

Farallon Islands Monthly Report

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

February 2021

Garrett Duncan
gduncan-SEA@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.

Southeast Farallon Island Visitors

Point Blue crew: Mackenzie Cahill, Sabrina Dahl, Garrett Duncan, Rhett Finley, and Anna Pedersen.

February 15th: **“Hokahey”** (skipper Jan Passion) brought out food and supplies.

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.

West End Island Visitors

February 19th: Duncan, Finley, and Pedersen conducted Northern Elephant Seal and Northern Fur Seal counts and recorded tag resights.

Weather/Ocean

Monthly weather is summarized in Figure 1. Light to moderate NW winds dominated this month. The island received 1.35 inches of rain this month, which fell predominantly in the third week. The range of midday air temperatures fell within the long-term normal range for this month, with an average of 12.1 ± 0.9 °C. This was 0.4 °C lower than the long-term average for the month. Sea surface temperature (SST) readings from the island were notably lower than the long-term normal range for this month, with an average of 11.2 ± 0.52 °C. This was 1.0 °C below the long-term average for the month.

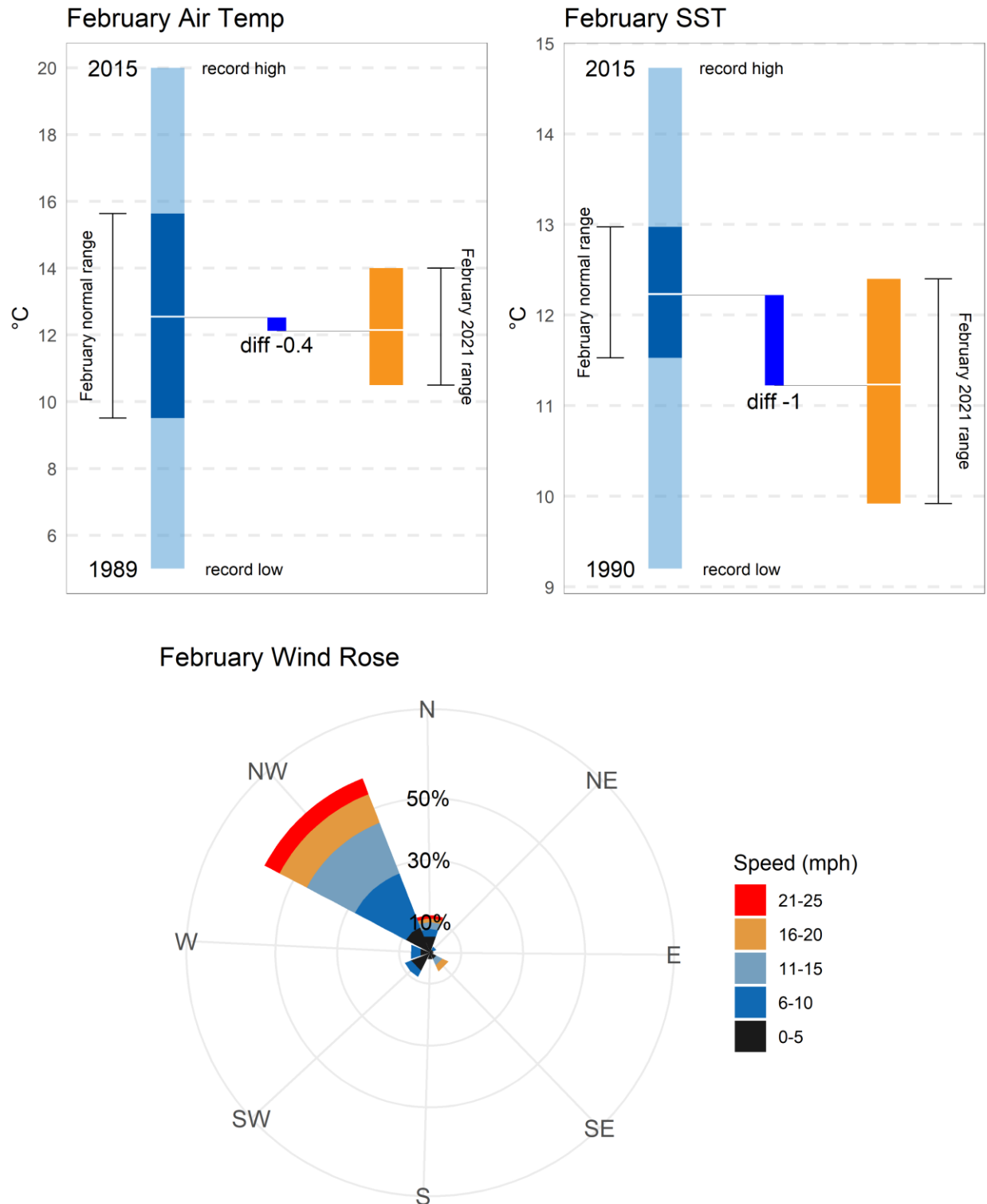


Figure 1. Noon air and sea surface temperature data summary. Light blue depicts the long-term (1971 – 2019) range of observations with years given for record highs and lows; dark blue shows the long-term range of averages for February. Orange depicts the range of current (2021) observations. Differences 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

Eleven *Zalophus* were seen with monofilament, packing strap, ropes or unknown material embedded in their necks.

