

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

May 2018

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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](http://www.pointblue.org).

**Island Visitors**

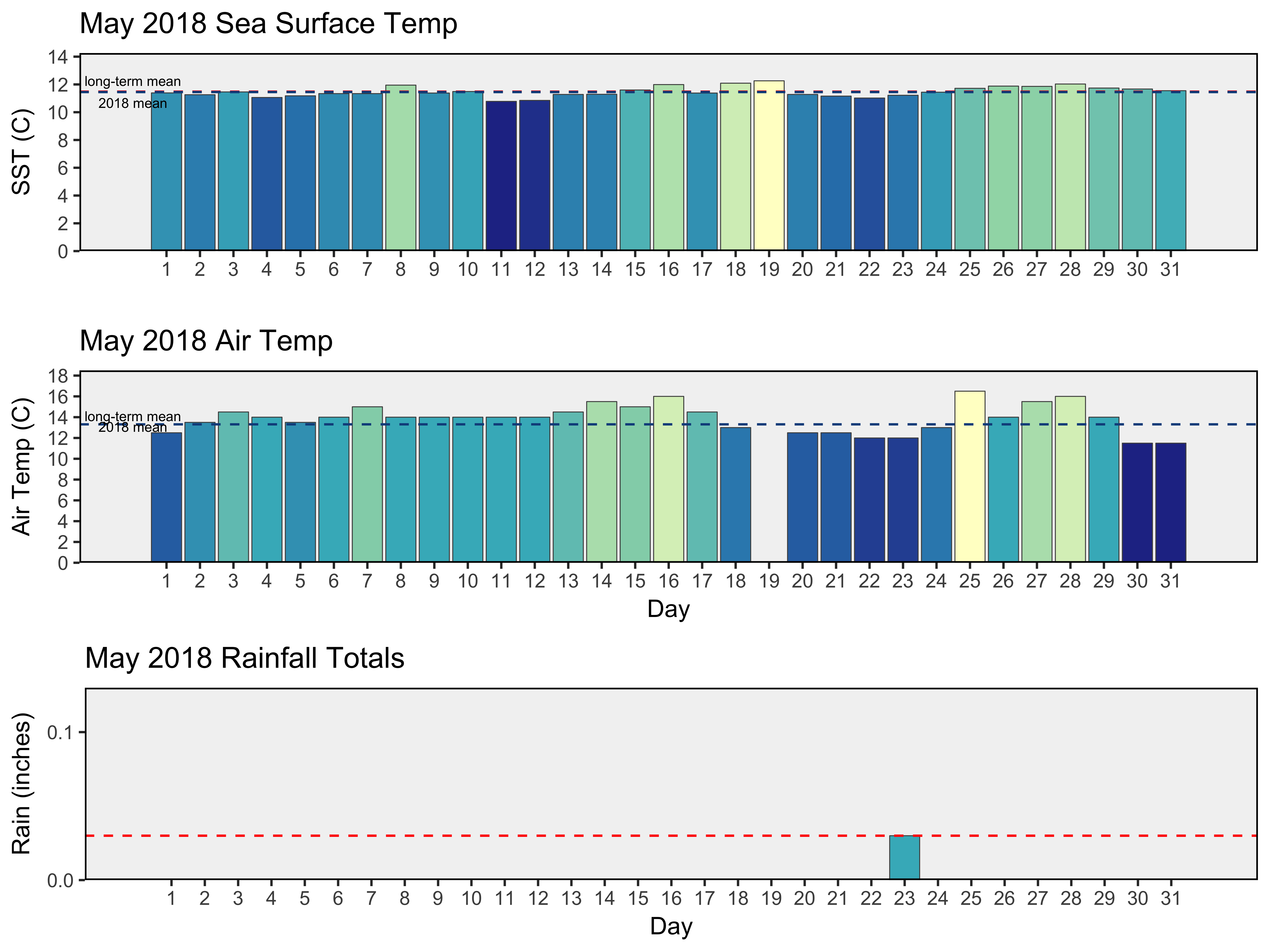
**Point Blue crew**: Gavan Borgias, Katie Douglas, Clare Flynn, Mike Johns, Cole Jower, Holly Pickett, Amy Miles, and Pete Warzybok. **San Jose State**: Scott Shaffer. **USFWS**: Jonathan Shore and Brad Speno.

