

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

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**Island Visitors**

**Point Blue crew**: Mike Johns, Haley Land-Miller, Sophia Prisco, Theresa Rizza, Amanda Spears. **UC Davis**: Amanda Jennings, Amy Miles, Chris Tyson.

April 13th: “**Kanpai III”** (skipper Andy Jones) brought out Theresa Rizza, Grace Kumaishi, Amy Miles, and Chris Tyson. Three people toured the island.

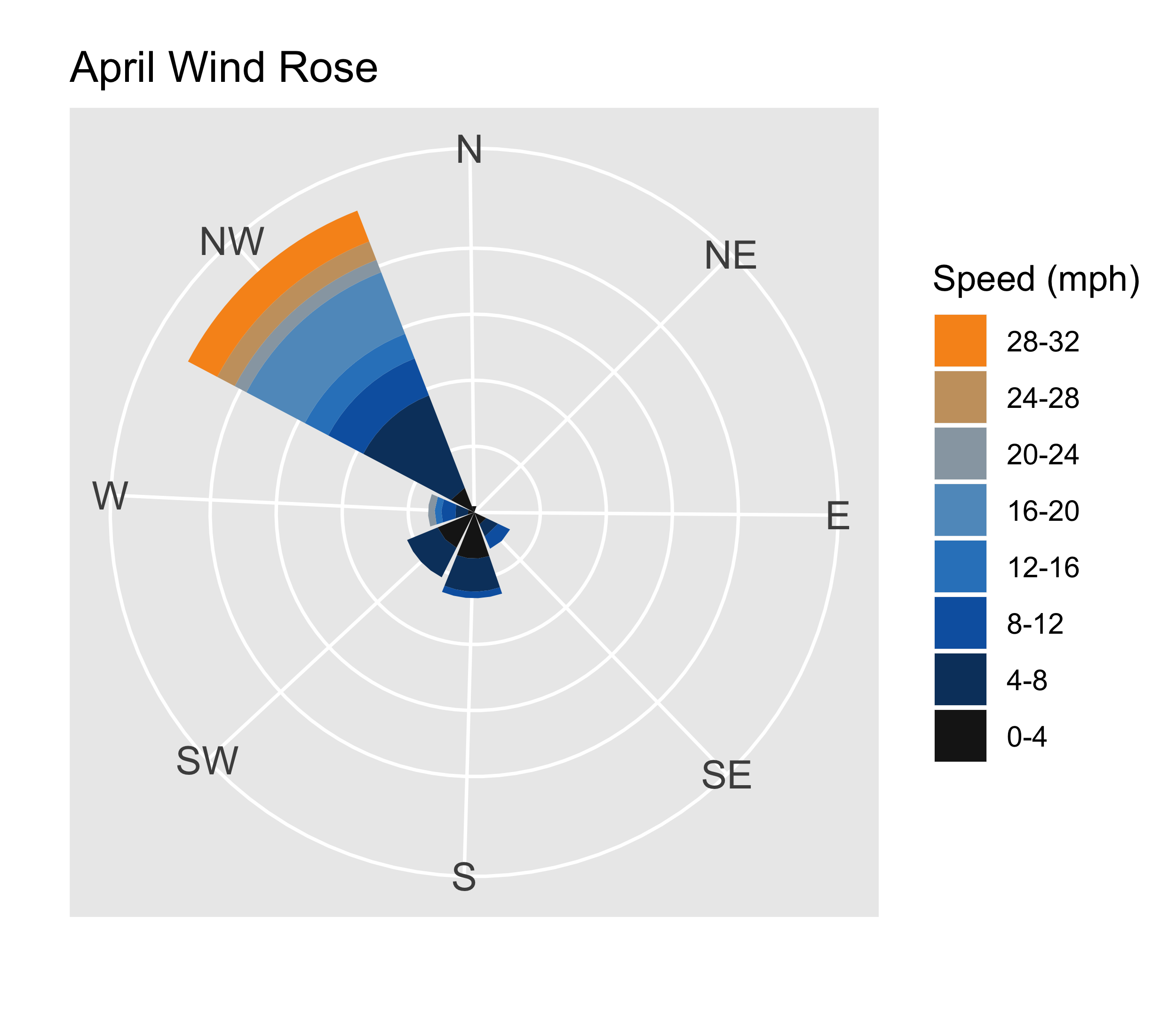
April 27th: “**Starbuck”** (skipper John Wade) brought out Sarag Jennings. Departed with Amanda Spears, Chris Tyson, and Sophia Prisco. Two people toured the island.

