



Farallon Islands Monthly Report

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

June 2018

Mike Johns, Pete Warzybok
mjohns@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.

Island Visitors

Point Blue crew: Sophie Bennett, Gavan Borgias, Katie Douglas, Grace Kumaishi, Claire Flynn, Mike Johns, Cole Jower, Holly Pickett, Amy Miles, Amanda Spears, and Pete Warzybok. **San Jose State:** Scott Shaffer. **USFWS:** Jonathan Shore and Brad Speno. **Contractor:** Mike McGoey.

June 1: **“Salty Lady”** (skipper Jared Davis) brought out Oceanic Society naturalists Alcía Retes, Chris Pincetich, Gail Broesder, Izzy Szczepaniak, Nicole Larson, Peter Winch, Russ Bradley, Susan Sharman, Chris Biertuempfel, and Wayne Sentman. All toured the island. Departed with Scott Shaffer.

June 2: **“Steadfast”** (skipper Kixon Meyer) brought out Amy Miles, Holly Pickett, and Mike McGoey. Departed with Mike Johns. Three people toured the island.

June 7: **“Outer Limits”** (skipper Tim Robertson) departed with Jonathan Shore and Mike McGoey. Several people toured the island.

June 16: **“Stillwater”** (skipper Richard Weber) brought out Mike Johns and Amanda Spears. Departed with Katie Douglas, Brad Speno (minus a tooth), and Pete Warzybok. Two people toured the island.

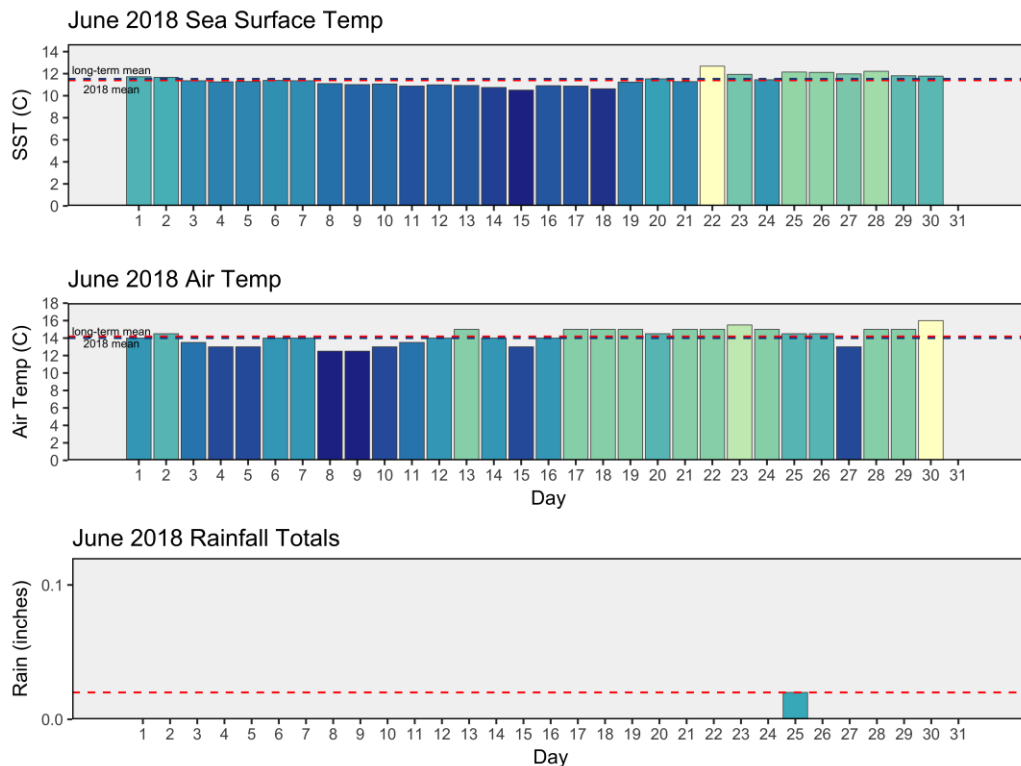
June 17: **“Salty Lady”** (skipper Jared Davis) brought out Grace Kumaishi.