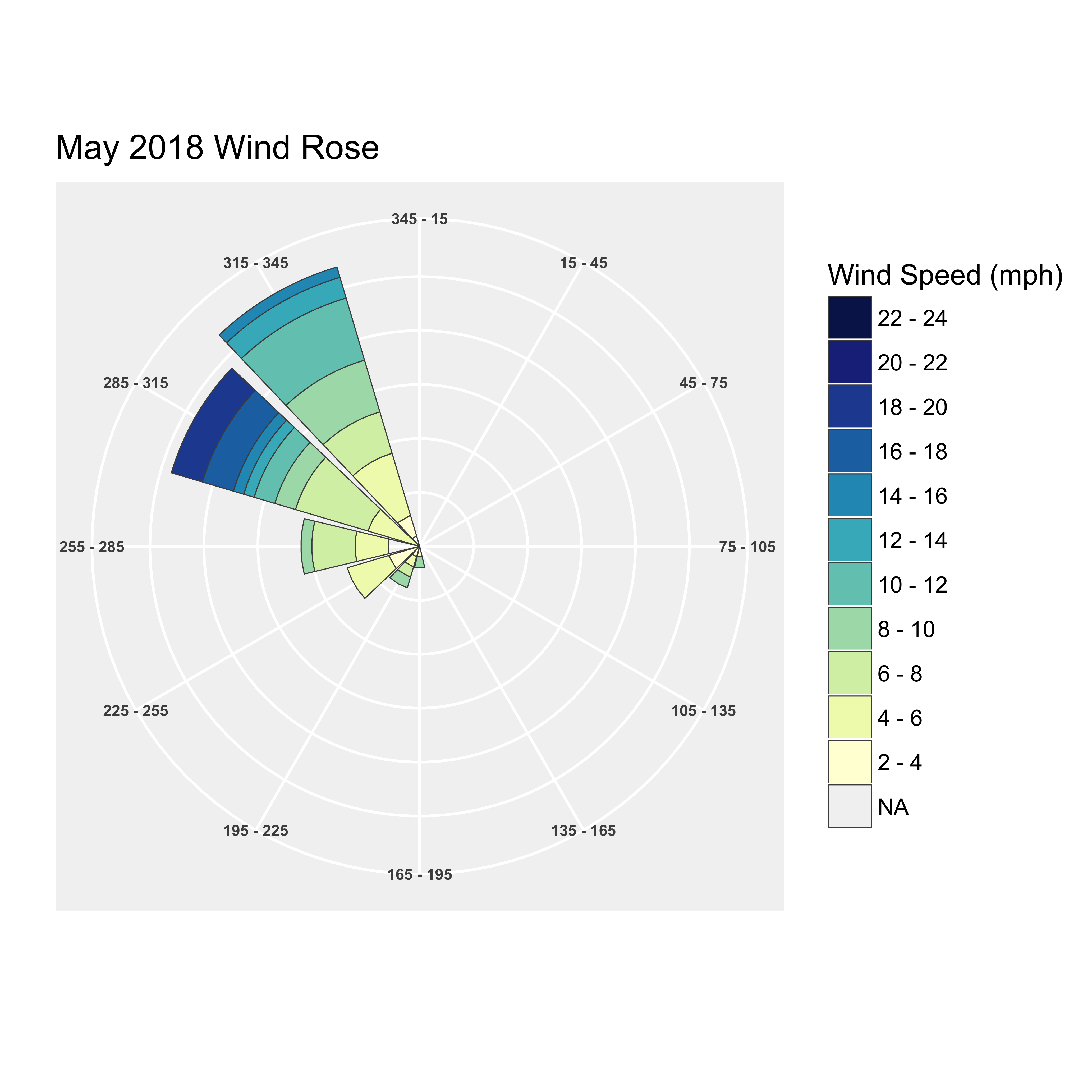
May 5: **“Ketch 22”** (skipper Tom Marlow) brought out Katie Douglas, Mike Johns, and Cole Jower. Departed with Gavan Borgias and Pete Warzybok. One person toured the island.