**West End Island Visitors**

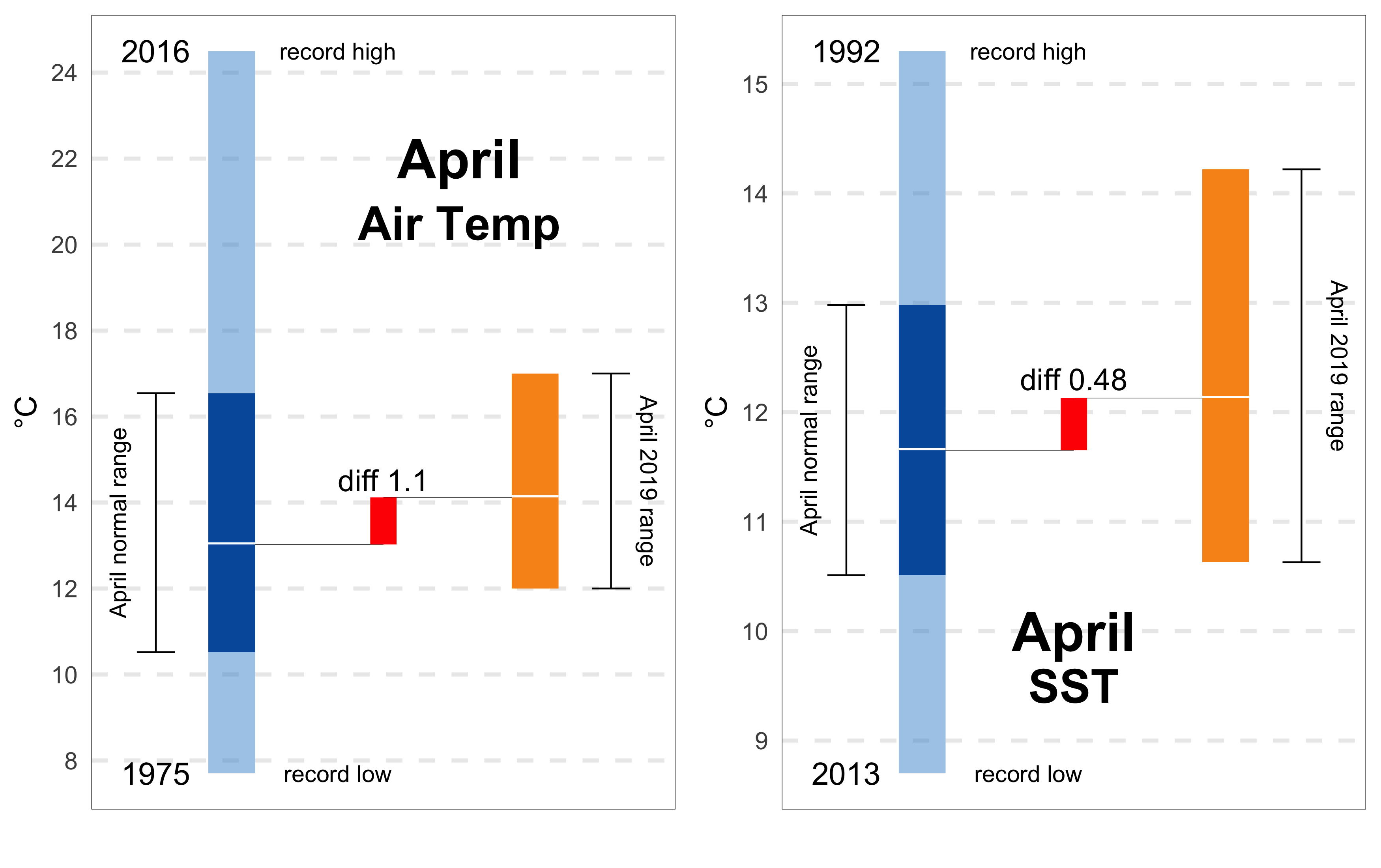
None

**Weather/Ocean**

Light winds from the south and west dominated the beginning of the month, switching to predominately strong NW winds (Fig. 1), with occasional gusts exceeding 40 knots on some days. The island received a meager 0.37 inches of rain in April. The range of midday air temperatures fell slightly above the long-term normal range for this month, with an average of 14.12 °C. This was 1.1 °C higher than the long-term average for April (Fig. 2). The upper range of sea surface temperature (SST) readings from the island peaked above the long-term range for this month, with an average of 12.13 °C. This was 0.48 °C higher than the long-term average SST for April (Fig. 2).



