

Farallon Islands Monthly Report

Report to the U.S. Fish and Wildlife Service

Farallon Islands National Wildlife Refuge

October 2020

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**Southeast Farallon Island Visitors**

**Point Blue crew**: Steve Dougill, My-Lan Le, Evan Lipton, Mike Mahoney, and Jim Tietz.

October 6th: **“Salty Lady”** (skipper Jared Davis) brought out the Arcadis crew consisting of: Robert Moniz, Austin Gerety, Mia Jauregui, Julia Vldonish, and Tim Walker. They also brought out plumber Andrew Carothers-Liske and his assistant Torrent, who departed the same day on the Salty Lady.

October 13th: **“Salty Lady”** (skipper Jared Davis) took Mia back to the mainland.

October 15th: **“Salty Lady”** (skipper Court) took remainder of Arcadis crew, Rob, Austin, Julia, and Tim, back to the mainland.

October 28th: “**Pacific Pearl**” brought out Gerry McChesney (USFWS), Chris Barr (USFWS), and five members of the California Coastal Commission: Sara Aminzadeh, Donne Brownsey, Caryl Hart, Katie Rice, and Mike Wilson. Everyone returned to the mainland in the afternoon.

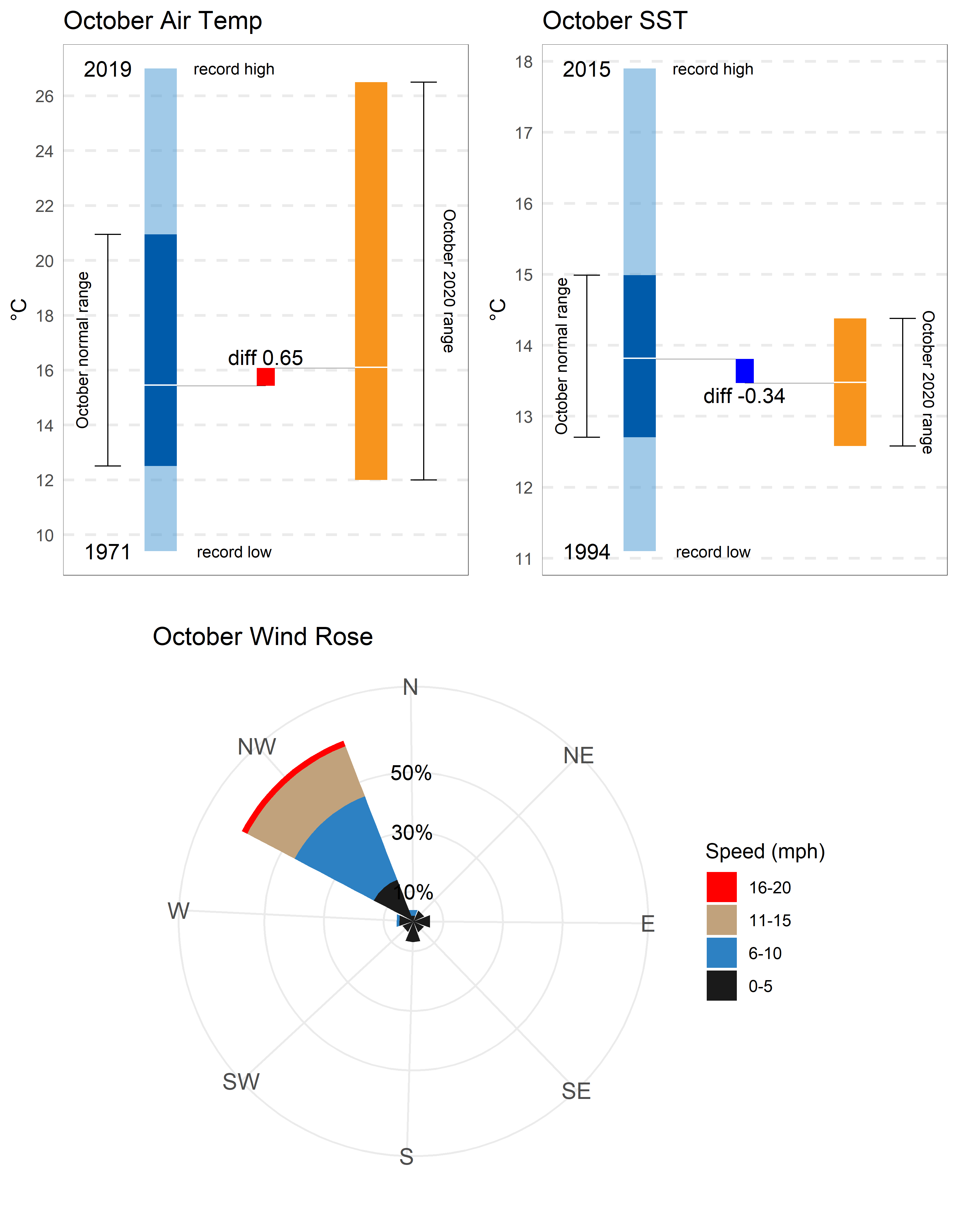
**COVID-19:** In response to ongoing concerns over impacts of this global pandemic, certain precautionary measures were taken this month to minimize the risk of COVID-19 infecting island personnel: The use of PPE was required by newly arriving interns prior to and during the landing; the frequency of 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**

