

## OBSERVATIONS ON BIRD LIFE IN THE PACIFIC OCEAN OFF THE NORTH AMERICAN SHORES

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From February 23 to September 15, 1945, our ship made five trips from San Francisco, California, to four areas in the Pacific waters ranging from 400 to 800 nautical miles from the North American shores. The geographical center of the areas and the dates when we were present at them are as follows: Area 1, 34° 40' N, 129° 50' W (400 nautical miles from San Francisco, California), April 10 to May 1 and May 24 to June 15; Area 2, 34° N, 131° 31' W (500 nautical miles from San Francisco, California), February 24 to March 19; Area 3, 31° 40' N, 136° W (800 nautical miles from San Francisco, California), July 22 to July 27; Area 4, 43° N, 135° W (465 nautical miles west of Cape Blanco, Oregon), July 8 to July 19 and August 23 to September 12. Figure 43 shows the relationship of the areas to the Hawaiian Islands, Aleutian Islands and the west coast of United States, Canada, and Alaska.

Relatively long periods of stay at a given location proved ideal for observing pelagic birds. Few ornithologists seem to have had such opportunities to observe restricted areas at sea over relatively long periods of time; accordingly, my observations contribute something to knowledge of the abundance and distribution of pelagic birds, and they add a few records of land birds seen far at sea. Table 1 consists of a list of birds observed at the four areas; the figures indicate the largest number of each species seen at one time in each area. Additional observations were made along our route, shown by broken lines on the map (fig. 43), between the oceanic areas and San Francisco. Often foggy conditions prevented detailed observations in the area between the Farallon Islands and the mainland. Table 2 lists the known species and the estimated numbers of individuals seen near the Farallones for each trip through that area. Few species were observed near these islands on trips 1, 3, 4 and 8 because of fog and stormy conditions.

A total of twenty-three different species of birds were identified far out at sea. Eight species were seen at Area 1; nine at Area 2; two at Area 3; and eighteen at Area 4. Prevailing weather conditions and the time of year undoubtedly affected the species and the number of birds observed at the four areas. The seemingly unusual number at Area 4 from August 23 to September 12 may have been due to a series of cyclonic storms passing over (see under Pintail) and carrying migrating birds off their normal routes. We were in Area 3 for only five days (July 22 to July 27) during which time the seas were calm and the weather mild (80° F. maximum). I observed the following species at sea in the regions shown in figure 43; those seen exclusively in the Farallon area are listed only in table 2. The names used are those of Grinnell and Miller (Pac. Coast Avif. No. 27, 1944).

*Diomedea nigripes*. Black-footed Albatross. Albatrosses were our constant companions, with few exceptions, from the time that we left the Farallon Islands until we returned. This species appeared to be well distributed throughout the waters visited. At all areas large numbers gathered near the ship where they fed daily on the galley scraps thrown overboard. The number of individuals around the stationary ship varied from hour to hour and from day to day (Yocom MS). One hundred and twenty-five Black-footed Albatrosses, counted in July, 1944, by a member of our crew 1000 nautical miles southwest of San Francisco, California (30° N, 140° W), is the largest number of these birds that was known to collect about the ship at one time. Albatrosses usually followed the ship when we passed to and from these areas. On a few occasions there were as many as a dozen, but the usual number varied between one and six.

*Diomedea immutabilis*. Laysan Albatross. Grinnell and Miller (Pac. Coast Avif. No. 27, 1944:41) refer to Laysan Albatrosses as rare or casual off the California coast with the center of its distribution

in the North Pacific ocean in the vicinity of the Hawaiian Islands. On March 17 at Area 2 ( $34^{\circ}$  N,  $131^{\circ}$  30' W), I saw two Laysan Albatrosses flying about with Black-footed Albatrosses. They remained in the vicinity throughout the day but were not seen thereafter. On several occasions in the previous week a single Laysan Albatross was seen at approximately the same location. According to accounts of members of the crew other "white-bodied" albatrosses were seen in this area previous to 1945.

*Fulmarus glacialis*. Fulmar. August 21 seven fulmars were seen in the channel on the south side of the Farallon Islands; September 15, twelve were observed in this same area.

*Puffinus creatopus*. Pink-footed Shearwater. On June 17 and July 5 thousands of Sooty Shearwaters accompanied by considerable numbers of "white-bellied" birds were seen twenty miles west of the Farallones in the shallow waters southeast of these islands. The shearwaters with light underparts appeared to be larger than the Sootys and were thought to be Pink-footed Shearwaters.

