of 1,459 observed on the 20th. The high count for pups was 510 on the 6th.

Cetaceans

Standard Survey – Eight one-hour standard whale watches were conducted this month from the Lighthouse using the Spotter App. Fog and/or wind frequently hampered our ability to conduct these surveys. Low numbers of gray and humpback whales were frequently observed around the island throughout the month. No blue whales were observed this month, but a fin whale and two minke whales were seen mid-month. Two Risso's dolphins were seen on the 28th.

August 2020 Cetacean Sightings



Sharks

Two *Zalophus* were observed this month with shark bites, but no actual predation events were observed.

Salamanders

No salamander surveys were conducted this month.

Owls

No burrowing owls were observed this month.

Crickets

No crickets surveys were conducted this month

Bats

The first bat survey was conducted on the 19th and then continued daily afterwards. A red bat was seen on the 25th and a hoary bat on the 27th.

Mice

Several mice were caught in the PRBO house this month. The first mouse of the year was caught in the Coast Guard house on the 30th.

Inverts and Intertidal

Dragonflies were relatively abundant the last week of the month, which included numerous gliders (*Pantala* sp.), a few blue-eyed darners (*Rhionaeschna multicolor*), one variegated meadowhawk (*Sympetrum corruptum*) and several black saddlebags (*Tramea lacerata*).

Plants

New Zealand spinach is covering approximately 30% of the southwest side of the island. The annual non-native plant control was not conducted this month due to precautions taken during the ongoing Covid-19 global pandemic.

Violations

Two boats were documented fishing in violation of the State Marine Reserve and one of these was within the Special Closure restrictions this month; neither boat appeared to have disturbed wildlife.

Maintenance

Island biologists Spears, Tietz, 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. At East Landing, the hose spigot and guide roller for the hoist wire rope were damaged by sea lions, and the sea lions also managed to loosen a nut on one of the slewing sheaves. The hose spigot was replaced, and the guide roller and sheave nut were repaired. Additional fixes included: a new antenna was installed at the lighthouse for communications; the turning wheel on the Dumper Jet was replaced; a new coat of sealer was applied to the rail cart; the PRBO house and boardwalks were power-washed; and the safety lines at East Landing were repainted. Several crane training sessions were conducted this month, including one at North Landing on the 28th and three at East Landing on the 6th, 22nd, and 29th. The communications on the island went down for a few days starting the 17th when

lightning struck a receiver on the mainland; Tim Pozar eventually fixed the receiver when he was allowed access.

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 in 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 are degrading and will need to be improved or replaced.
- Aluminum railings at East Landing and the lighthouse need repair.
- The PRBO house phone is having issues making calls and the internet phone adaptor may need to be replaced.
- 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 load cell battery and antenna at the EL crane were replaced, but now the load cell needs to be recalibrated.
- 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):	2.3 hours	(662.6 on meter)
Kohler 40REOZK (Zeke):	10.6 hours	(498.5 on meter)
Kohler 15ROY61 (Peevey):	0 hours	(3954.2 on meter)
Webasto:	0 hours	

Power use

Facilities power use: Start = 86,237; End = 86,831; for total of 594 kWh

Fuel Reserves

Diesel used:	10.1 gallons
Diesel drums: 10 @55gal:	550 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:	10 gallons
Gasoline for portable generator:	12 gallons
6 gallon boat tank:	Full
3 gallon boat tank:	Full

Water Reserves

Water used this month: Start = 293,934; End = 298,995; for a total of 5,061 gallons	
Cistern:	6' 5" or ~81,660 gallons
Gravity Tank:	empty
Settling Tank:	empty

Sightseeing Boats

The following boats were recorded viewing the island and wildlife: the **Salty Lady** was seen 3 times with an average of 16 POB, The **New Captain Pete** was seen twice with an average of 17 POB, the **Seawolf** was seen once with 10 POB, and the **Huck Finn** was seen once with 9 POB.

Non-breeding birds

Black-footed Albatross, Northern Fulmar, Pink-footed Shearwater, Flesh-footed Shearwater, Buller's Shearwater, Sooty Shearwater, Brown Booby, Northern Gannet, Brown Pelican, Great Egret, Northern Shoveler, Northern Pintail, Green-winged Teal, American Kestrel, Peregrine Falcon, Semipalmated Plover, Wandering Tattler, Whimbrel, Marbled Godwit, Ruddy Turnstone, Black Turnstone, Sanderling, Western Sandpiper, Least Sandpiper, Baird's Sandpiper, Short-billed Dowitcher, Long-billed Dowitcher, Red-necked Phalarope, Pomarine Jaeger, Heermann's Gull, Ring-billed Gull, California Gull, Glaucous-winged Gull, Glaucous-winged Gull x Western Gull, Elegant Tern, Horned Puffin, Mourning Dove, Eurasian Collared-Dove, Anna's Hummingbird, Rufous Hummingbird, Western Wood-Pewee, Willow Flycatcher, Least Flycatcher, Western Flycatcher, Warbling Vireo, Purple Martin, Tree Swallow, Violet-green Swallow, Northern Rough-winged Swallow, Cliff Swallow, Blue-gray Gnatcatcher, Northern Mockingbird, Cedar Waxwing, Orange-crowned Warbler, Nashville Warbler, Yellow Warbler, Audubon's Warbler, Black-throated Gray Warbler, Townsend's Warbler, Hermit Warbler, American Redstart, Northern Waterthrush, MacGillivray's Warbler, Common Yellowthroat, Wilson's Warbler, Chipping Sparrow, Brewer's Sparrow, Vesper Sparrow, Lark Sparrow, Black-throated Sparrow, Savannah Sparrow, Grasshopper Sparrow, Lincoln's Sparrow, Black-headed Grosbeak, Lazuli Bunting, Bobolink, Red-winged Blackbird, Brown-headed Cowbird, Bullock's Oriole, Pine Siskin, and Lesser Goldfinch.