October 23rd: Mahoney and Tietz visited West End Island.

**Weather/Ocean**

Monthly weather is summarized in Figure 1. Light to moderate NW winds dominated this month, but turned the east and south a few times. The island received 0.11 inches of rain this month, which fell as drizzle. Fog was noted on 29% of weather observations and haze on 4%. The range of midday air temperatures fell within the long-term normal range for this month, with an average of 16.1 ± 2.77 °C. This was 0.65 °C higher than the long-term average for the month. Sea surface temperature (SST) readings from the island were slightly lower than the long-term normal range for this month, with an average of 13.47 ± 0.40 °C. This was 0.34 °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 October. 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**

Fifteen Zalophus (1 adult male, 4 adult females, 2 sub-adult males, and 8 immatures) were seen with monofilament, packing strap, or unknown material embedded tightly around their necks. Three Western Gulls (1 adult and 2 immatures) were seen to be entangled in various materials. One had a fishing lure hook embedded in its bill and foot, which we removed from the bird.

No oiled wildlife were observed this month.

**Breeding Birds**

**Storm-petrels** – At the beginning of the month, 20 Ashy sites were active with chicks and still being followed from the previous month. Of these 20 nests, 18 fledged and 0 failed by the end of the month, while 2 were still being monitored into November. The one monitored breeding site in the Ashy Castle fledged mid-month. On the 25th, another chick was heard begging from the north corner of the Ashy Castle, but it could not be located. No Leach’s sites were active this month.

**Brandt’s Cormorant** – A few thousand birds were observed daily either roosting on offshore islets or feeding on the ocean.

**Pelagic Cormorant** – Approximately a hundred birds were observed daily roosting on cliffs.

**Double-crested Cormorant** – This species was last seen on 7 Oct.

**Western Gull** – A few thousand birds were observed daily either roosting on the island or feeding on the ocean.

**California Gulls** – Numbers of migrants roosting on the island remained high this month.

**Common Murre** – A few dozen murres were seen offshore through the month.

**Pigeon Guillemot** – One to two birds were seen offshore on four days this month.

**Rhinoceros Auklet** – Single birds were seen offshore five times this month.

**Tufted Puffin** – A single bird was seen offshore on the 30th.

**Cassin’s Auklet** – On most days, only a few birds were seen offshore on a daily basis around the island, but 420 were estimated to be offshore on the 8th. A few were incidentally captured in Burrowing Owl nets this month.

**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 7,214 (std ± 1205) individuals counted during the weekly pinniped census from the lighthouse, with a high count of 9,126 individuals on the 30th. The high count for pups was 311 on the 8th. A few shark bitten individuals were seen this month.

**Steller Sea Lion –** On average there were 91 (std ± 20) individuals counted, with the high count of 118 on the 1st. The high count for pups was 26 on the 8th.

**Northern Elephant Seal –** Numbers increased this month, with an average count of 60 (std ± 38) individuals. A high count of 96 individuals occurred on the 25th. All were immatures or sub-adult males.