May 19: “**Bonkers**” (skipper Keith Sedwick) brought out Clare Flynn, Brad Speno, Jonathan Shore, Scott Shaffer, Gavan Borgias, and Pete Warzybok. Departed with Holly Pickett and Amy Miles. Four people toured the island.

**Weather/Ocean**

Graphs depicting weather observations. Warm colors = higher values, cool colors = lower values, with monthly (red dashed line) and long-term mean (blue dashed line). Daily wind speed intensity (color scale) and direction binned into sectors (bars, 0-360). Larger bars = more wind from that direction.





**Oiled & Entangled Wildlife**

No oiled or entangled animals were observed.

**Breeding Birds**

**Storm-Petrels** – Standard mist netting for the mark/recapture study was conducted twice in May. On May 13th there were 49 new and 4 recapture ASSP, and 1 new LHSP at Lighthouse Hill. In addition to metal bands, birds were fitted with PIT tags and 30 cloacal lavage samples were collected by Amy Miles for a study examining breeding hormone levels. On May 15th there were 73 new and recapture ASSP caught at the Carp Shop. Lavage samples were collected from 28 birds and PIT tags were deployed. Regular burrow cam breed checks for ASSP began on May 4th, and the first egg was discovered on May 9th. The first detection of activity from RFID readers was confirmed on May 12th.

**Brandt’s Cormorant** – Nests began to stabilize in May, with the first egg found seen at Subrick Cove on May 2nd. First eggs at followed sites occurred on May 4th at the Corm Blind and May 5th at the Sea Lion Cover blind. Numbers at both locations seem lower than last year, but island wide number at least anecdotally appear normal. An island wide boat-based census of well built nests was conducted on May 25th.

**Pelagic Cormorant** – Pelagic cormorant continue to stand around on empty well build nests, with no eggs yet confirmed in May. It seems likely that very few birds will be successful at breeding this year. A boat-based census of well built nests was conducted on May 25th.

**Double-crested Cormorant** – The total number of well built nests on Maintop, observed from the Lighthouse, has stabilized at ~ 106 nests. Several additional nets were counted on the west faces of Maintop during a boat-based census on May 25th. No chicks were observed.

**Western Gull** – Western gull nesting activity increased dramatically throughout the month. Known-age birds in all followed plots had begun laying eggs by the 10th. The first chicks of the season were found on May 26th. Point Blue biologists conducted the annual all island gull survey on the 31st resulting in a corrected population estimate of 13,800 breeding birds. Nest counts were also conducted within the traditionally monitored plots (C, H, J, and K). Scott Shaffer from SJSU visited the island between May 16 and June 1 to continue a western gull tracking study using small GPS data loggers. We tagged 30 individuals and we recovered 27 tags with good quality data. Initial results show that birds were largely feeding on the ocean with diet samples consisting of krill, mackerel, and squid. Many birds also made regular trips to exploit anthropogenic food sources at the Recology transfer station in San Francisco and the Waste Management transfer station by the Oakland airport. One bird even went so far as the Central Valley! This bird apparently hitched a ride in a truck from the Recology facility in San Francisco (the GPS track follows the highway) to an organic composting facility in Vernalis, CA. Even more remarkable was the fact that the bird flew back to the Farallones the next morning and then repeated the trip 2 days later, again hitching a ride along the highway from Recology to the same composting facility.

**California Gulls** – Very low numbers have been recorded this year, with only a single well built nest found on May 16th. No eggs or chicks have been confirmed.