**Figure 1**. Summary of daily wind speed (color scale) and direction binned into sectors for morning, noon, and afternoon observations for this month. Larger bars means more wind from that direction.



**Figure 2**. Noon air and sea surface temperature data summary. Light blue depicts the long-term (1971 – 2018) range of observations with years given for record highs and lows, dark blue shows the long-term “normal” range (average highs and lows). Orange depicts the range of current (2019) observations. Differences between the long-term and current means are shown in red if above normal, and blue if below normal.

**Oiled & Entangled Wildlife**

Common murre with black oil covering ~15% of breast was sighted on April 27th at East Landing.

Three Zalophus were observed with monofilament, rope, packing straps or an unknown material either embedded in their neck or tight around their body.

**Breeding Birds**

**Storm-Petrels** – Two standard 3-hour mist netting sessions were conducted this month. An incomplete session at the Carp Shop site occurred on April 3rd and canceled after 40 minutes due to heavy mist/rain, with 6 new and 1 recap ASSP. A complete session at the Lighthouse Hill site occurred on April 26th, with 31 new and 3 recap ASSP, and 1 new LHSP. Eighteen pit tags were deployed and 14 blood samples taken.

**Brandt’s Cormorant** – Started morning and evening resighting efforts at Sea Lion Cove and Corm Blinds on April 1st. Some well-built nests were observed later in the month, but most were destroyed by neighboring birds and sea lions hauling out in the colonies.

**Pelagic Cormorant** – Regular breed checks began on April 25th. Although some birds had been seen on fair-built nests, less than half of the followed sites were unattended.

**Double-crested Cormorant** – First individuals were seen attending colony atop Maintop on April 13th. Regular 5-day colony counts and breed checks began on April 27th.

**Western Gull** – Resighting efforts in followed plots began on April 1st, and breed checks began on April 22nd. The first eggs were found on April 28th in H-plot East and near the Carp Shop. A bird banded at San Pedro in 2015 as 108637697 (combo w0m0) was seen in front of the Coast Guard House.

**California Gulls** – Small groups of ~5 were observed near-daily in roosting flocks on the island and in the surrounding waters. There was no evidence of breeding behavior.

**Common Murre** – Daily attendance of birds within Upper Shubrick and Upper Upper plots began on April 16th. No eggs were seen as of April 30th.

**Pigeon Guillemot** – Daily raft counts began on April 1st when large numbers were noted around the island, and ended on April 27th when birds began attending sites on Lighthouse Hill. Strong winds and dense fog likely resulting in missing peak raft counts. The high count was on April 24th with 2,351 individuals.

**Rhinoceros Auklet** – Productivity box checks began on April 1st and burrow cam checks began on April 17th. The first egg was seen at Rabbit Cave Catacombs on April 21st, and the first egg on the cam checks was found on April 22nd at site 304.

**Tufted Puffin** – The first puffin was seen on April 1st, and substantial increase in individuals attending sites on Lighthouse Hill, Sugar Loaf, and Maintop was noted on April 20th.

**Cassin’s Auklet** – The first eggs were found in the Known-age box study on April 13th and in the PRBO productivity study April 16th. Peak lay was noted on April 28th this year. A total of 5 geolocator tags were recovered in April.