**Harbor Seal –** On average there were 16 (std ± 16) individuals counted, with a high count of 38 on the 8th.

**Northern Fur Seal –** Numbers declined for the colony on West End this month as more individuals headed to sea for the winter. On average there were 969 (std ± 158) individuals counted, with the high count of 1,227 observed on the 22nd. The high count for pups was 109 on the 8th; on subsequent surveys, pups were not identified from the lighthouse because they become too difficult to distinguish from immatures.

On a trip to West End Island on the 23rd, we counted 1,562 total individuals which included 123 pups and 369 non-ID on land, and 1070 non-ID in the water. We resighted tags on 25 individuals, including three blue (Farallon) tags on individuals we tagged in 2017 and 2018.

**Cetaceans**

**Standard Survey** – Eleven 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. One to three gray whales were observed close to the island all month. Large numbers of humpback whales were seen early mid-month and late in the month. Large groups of Pacific White-sided and Risso’s Dolphins were seen this month.

**Sharks**

Six shark predation events were spotted this month around the island. Four of the attacks were on the south side of the island, while one was off Indian Head, and one was off Fertilizer Flat. Researchers from the Monterey Bay Aquarium came to the island on a few days and encountered several sharks during their work.

**Salamanders**

No salamander surveys were conducted this month, but a few individuals were seen at night during cricket surveys around the caves near the Gap, and one was found inside Rabbit Cave.

**Owls**

We recorded eight arrivals this month and banded three of those. In addition, we resighted P30/S, an individual banded by us during the fall of 2019.

**Crickets**

Cricket surveys were conducted from the 24th to the 28th in all monitored caves: Cricket Cave had an average of 2530 (SD ± 693) crickets; Rabbit Cave 390 (SD ± 76), Spooky 205 (SD ± 76), Corm Blind 13 (SD ± 10), Gap 9 (SD ± 4), and North Landing 29 (SD ± 19).

**Bats**

No bats were observed this month, and the survey concluded on the 31st.

**Mice**

A few mouse holes were plugged in both the PRBO house and Coast Guard house. Mice were heard every night running around in the walls of the PRBO house. All mouse entryways seemed to be plugged in the PRBO house. Arcadis found and plugged a mouse hole in the Wind Room of the Coast Guard house, but mice continued to get into the Coast Guard house after they departed. Mice were easily seen this month running around outside during the day and night.

**Inverts and Intertidal**

On the 15th, two seven-spotted lady beetles were found. On the 23rd, a slug was found at night. Three species of butterfly were seen this month: several Painted Lady (*Vanessa cardui*) were seen in the first half of the month, West Coast Lady (*Vanessa Annabella*) was seen on the 16th and 27th, and a single Orange Sulphur (*Colias eurytheme*) was seen on the 16th. Dragonflies were seen on a few days this month, including gliders (*Pantala* sp.) on two days, green darner (*Anax junius*), and variegated meadowhawk (*Sympetrum corruptum*) on four days.

**Plants**

New Zealand spinach (*Tetragonia tetragonoides*) is covering approximately 40% of the southwest side of SEFI. The annual non-native plant control was not conducted this month due to precautions taken during the ongoing Covid-19 global pandemic.

**Violations**

Six boats were documented fishing in violation of the State Marine Reserve. One boat was seen violating the Special Closure restrictions this month when it passed between Saddle Rock and Southeast Farallon Island; no wildlife were disturbed. Two USCG planes, one USCG helicopter and one private seaplane violated the 1000’ aircraft regulation zone around the islands. The seaplane moved 60 zalophus near the domes on Mussel Flat.

**Maintenance**

Island biologist Tietz conducted routine weekly maintenance checks on the PV system and generators. Monthly changes of water filters and crane greasing were conducted. A crane training was conducted at North Landing on the 11th and at East Landing on the 18th. Jim determined that the portable blue diesel generator requires new carbon brushes before it will be operational. Plumber Andrew Carothers-Liske and his assistant Torrrent flushed the blockage out of the PRBO downstairs bathtub drain and replaced the hot and cold water handles on both the PRBO and Coast Guard House bathtubs.