**Common Murre** –Egg laying really took off during May with the first eggs seen at the Upper Upper plot by the Corm Blind and most followed sites laying by the end of the month. The first chick of the season was observed on May 31 at the Upper Shubrick Point study plot.

**Pigeon Guillemot** –Attendance at nesting sites increased rapidly in early May and the first eggs were observed in followed sites on May 17th. Laying has continued steadily throughout the remainder of the month, but few sites have laid a 2 egg clutch so far.

**Rhinoceros Auklet** –Egg laying continued throughout May with a total of 34 occupied nest boxes by the end of the month. The first chicks of the season were observed on May 31st. We also completed counting the rhinoceros auklet index plots as part of our annual population survey.

**Tufted Puffin** – Tufted puffin activity increased during May with birds regularly seen attending nesting sites and even carrying nesting material into crevices. The early season breeding attendance checks began on May 23 and will finish in early June.

**Cassin’s Auklet** –Most birds were busy incubating eggs or hatching chicks during May with almost all followed sites having either hatched or relayed by the end of the month. Diet sampling began on May 7th and has continued weekly with most samples consisting of krill. Time-depth recorders were deployed on 10 birds in late May as part of a long-term study of the foraging ecology of Cassin’s auklets. GLS tags were also deployed on 30 individuals to study the winter movement patterns of auklets after they depart the colony at the end of the breeding season.

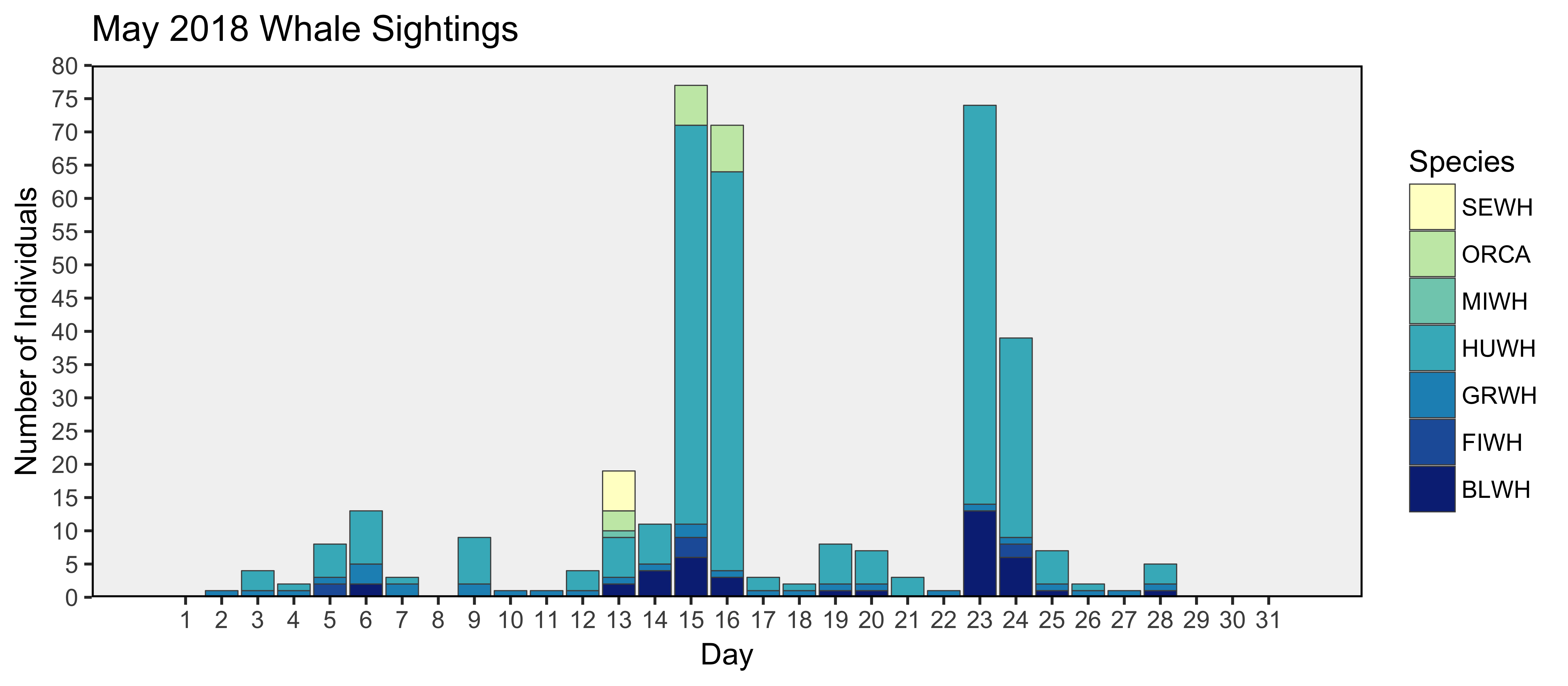
**Black Oystercatchers** – Standard monitoring studies for this species have been canceled this year, given the effort required to document breeding behavior for a small population of a non-target species. Opportunistic band resighting and breeding notes will still be recorded. At least 10 pairs have been observed regularly attending breeding territories and likely nesting, though the nests themselves are cryptic and often hidden behind rocks. The first chicks were seen by “The Ponds” on Fertilizer Flat on May 28th.