One juvenile Glaucous-winged Gull was seen on Mussel Flat on the 3rd with black oil on its breast. 10% coverage. One Herring Gull was seen on Mussel Flat on the 17th with black oil on its breast. 10% coverage.

Breeding Birds

Storm-Petrels – No Storm-Petrels were detected this month.

Brandt's Cormorant – A few thousand birds were observed daily either roosting on offshore islets or feeding on the ocean. Breeding plumage is seen on many individuals.

Pelagic Cormorant – Approximately a hundred birds were observed daily roosting on cliffs. Breeding plumage is seen on most individuals.

Double-crested Cormorant – One juvenile was seen on Sugarloaf on the 21st.

Western Gull – A few thousand birds were observed daily either roosting on the island or feeding on the ocean. In the early morning, a few thousand birds returned to their territories.

California Gulls – Low numbers were observed roosting on Sea Pigeon Terrace, Mussel Flat, and West Marine Terrace.

Common Murre – The Murre colony areas were fully occupied many days this month.

Pigeon Guillemot – No guillemots were observed this month.

Rhinoceros Auklet – A couple were seen in trail camera footage of the Shubrick owl roost.

Tufted Puffin – None were seen this month.

Cassin's Auklet – On most dark nights, large numbers of birds landed on the island to dig out nest sites and vocalize.

Black Oystercatchers – Individuals this month were usually seen either paired up along the shoreline or in the large roosting flock at Low Arch.

Pinnipeds

California Sea Lion – On average there were 3,004 (std \pm 670) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 4,048 individuals on the 18th.

Steller Sea Lion – On average there were 74 (std \pm 27) individuals counted, with the high count of 117 on the 4th.

Northern Elephant Seal – There was an average count of 108 (std \pm 28) individuals with a high count of 140 individuals on the 4th. By the end of the month there were 12 cows, 11 pups, 28 weaned pups, and 5 large males on SEFI, and 17 cows, 11 pups, 18 weaned pups and 5 large males on WEI.

Harbor Seal – On average there were 31 (std \pm 28) individuals counted, with a high count of 60 on the 18th.

Northern Fur Seal – On average there were 220 (std \pm 29) individuals counted, with the high count of 269 observed on the 11th. On the trip to WEI, 368 individuals were counted, including 62 adult males.

Cetaceans

Standard Survey – 23 one-hour standard whale watches were conducted this month from the Lighthouse using the Ocean Alert App. Daily high counts are summarized in Figure 2. Large numbers of Gray Whales were observed migrating past the island this month. On the 2nd the crew spotted a dead sperm whale calf washed ashore on Mirounga Beach (Figure 3). The whale was taken back to the ocean by the tide before measurements and samples could be taken; a shark bite was observed on the back of the animal.

February 2021 Cetacean Sightings

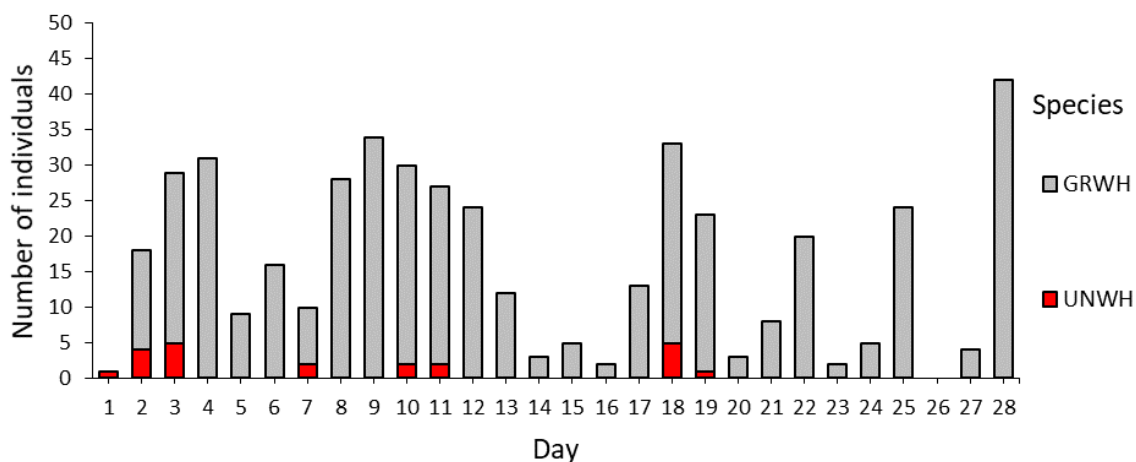


Figure 2. Daily high counts of cetaceans observed from Southeast Farallon Island for February 2021. GRWH = gray whale, UNWH = unidentified whale.