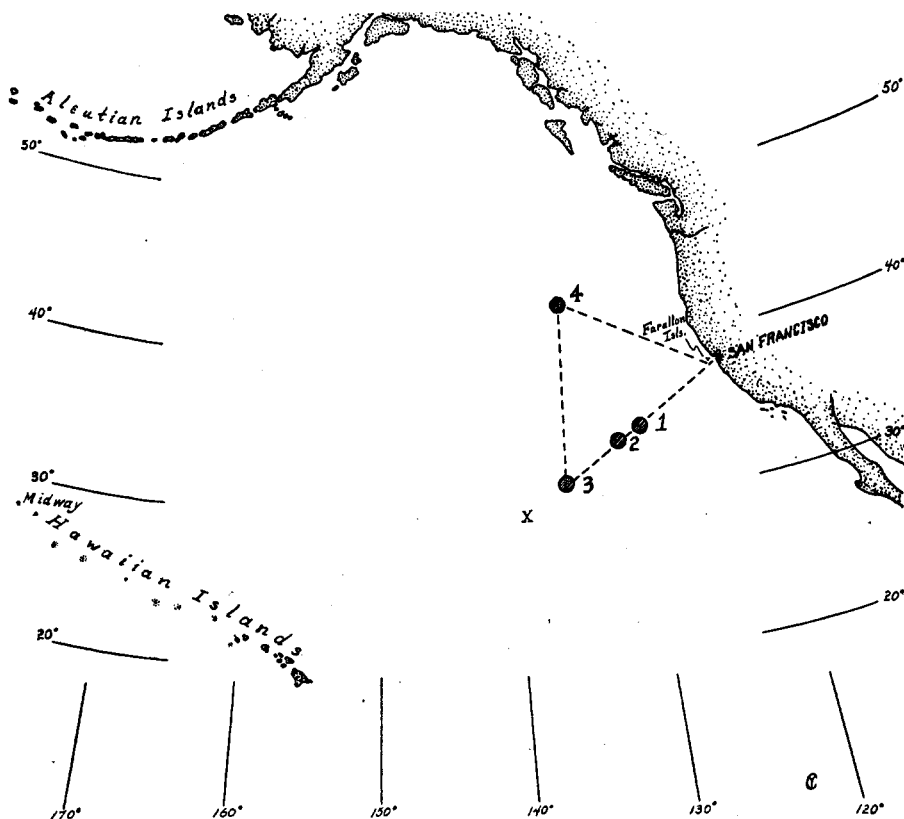


Fig. 43. Map of observation areas (numbered circles) in the northeastern Pacific Ocean; routes of ship indicated by broken line; X marks a point 1000 nautical miles from San Francisco.

*Puffinus griseus*. Sooty Shearwater. This species was seen at all four areas far at sea but not in large numbers. On August 30 six were sighted from the ship on Area 4. Unlike the Black-footed Albatrosses, these birds did not collect about the ship when it was lying to or was underway. Usually only a single bird was seen at one time as it flew about with Black-footed Albatrosses. Sooty Shearwaters were seen far at sea more often during stormy weather. Huge flocks of Sooty Shearwaters were seen around the Farallon Islands on June 17 and July 5. These large flocks of resting birds let the ship approach closely before flying out of its course. Some birds would dive rather than fly and others would flap and run over the water to a safe distance.

*Oceanodroma furcata*. Fork-tailed Petrel. Individuals were seen near the Farallon Islands on May 22 and July 5 and were noted at all areas except number 3. They were usually seen alone or in

pairs. They were not particularly attracted by the stationary ship and would soon pass on. Others were seen in waters between the coast and the four areas.