**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. The final Mirounga cow departed on March 15th.

**Cetaceans**

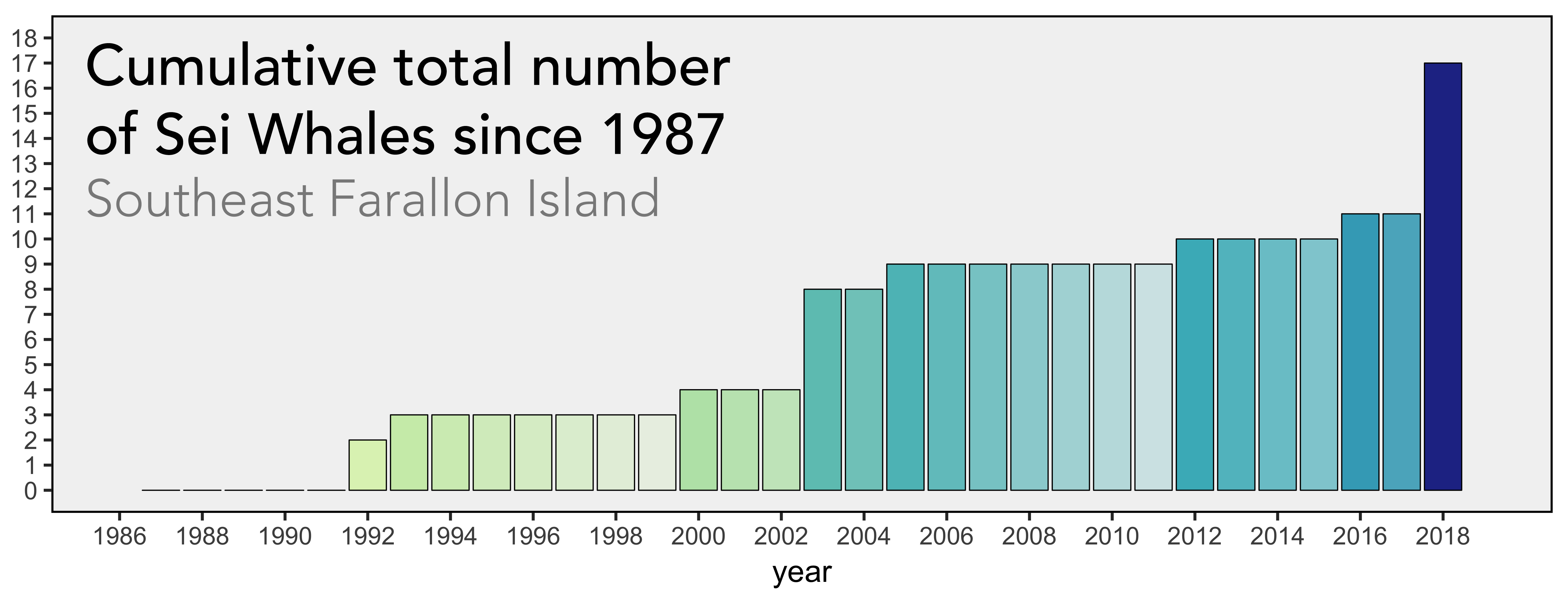
**Standard Survey** – Eleven one-hour standard whale watches were conducted this month from the Lighthouse using the Apple iPad and Spotter App. Daily high counts from standard watches and incidental observations are summarized below. In addition, ~ 2,000 Pacific white-sided dolphins, 500 northern right-whale dolphins, and 30 Risso’s dolphins were observed on May 24th.