**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 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.
* 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: 59 gallons

**Generator run times**

Kohler 15ROZ (Buffy): 0 hours (1830.5 on meter)

Kohler 30REOZJC (Speedwagon): 3.6 hours (668.1 on meter)

Kohler 40REOZK (Zeke): 17.7 hours (523.9 on meter)

Kohler 15ROY61 (Peevey): 0 hours (3954.2 on meter)

Webasto: 0 hours

**Power use**

Facilities power use: Start = 87,387; End = 87,984; for total of 597 kWh

**Fuel Reserves**

Diesel used: 21.5 gallons

Diesel drums: 9.5 @55gal: 523 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: 15 gallons

Gasoline for portable generator: 12 gallons

6 gallon boat tank: Full

3 gallon boat tank: Full

**Water Reserves**

Water used this month: Start = 300,405; End = 302,780; for a total of 2,375 gallons

Cistern: 6’ 2” or ~77,500 gallons

Gravity Tank: empty

Settling Tank: empty

**Sightseeing Boats**

The **Salty Lady** was the only boat recorded viewing the island and wildlife and was seen 4 days with an average of 18 POB. The **Derek M. Baylis** was present at the Island looking for sharks 6 days with an average of 7 POB.

**Non-breeding birds**

Pacific Loon, Common Loon, Eared Grebe, Western Grebe, Black-footed Albatross, Northern Fulmar, Pink-footed Shearwater, Buller’s Shearwater, Sooty Shearwater, Short-tailed Shearwater, Black-vented Shearwater, Brown Booby, Northern Gannet, Brown Pelican, Great Egret, Snow Goose, Cackling Goose, Northern Shoveler, Northern Pintail, Green-winged Teal, Surf Scoter, White-tailed Kite, Northern Harrier, Sharp-shinned Hawk, American Kestrel, Merlin, Peregrine Falcon, Sora, American Coot, Pacific Golden-Plover, Killdeer, Wandering Tattler, Whimbrel,Long-billed Curlew, Ruddy Turnstone, Black Turnstone, Rock Sandpiper, Red Phalarope, Pomarine Jaeger, Parasitic Jaeger, Long-tailed Jaeger, Black-tailed Gull, Heermann’s Gull, Ring-billed Gull, California Gull, Herring Gull, Thayer’s Gull, Glaucous-winged Gull, Black-legged Kittiwake, Band-tailed Pigeon, Mourning Dove, Eurasian Collared-Dove, Barn Owl, Burrowing Owl, Short-eared Owl, Anna’s Hummingbird, Northern Flicker, Willow Flycatcher, Western Flycatcher, Black Phoebe, Say’s Phoebe, Cassin’s Vireo, Hutton’s Vireo, Warbling Vireo, Philadelphia Vireo, Horned Lark, Tree Swallow, Violet-green Swallow, Cliff Swallow, Barn Swallow, Red-breasted Nuthatch, Brown Creeper, Rock Wren, House Wren, Pacific Wren, Golden-crowned Kinglet, Ruby-crowned Kinglet, Blue-gray Gnatcatcher, Mountain Bluebird, Swainson’s Thrush, Hermit Thrush, American Robin, Varied Thrush, Northern Mockingbird, Sage Thrasher, European Starling, American Pipit, Cedar Waxwing, Tennessee Warbler, Orange-crowned Warbler, Nashville Warbler, Yellow Warbler, Black-throated Blue Warbler, Audubon’s Warbler, Myrtle Warbler, Black-throated Gray Warbler, Townsend’s Warbler, Hermit Warbler, Blackburnian Warbler, Palm Warbler, Blackpoll Warbler, Connecticut Warbler, MacGillivray’s Warbler, Common Yellowthroat, Wilson’s Warbler, Yellow-breasted Chat, Western Tanager, Green-tailed Towhee, Spotted Towhee, American Tree Sparrow, Chipping Sparrow, Clay-colored Sparrow, Vesper Sparrow, Savannah Sparrow, Grasshopper Sparrow, Fox Sparrow, Lincoln’s Sparrow, Swamp Sparrow, White-throated Sparrow, White-crowned Sparrow, Golden-crowned Sparrow, Oregon Junco, Lapland Longspur, Bobolink, Red-winged Blackbird, Yellow-headed Blackbird, Western Meadowlark, Brewer’s Blackbird, Brown-headed Cowbird, Hooded Oriole, Bullock’s Oriole, Cassin’s Finch, Purple Finch, House Finch, Pine Siskin, and Lesser Goldfinch.