*Oceanodroma leucorhoa*. Leach Petrel. Unlike the Fork-tailed Petrel this species often was seen in larger groups, particularly at the northern area west of Cape Blanco, Oregon. On September 13 at 3:30 p.m. I counted from the bridge eighteen Leach Petrels all within one-fourth mile of the ship. Our location was 41° 23' N, 132° 04' W. One, collected at station four and identified as the subspecies

Table 1  
Species of Birds Observed at the Four Areas in Pacific Ocean

Areas Distance from mainland (statute miles)	1 460		2 575		3 535		4 920	
	Dates of observation April 10 to May 1	May 24 to June 15	Feb. 24 to Mar. 19	July 22 to July 27	July 8 to July 19	Aug. 23 to Sept. 12		
Black-footed Albatross	50	95	65	73	53	53		
Laysan Albatross	....	....	2	....	....	....		
Sooty Shearwater	....	3	2	1	1	6		
Fork-tailed Petrel	2	....	2	....	1	1		
Leach Petrel	3	2	2	....	4	18		
Red-billed Tropic-Bird	....	....	....	....	....	1		
Green-winged Teal	....	....	....	....	....	3		
Pintail	....	....	....	....	....	200		
Turnstone, sp. ?	....	....	....	....	....	1		
Sandpiper, sp. ?	....	....	....	....	....	6		
Baird Sandpiper	....	....	....	....	....	1		
Red Phalarope	....	....	....	....	2	3		
Skua	....	....	....	....	1	....		
Pomarine Jaeger	....	1	....	1	....	2		
Parasitic Jaeger	....	....	....	....	1	3		
Long-tailed Jaeger	....	....	....	....	1	1		
Herring Gull	10	....	25	....	....	....		
Glaucous-winged Gull	....	....	4	....	....	....		
Black-legged Kittiwake	5	....	4	....	....	....		
Sabine Gull	4	....	2	....	....	6		
Tern, sp. ?	....	....	....	....	....	2		
Nighthawk	....	....	....	....	....	1		

*Oceanodroma leucorhoa beali* by Dr. Alden H. Miller, is now at the Washington State College Museum. Although petrels were observed for many hours, none was ever noted resting on the water; they were not attracted by galley scraps.

*Phaethon aethereus*. Red-billed Tropic-bird. Grinnell and Miller (Pac. Coast Avif. No. 27, 1944:50) report this species as a "sparse postbreeding vagrant from the south." The few records off California are from the southern sea coast. A record of a skull from the Marin County coast remains unconfirmed (Grinnell, Pac. Coast Avif. No. 11, 1915:176). On September 7, 1945, at 42° 29' N, 135° 05' W, approximately 460 nautical miles west of Cape Blanco, Oregon, a Red-billed Tropic-bird flew directly over the ship at approximately 200 feet elevation on a northerly course. It flew several hundred yards beyond the ship then turned and came back so that I was able to study it closely with 7×50 binoculars. The rapid flight of this bird was characterized by steady wingbeats without sailing or gliding.

*Anas acuta tzitzihua*. Pintail. At 2:30 a.m. on August 30, 1945, a gentle rain started to fall. Our position was 43° 30' N, 135° 05' W at Area 4; ship "lying to." An occluded front was passing over us with the center of the low pressure area just off the coast of Vancouver Island, British Columbia. At 11:30 a.m. when I came out on the deck, much rain was falling with a 25-knot easterly wind. I was counting a flock of resting albatrosses which were nearly a fourth of a mile from the ship, when over 200 Pintail Ducks set their wings and circled over them; some ducks alighted, but most of the flock flew off in a southerly direction close to the ocean swells. A short while later several flocks of Pintails circled the ship many times before departing. Three Green-winged Teals were seen in one flock. The following log indicates some of the unusual bird activity which occurred that day:

1200—150 Pintails circling ship; departed on northerly course after being shot at by crew.

1235—Fifty Pintails flew southeast. Nine Pintails and one Green-winged Teal flew around the ship; acted as if they would alight; approached within 100 yards.

1300—Six unidentified ducks one-fourth mile west of ship.

1312—Two Parasitic Jaegers flew near ship. One Sabine Gull flew across our bow at 100 yards (adult plumage). Several (6) shearwaters in area. Two petrels seen far out.

1335—One Pintail alighted with the albatrosses 150 yards away from ship. Two unidentified terns flew by (200 yards). Many unidentified shorebirds are flying by the ship—some appear to be Western Sandpipers and one a Baird Sandpiper. The latter appears to be tired.

1345—Two flocks of Pintails (16 and 26) are flying around ship.

1400—One hundred and fifty Pintails off one-half mile south of ship.

1410—Pintail female shot down out of a flock of thirty which alighted near ship.

1510—The wounded duck has drifted back near the ship. There was no trace of food in crop or gizzard; bird was not fat but appeared to be in good health.

2100—Five Sabine Gulls flew over.