*SEWH = Sei whale, ORCA = killer whale, MIWH = minke whale, HUWH = humpback whale, GRWH = gray whale, FIWH = fin whale, BLWH = blue whale*

A noteworthy sighting included what was likely a group of 6 Sei whales that made a close approach to the island on May 13th. These were identified by their smaller size, visible blow (too large to be Minkes), dolphin-like falcate dorsal fins, dark coloration, lack of a white right jaw line, and unusual behavior. Until this sighting only 11 Sei whales have been reported from the Farallones since dedicated observations first began in the late 80’s.





**Sharks**

No shark activity was observed.

**Salamanders**

Two standard salamander surveys were conducted this month. One on May 3rd with 9 salamanders (6 large and 3 small) and a second standard survey on May 18th with only 1 large salamander. Surveys have been suspended for the season now that the soil has dried out and most salamanders have retreated deep underground. Surveys will resume in the fall after the first rains of the season.

**Owls**

No owls have been observed during May.

**Crickets**

No cricket surveys were conducted this month.

**Mice**

No mice activity to report.

**Inverts and Intertidal**

# Nothing to report.

**Plants**

Jonathan Shore and Brad Speno from USFWS arrived on the island on May 19th and waged war on invasive vegetation. This included pulling mustard (Sisymbrium), spinach, Malva sp., Sonchus sp., and Chenopodium around the cistern and water catchment pad. They also spent many days spraying Tetragonia, Plantago, Malva sp., Chenopodium, Sonchus and Erharta on Blowhole Peninsula, Powerhouse Hill, upper and lower Lighthouse Hill, Little Lighthouse hill, and around the houses. Brad also conducted plant phenology surveys at all plant survey plots.

**Violations**

A fishing vessel “Gold Coast” (ID# 252221) was tied off on the North Landing mooring ball on the evening of May 23. As a result, the mooring ball (which is no longer attached to the anchor) has drifted outwards in Fisherman’s Bay.

**Maintenance**

Island biologists Johns and Warzybok conducted routine maintenance checks on the PV system and generators weekly. Monthly changes of water filters and outboard motor operation were also conducted as well as biweekly crane greasing. Additional fixes performed by Point Blue and FWS staff included repairing broken sections of the cart rail system, unclogging the tub drain in the Coast Guard House, and securing the North Landing crane to prevent it from blowing around in the wind. Jonathan Shore also collected GPS coordinates for both the North Landing and East Landing mooring balls to ground truth and monitor any movement.