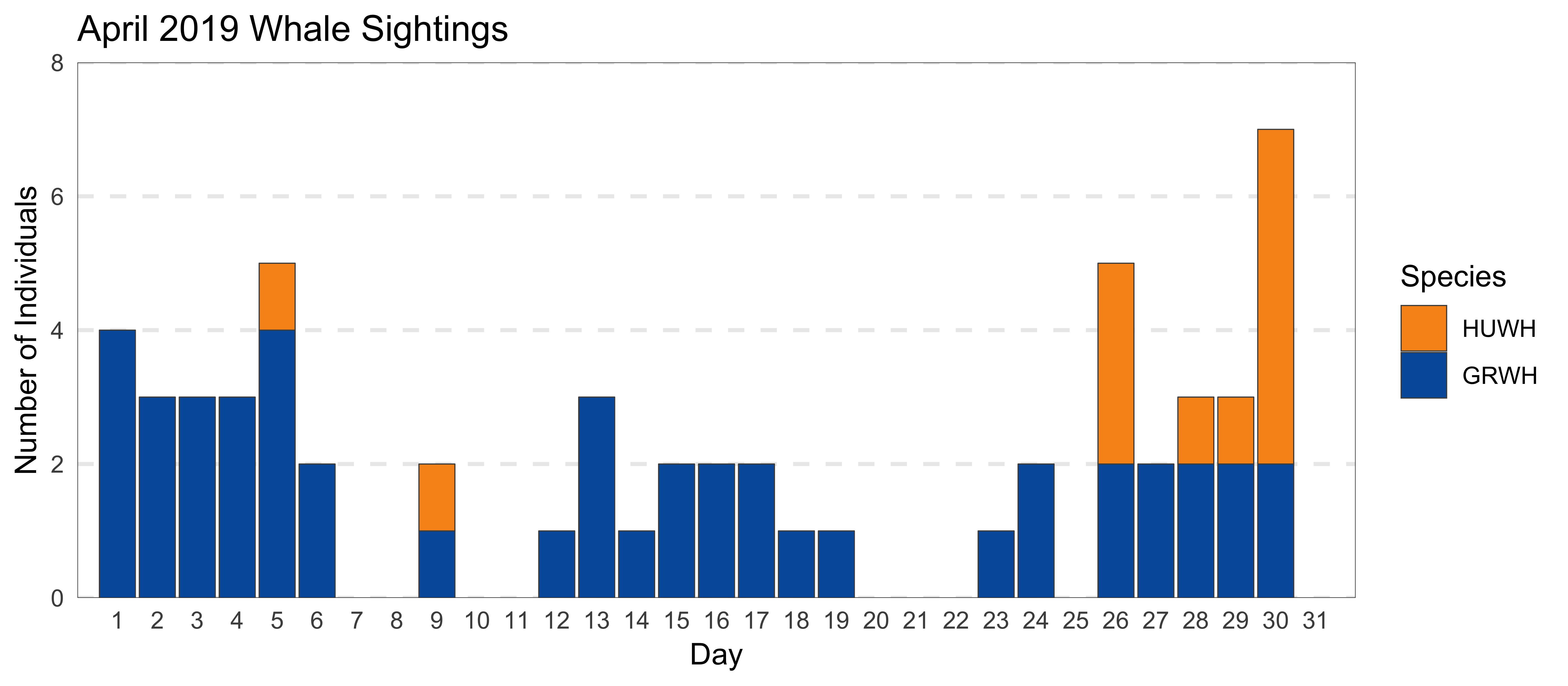
**Black Oystercatchers** – Pairs were seen in typical nesting areas, as well as a large roosting flock on Low Arch.

**Pinnipeds**

Weekly counts have been postponed until May 15th. This was chosen to reduce workload for island biologists until the window of long-term peak numbers for all species, as a way to reduce effort while still capturing high counts.

**Cetaceans**

**Standard Survey** – Due to strong NW winds and heavy fog, only 8 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 3. In addition, a mixed pod of 30 Pacific white-sided and 50 northern right-whale dolphins were seen on April 4th, along with another mixed pod of 10 Pacific white-sided and 80 Risso’s dolphins on April 15th.



**Figure 3.** Daily high counts of Cetaceans from SEFI. HUWH = humpback whale, GRWH = gray whale, BNDO = bottlenose dolphin.

**Sharks**

No predation events this month.

**Salamanders**

One standard survey was conducted on April 18th with a total of 24 individuals (20 large and 4 small).

**Owls**

It was assumed all burrowing owls had departed the island by April 18th. A single barn owl was observed periodically throughout the month roosting in a crack high on Lighthouse Hill.

**Crickets**

No cricket surveys were conducted this month.

**Bats**

None were observed.

**Mice**

A final mouse trapping session for the seasons was conducted starting on the 18th, with a 4% capture rate.

**Inverts and Intertidal**

A seven-spotted ladybird was seen on Lighthouse hill on April 12th.

**Oceanic Events**

Several large mats of by-the-wind-sailors (*Valela valela*) observed south of the island, blown in by strong south winds.

**Plants**

Drier conditions and a sudden increase in the northwest winds on April 11th accelerated the drying out most grasses and large Malva plants island-wide.

**Violations**

No violations were observed this month.