June 26: **“So Good”** (skipper Harmen Shragge) saved the day and picked up Grace Kumaishi, thanks Harmen!

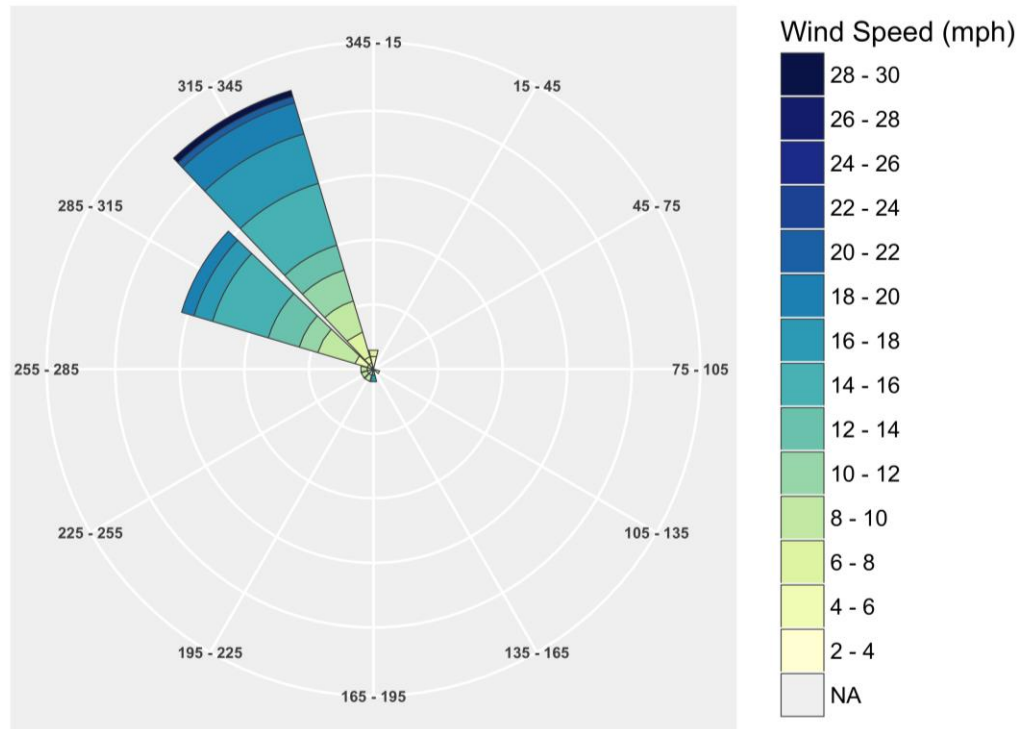
June 30: **“Hokahey”** (skipper Jan Passion) brought out Katie Douglas and Sophie Bennett. Departed with Gavan Borgias, Cole Jower, and Claire Flynn. Four people toured the island.

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.



June 2018 Wind Rose



Oiled & Entangled Wildlife

An immature California Sea Lion was seen with monofilament netting embedded in its neck at Mussel Flat on June 22nd. No oiled wildlife was seen.

Breeding Birds

Storm-Petrels – Standard mist netting for the mark/recapture study was conducted twice in June. On June 18th there were 103 new and 16 recapture ASSP, and 1 new LHSP at Lighthouse Hill. In addition to metal bands, 63 birds were fitted with PIT tags and Amy Miles collected 19 blood samples. On June 25th there were 57 new ASSP caught at the Carp Shop. 18 blood blots and 13 plasma samples were taken and PIT tags were deployed. Regular burrow cam breed checks confirmed the first chick of the season at Lighthouse Hill on June 23rd. Several more PIT tagged birds were detected by RFID readers deployed on Lighthouse Hill.