**Maintenance Needs**

* Repair liner in the Gravity tank
* Cistern has been losing water at a rate ~250 gallons per month. There appears to be a much more sizable leak when the cistern is above 8’6”. A recent inspection of the cistern indicated serious structural decay that will need to be repaired in the future.
* Settling Tank appears to have a leak in it when water is above 5.1 feet.
* Some of the wooden railing on Lighthouse Hill needs repair.
* Corrosion of the cart path rail system appears to be accelerating and will need to be addressed soon, perhaps repaired with the old galvanized pipe when the water lines are replaced. The cart is falling of the tracks in several places now.
* Several separations have been seen on the East Landing derrick slewing rope, possibly from jogging the slew. Perhaps tightening the slewing rope will mitigate this issue slightly until replacement.
* Several inches of water accumulate in the pipe shop after a good rain. A new threshold is needed to seal the door.
* Several grease points on the crane are having difficulty taking grease.
* NL mooring ball is no longer connected to the anchor and needs to be replaced. It has been closed off until further notice.
* EL mooring anchor is upside down, causing a shortening of the chain and potentially compromising the integrity of the connection.

**Solar/Electric**

**PV System**

Distilled water reserves: 35 gallons

**Generator run times**

Kohler 15ROZ (Buffy): Not run

Kohler 30REOZJC (Speedwagon): 6 hours

Kohler 40REOZK (Zeke): 3 hours

Kohler 15ROY61 (Peevey): Not run

Webasto: 0 hours

Power Used this month: Start = 67,890; End = 68,595; for total of 705 kwh

**Fuel Reserves**

Diesel fuel used in April: 13.1 gallons

Drums: 3 3/4 x 55g = 207 gallons

Kohler 15ROZ (Buffy) Tank: Full

Kohler 30REOZJC (Speedwagon) Tank: Full

Kohler 40REOZK (Zeke) Tank: Full

Kohler 15ROY61 (PV) Tank: Full

Webasto Tank: 2/3 Full

Surplus gasoline for boat motors: None (10 gallons to be delivered in early June)

Safeboat tank: Full

Zodiac tank: Full

**Water Reserves**

Cistern: ~ 88,300 gallons (6’9”)

Difference from previous month: - 5,020 gallons

Gravity Tank: empty

Settling Tank: empty

Water use at house meter was 4,510 gallons

Additional water use (landings, vegetation management, leaks etc.): 510 gallons

**Sightseeing Boats**

The **Kitty Kat** was seen 3 times with an average of 30 POB and the Salty Lady was seen 3 times with an average of 25 POB.

**Non-breeding birds**

Pacific Loon, Common Loon, Eared Grebe, **Black-footed Albatross**, Pink-footed Shearwater, Sooty Shearwater, Northern Fulmar, **Northern Gannett**, Brown Pelican, Canada Goose, Surf Scoter, Peregrine Falcon, Wandering Tattler, Whimbrel, Black Turnstone, Red-necked Phalarope, **Bonaparte’s Gull**, Caspian Tern, **Ancient Murrelet**, Eurasian Collared-dove, Rock Pigeon, **Olive-sided Flycatcher**, Western Wood-Pewee, Hammond’s Flycatcher, **Gray Flycatcher**, Dusky Flycatcher, Pacific-slope Flycatcher, **Ash-throated Flycatcher**, **Western Kingbird**, Warbling Vireo, **Purple Martin**, Barn Swallow, Ruby-crowned Kinglet, Swainson’s Thrush, Hermit Thrush, **Varied Thrush**, **Cedar Waxwing**, **Tennessee Warbler**, Orange-crowned Warbler, **Nashville Warbler,** Yellow Warbler, **Chestnut-sided Warbler**, Audubon’s Warbler, Myrtle Warbler, Townsend’s Warbler, **Hermit Warbler, Western Palm Warbler, Black-and-white Warbler, Ovenbird, MacGillivray’s Warbler,** Common Yellowthroat, Wilson’s Warbler, **Yellow-breasted Chat**, **Summer Tanager**, Western Tanager, **Spotted Towhee**, **Chipping Sparrow**, Sooty Fox Sparrow, **Song Sparrow**, **White-throated Sparrow**, White-crowned Sparrow, Golden-crowned Sparrow, Oregon Junco, **Rose-breasted Grosbeak, Black-headed Grosbeak, Lazuli Bunting**, **Brewer’s Blackbird**, **Pine Siskin**, American Goldfinch, and **House Finch**.