Figure 3. On February 2nd, a sperm whale calf was observed washed ashore on Mirounga Beach.

Sharks

On the 2nd, a shark was seen near East landing with a swarm of gulls. No blood or oil slick was seen.

Salamanders

Salamander surveys were conducted on the 17th and 28th, yielding 75 and 46 individuals, respectively. Many large salamanders were observed taking shelter under spinach plants on Lighthouse Hill.

Owls

5 individuals were consistently seen in known roosting locations around the island. Three pellets were found containing Ashy Storm-Petrel bones and feathers.

Crickets

No crickets were detected this month.

Bats

No bats were detected this month.

Mice

Mice were infrequently detected this month.

Inverts

No butterflies were detected this month. Several 2 inch sea lice and large *Ligia pallasii* (rock lice) were found in the Sewer Gulch intertidal cave.

Plants

Efforts to hand-pick invasive plants continue.

Violations

CF 8831 SM was observed photographing seabirds within the special closure near Fertilizer Flat. 1000+ Murre flushed.

Maintenance

Island biologist Duncan conducted routine weekly maintenance checks on the PV system and generators. Monthly changes of water filters and crane greasing were conducted. One pre-landing crane training was conducted this month. Approximately 3,000 gallons of water was collected. A hook for a life ring was installed at the lower North Landing platform. A new cistern ozonator bulb was installed. The powerhouse ramp was painted with gritty paint.

Maintenance Needs

- 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 has 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.
- Powerhouse roof-access ladder mounts are badly corroded and need to be replaced.
- There is a small leak in the closet next to the downstairs bathroom in the PRBO house. The source was likely a hole underneath the eaves on the NW side of the house. Will continue to monitor.
- The load cell battery and antenna at the EL crane were replaced, but now the load cell needs to be recalibrated. A2B is also non-functional.
- The North Landing Jib crane needs to be power washed.
- The Speedwagon generator continues to encounter rotor lock shutdown faults. This is likely due to a bad starter solenoid.

Solar/Electric

PV System

Distilled water used:	6 gallons
Distilled water reserves:	40 gallons

Generator run times

Kohler 30REOZJC (Speedwagon):	6.2 hours	(678.8 on meter)
Kohler 40REOZK (Zeke):	12.3 hours	(561.4 on meter)
Kohler 15REOZK (PeeVee Herman):	7.3 hours	(37.0 on meter)
Webasto:	0 hours	

Power use

Facilities power use: Start = 89,710; End =90,221; for total of 511 kWh

Fuel Reserves

Diesel used:	20.5 gallons
Diesel drums: 7@55gal + 9.5 gal	394.5 gallons
Kohler 15REOZK (PV) Tank:	3/4
Kohler 30REOZJC (Speedwagon) Tank:	Full
Kohler 40REOZK (Zeke) Tank:	Full
Webasto Tank:	Full
Gasoline for portable generator/boats:	25 gallons
6 gallon boat tank:	Full
3 gallon boat tank:	Full

Water Reserves

Water used this month: Start = 309,723; End =311,906; for a total of 2,183 gallons	
Cistern:	6'1' or ~76,250 gallons
Gravity Tank:	empty
Settling Tank:	2.45'
Drinking water:	15 5-gal jugs

Sightseeing Boats

No sightseeing boats visited the island this month.

Non-breeding birds

Pacific Loon, Eared Grebe, Sooty Shearwater, Brown Booby, Northern Gannet, Brown Pelican, Canada Goose, Surf Scoter, Peregrine Falcon, Wandering Tattler, Spotted Sandpiper, Whimbrel, Ruddy Turnstone, Black Turnstone, Rock Sandpiper, California Gull, Herring Gull, Thayer's Gull, Glaucous-winged Gull, Black-legged Kittiwake, Barn Owl, Burrowing Owl, Black Phoebe, Rock Wren, Hermit Thrush, Myrtle Warbler, Spotted Towhee, Savannah Sparrow, Fox Sparrow, Lincoln's Sparrow, White-crowned Sparrow, Golden-crowned Sparrow, Western Meadowlark.