Brandt's Cormorant – An all island census was conducted on June 4th. The first chicks were observed at Sea Lion Cove, the Corm Blind, and Shubrick Point also on the 4th.

Pelagic Cormorant – Pelagic cormorants continue to exhibit little interest in breeding this year, and have mostly been observed standing over empty nests. The first eggs were finally confirmed on June 14th from the ridge. An all island census was conducted on June 4th.

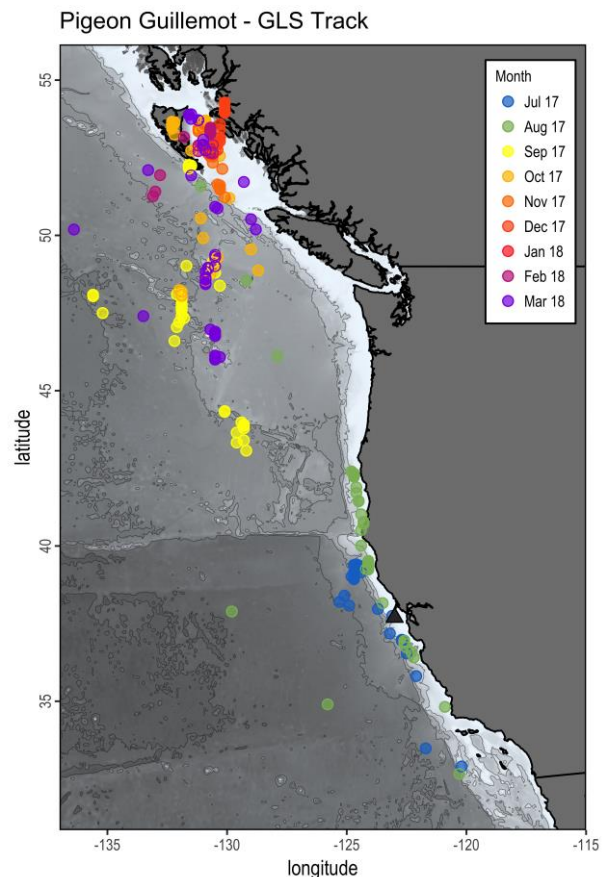
Double-crested Cormorant – Some chicks at the Maintop colony reached nearly adult size and were observed wandering away from nests by the end of the month. Well-built nest counts peaked at about 100.

Western Gull – Western gull chicks were large enough to band by mid-month, with the first chicks banded in followed known-age plots on June 12th. Adults reached peak aggression levels. Hard hats were essential throughout the month. As has been the pattern in the past several years, productivity was low in K-plot and H-plot west.

California Gulls – California gulls have yet to attempt to breed this year. Numbers remained low and no active nests were found in June.

Common Murre – It appears to be a normal year for common murre, with no major chick die offs or abandonment observed. Index plot counts over a 10-day period were initiated on June 3rd. Dailey 2-hour diet watches began on June 12th. Anchovy and juvenile rockfish dominated the chick diet during June, with the occasional flatfish and market squid. Many chicks were seen wandering around followed plots by the end of the month. The first confirmed fledge occurred on June 23rd.

Pigeon Guillemot – Breeding activity appears normal so far this year for pigeon guillemots. The first chicks were discovered at Garbage Gulch and Lighthouse Hill on June 14th. A total of 20 archival light sensing devices (geolocators) were recovered from birds that were tagged last year. Geolocators record ambient light levels experienced by the bird which are later used to estimate twice daily geographic positions, based on day length (latitude) and the timing of solar and lunar noon (longitude). Preliminary results indicate pigeon guillemots from the Farallones likely travel north to British Columbia in the winter, based on a single model run of one tag. This particular bird spent the winter months in the Queen Charlotte Islands. An additional 30 geolocators were deployed on the nights of June 24th, 25th, and 26th.