**Maintenance**

Island biologists Duncan and Johns conducted routine weekly maintenance checks on the PV system and generators. Monthly changes of water filters and crane greasing were conducted. In addition, annual service on the 60hp, 25hp, and 9hp outboards (fuel & oil filters, oil change, lubed pivot points) occurred on April 3rd and 4th. Water collection was closed out for the season on April 8th. A Faulty check valve in the grey water system was replaced on April 14th. The septic system was serviced by Bonny Doone on April 30th.

**Maintenance Needs**

* The locking mechanism on the Crane Control Panel needs to be fixed or replaced. Sometimes it fails to lock the door when the main disconnect switch is in the on position.
* The circuit that powers the downstairs overhead lights in the PRBO house has a short. This is not a pressing matter as the auxiliary lights are working well.
* The PV and Buffy generators are supposed to automatically start to give themselves monthly exercise. This is not happening, requiring they be manually started for exercise. (Exercise not needed during the winter months.)
* 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 Settling Tank measuring stick came undone and fell into the tank.
* Many of the wooden railing on Lighthouse Hill needs repair.
* Several separations have been seen on the East Landing derrick slewing rope, possibly from jogging the slew. A couple more separations have appeared, possibly from the large storm events in the last couple of months.
* Substantial corrosion of the wedge-socket on the East Landing block.
* Several inches of water accumulate in the pipe shop after a good rain. A new threshold is needed to seal the door. Also, there could be a crack in the foundation.
* Several grease points on the crane are having difficulty taking grease.
* There are several broken sections of pipe around the island which have received temporary repairs with compression sleeves. **Island-wide, the water pipes are in dire shape and need to be replaced.**
* The kitchen drain is not draining well. I propose eventually abandoning the current plumbing and installing new pipes outside the house that connects the sinks and showers in the house to the graywater system.
* The water meter at the house is reading the proper volume of water again but I propose switching to the pump house meter, so we can monitor water use at the landing and other hose bibs along the cart path.
* The PRBO house kitchen counters especially around the sink continue to deteriorate. Replacement sometime in the next year is recommended.

**Solar/Electric**

**PV System**

Distilled water used: 0 gallons

Distilled water reserves: 65 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 2.2 hours (1734.2 on meter)

Kohler 30REOZJC (Speedwagon): 7.2 hours (605.3 on meter)

Kohler 40REOZK (Zeke): 6.6 hours (291.7 on meter)

Kohler 15ROY61 (Peevey): 1.9 hours (3880.7 on meter)

Webasto: 0 hours

**Power use**

Facilities power use: Start = 75,606; End = 76534; for total of 928 kWh

**Fuel Reserves**

Diesel used: 43 gallons

Diesel drums: 15.8 @55gal: 869 gallons

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: Full

Kohler 40REOZK (Zeke) Tank: Full

Kohler 15ROY61 (Peevey) Tank: Full

Webasto Tank: Full

Surplus gasoline for boat motors: 7 gallons

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Water used this month: Start = 254,530; End = 256,908; for a total of 2,378 gallons

Cistern: 8.25’ or ~115,000 gallons

Gravity Tank: empty

Settling Tank: empty

**Sightseeing Boats**

No sightseeing boats were seen around the island.

**Non-breeding birds**

Red-throated Loon, Pacific Loon, Common Loon, Red-necked Grebe, Eared Grebe, Black-footed Albatross, **Pink-footed Shearwater**, Sooty Shearwater, Blue-footed Booby, Brown Booby, Northern Gannet, Brown Pelican, **Great Blue Heron**, Canada Goose, Surf Scoter, **White-winged Scoter**, **Sharp-shinned Hawk,** Peregrine Falcon, Wandering Tattler, Whimbrel, Black Turnstone, **Red-necked Phalarope, Red Phalarope**, **Bonaparte’s Gull,** Mew Gull, Herring Gull, Thayer’s Gull, Glaucous-winged Gull, Glaucous Gull, Sabine’s Gull, **Rock Pigeon**, **Band-tailed Pigeon**, **Eurasian Collared-dove**, Barn Owl, Burrowing Owl***, Selasphorus sp*., Northern Flicker,** **Red-breasted Nuthatch**, Rock Wren, Ruby-crowned Kinglet, Hermit Thrush, American Robin, **Orange-crowned Warbler**, Audubon’s Warbler, Myrtle Warbler, **Common Yellowthroat**, **Wilson’s Warbler**, **Spotted Towhee**, Fox Sparrow, White-crowned Sparrow, Golden-crowned Sparrow, Oregon Junco, Red-winged Blackbird, **Brewer’s Blackbird, Brown-headed Cowbird**.