Rhinoceros Auklet – Cole Jower, a graduate student with San Jose State University, deployed 15 and retrieved 12 GPS/TDR tags, in an effort to link foraging trips with diving information to better understand chick provisioning patterns. Standard netting sessions to collect diet samples began on June 16th. By far, the dominated prey item being delivered to chicks were anchovy – in fact, provisioning parents consistently brought in a bill load of 2 anchovy. Additional prey consisted of juvenile rockfish, squid, and the occasional Pacific saury. Chicks appeared to be putting on weight at a normal rate.



Tufted Puffin – Early season breeding survey concluded on June 5th, with an estimated 90 active crevices from visible locations across the island. Several puffins were spotted flying with a bill load of fish on June 27th, indicating that chicks likely had begun hatching by the end of June.

Cassin's Auklet – Most chicks from followed nest boxes fledged by the end of the month, with the first confirmed fledge as early as June 2nd. Roughly 30% of pairs in active nest boxes initiated a second brood, matching the long-term double brooding rate for this population. Weekly diet sampling continued through June with most samples consisting of krill.

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.

Pinnipeds

California Sea Lion – On average there were 2,798 (stdev \pm 262) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 3,150 individuals on the 15th. The high count for pups was 380 on the 22nd.

Steller Sea Lions – On average there were 165 (stdev \pm 64) individuals counted, with at least 20 bull males at several sites around the island. The high count for Steller sea lions was 233 on the 29th. The high count for pups was 38 on the 22nd.

Northern Elephant Seal – Numbers of elephant seals continued to decline in June, with an average total count of 34 (stdev \pm 19) individuals counted.

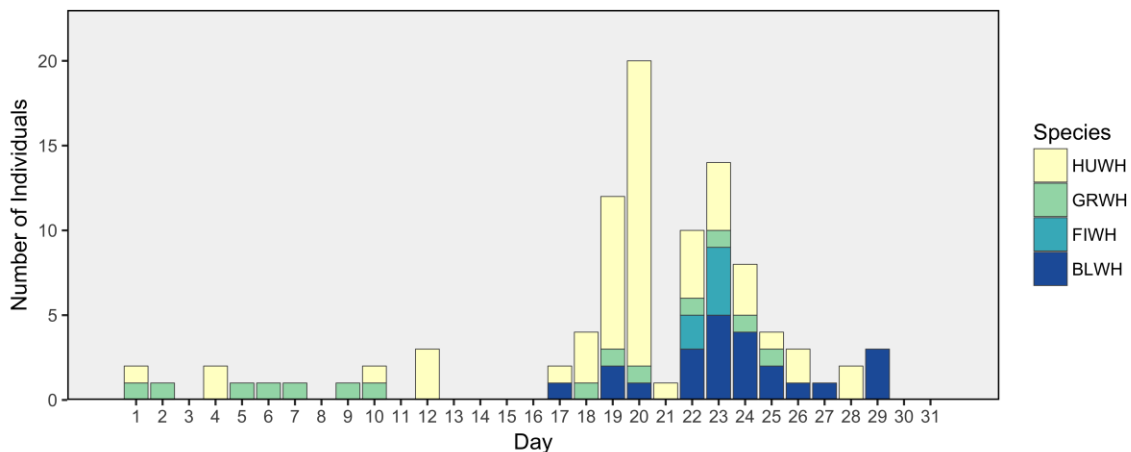
Harbor Seal – Harbor seal numbers were highly variable, reflecting tide height and weather conditions during the weekly census. On average there were 60 (stdev \pm 22) individuals counted. The high count was 87 on the 8th and low count of 43 on the 15th.

Northern Fur Seals – Fur seal numbers increased rapidly throughout the month, reflecting pupping activity at their main site on Indian Head. The mean count was 395 (stdev \pm 188) individuals, with a high of 668 on the 29th. The first pups were seen on the 15th, and by the 29th 186 pups were observed. Also of note, a pup was seen suckling on the West End side of Jordan Channel, a sign that this growing population may soon expand to new pupping sites outside of Indian Head.

Cetaceans

Standard Survey – June was dominated by strong winds from the NW that hampered our ability to spot whales. Only a single one-hour standard whale watch was 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.

June 2018 Whale Sightings



HUWH = humpback whale, GRWH = gray whale, FIWH = fin whale, BLWH = blue whale.

Sharks

An adult male Sea Lion with a large shark bite on its side was seen on the North Landing platform on June 22nd.

Salamanders

No salamander surveys were conducted this month.

Owls

No owls have been observed during May.

Crickets

No cricket surveys were conducted this month.

Mice

Mice are slowly beginning to increase in numbers, as evidenced by an amplification of scratching sounds emanating from the walls and fresh droppings in our boots in the show room.

Inverts and Intertidal

Nothing to report.

Plants

Jonathan Shore and Brad Speno from USFWS continued to wage 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* at Rabbit Cave, the Marine Terrace, around the house, Carp Shop, and Powerhouse. Brad also conducted plant phenology surveys at all plant survey plots.

Violations

No violations to report.

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 replacing a light switch and toilet flush valve in the PRBO downstairs bathroom, and repaired North Landing pole guides. Mike McGoey installed spacers in the East Landing control cabinet to accommodate a new on/off switch. Also of note, there was a substantial break in the main water line near Twittville on June 22nd. The section of pipe, which was completely split in half, was temporarily repaired with a rubber clamp – which is currently holding with only a very minor drip. Additionally, one of the reusable anti-moisture devices (for lack of a better word) used for keep the fridges dry shorted out and began to smoke while plugged into a surge protector in the phone room. This caused the fire alarm to go off during a landing on June 30th, noticed by an intern who happened to be in the house at the time. Confirmation that the system works and the fire doors shut on command. Luckily the source of the smoke was quickly identified and no damage was done. We will no longer be using the anti-moisture devices.

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.
- Many 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 off 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.
- Broken section of pipe near Twittville needs to be properly prepared.

Solar/Electric

PV System

Distilled water reserves: 30 gallons

Generator run times

Kohler 15ROZ (Buffy): 0.1 hours

Kohler 30REOZJC (Speedwagon): 2.4 hours

Kohler 40REOZK (Zeke): 9.1 hours

Kohler 15ROY61 (Peevey): Not run

Webasto: 0 hours

Power Used this month: Start = 68,595; End = 69,516; for total of 921 kwh

Fuel Reserves

Diesel fuel used in April: 11 gallons

Drums: 3 1/2 x 55g = 192.5 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: 8 gallons

Safeboat tank: Full

Zodiac tank: Full

Water Reserves

Cistern: ~ 81,660 gallons (6'5")

Gravity Tank: empty

Settling Tank: empty

Water use at house meter was 4,021 gallons

Sightseeing Boats

The **Kitty Kat** was seen 4 times with an average of 25 POB and the **Salty Lady** was seen 3 times with an average of 30 POB.

Non-breeding birds

Pacific Loon, **Western Grebe**, Black-footed Albatross, Pink-footed Shearwater, Sooty Shearwater, Northern Gannet, **Blue-footed Booby**, Brown Pelican, Canada Goose, Peregrine Falcon, Wandering Tattler, Eurasian Collared-dove, *Selasphorus sp.* hummingbird, Western Wood-Pewee, Ash-throated Flycatcher, **Red-eyed Vireo**, **Purple Martin**, **Cliff Swallow**, **Northern Mockingbird**, Yellow Warbler, Chestnut-sided Warbler, **American Redstart**, Ovenbird, Wilson's Warbler, **Green-tailed Towhee**, Rose-breasted Grosbeak, American Goldfinch.