Over 300 Pintails were estimated to have been seen August 30. On August 31 only one Pintail, which rested near the ship with the albatrosses, was noted. The warm front had passed; there was no rain and only high scattered clouds remained. Except for a few Sabine Gulls, the Pintail, and small sandpipers, only the usual pelagic species were seen.

Observations of many unusual birds on August 30 and the days following were probably related to the cyclonic storm which may have blown migrating birds off their normal routes. There may be, however, many waterfowl that normally migrate over waters off our continental shores. Pintails winter in the Hawaiian Islands, so their presence may not have been unusual for that time of year. Others may normally migrate from the Aleutian Islands and even Alaska to California through these waters; however, I would expect them to fly much nearer the coast. Counter-clockwise air movement around the low pressure area could have blown them from the Alaskan and Canadian coastal regions.

*Anas carolinensis*. Green-winged Teal. Four were seen at Area 4, August 30 (see under Pintail).

*Pluvialis dominica*. Golden Plover. On October 15, 1944, a Golden Plover flew aboard the ship, which at that time was lying to 1000 miles southwest of San Francisco (140° W, 30° N). The bird remained on the deck for several hours before leaving.

*Erolia bairdii*. Baird Sandpiper. One of the small sandpipers seen at Area 4 appeared to be this species.

*Phalaropus fulicarius*. Red Phalarope. I noted this species on each voyage either in the vicinity of the Farallones or far at sea between the areas and San Francisco. Red Phalaropes frequented the vicinity of our ship when lying to at Area 4 on both trips; they were not seen, however, at the other areas but were seen when we were going to and from them. Usually only one, two or three individuals were seen at one time; on August 12, twelve phalaropes were counted dabbling for food in a floating mass of vegetative matter approximately sixty miles northwest of the Farallon Islands. On another occasion, July 27, as we were still 400 miles from San Francisco, several pairs of Red Phalaropes were seen feeding on the water or flying by. At night I have seen these birds fly about the masthead lights, apparently attracted by them.

*Catharacta skua*. Skua. On July 17, at Area 4, at 5:30 p.m. a Skua approached the ship and flew around for several minutes, then alighted near a group of Black-footed Albatrosses. The flight of this brownish sea bird, with noticeable white patches at the bases of its primaries, square tail, and somewhat rounded wing tips, resembled, to some extent, that of a buteonine hawk. This Skua was the only one seen.

Gabrielson and Jewett (Birds of Oregon, 1940) list no records of this species off the Oregon coast; Grinnell and Miller (*op. cit.*:160) list only a few from California. Others have been reported off Washington state (Alcorn, Condor, 44, 1942:218).

*Stercorarius pomarinus*. Pomarine Jaeger. Beck (Proc. Calif. Acad. Sci., ser. 4, 3, 1910:61) reports this species off "Point Pinos [Monterey County, California] in every month of the year." I did not see jaegers on my first two trips to sea (February 22 to March 19; April 8 to May 3). My sight records for this species are as follows: one remained about the ship for several hours at Area 1 on June 9; on July 27, on our way in from Area 3, I saw five in the vicinity of Area 1. Other unidentified jaegers were seen shoreward. At Area 4 on August 29, two flew over the ship; on August 31, one dark and one light-phased bird remained about the ship for a short time.

*Stercorarius parasiticus*. Parasitic Jaeger. *Parasiticus* is a common migrant off California in spring and autumn. Some of the unidentified jaegers seen between Area 1 and the Farallon Islands were probably this species. On July 17 one approached the ship at Area 4. From August 23 to September 12, I found the Parasitic Jaeger to be common at Area 4. Oftentimes jaegers could not be identified as to species due to the absence of elongated, central, tail feathers (immature birds); on other occasions I could not be certain if the bird in question was a Long-tailed or a Parasitic Jaeger, so that most of my sight records for *parasiticus* and *longicaudus* are questionable.

*Stercorarius longicaudus*. Long-tailed Jaeger. Gabrielson and Jewett (*op. cit.*:604) place this

Table 2  
Birds Noted on Trips Past the Farallon Islands in 1945

Trip Date	1 Feb. 22	2 Mar. 19	3 Apr. 8	4 May 3	5 May 22	6 June 17	7 July 5, p.m.	8 Aug. 1, a.m.	9 Aug. 21, p.m.	10 Sept. 15, early a.m.
Black-footed Albatross	1	1	3	3	2	2	1	....	3	1
Fulmar	....	....	....	....	....	....	....	....	7	12
Pink-footed Shearwater	....	....	....	....	....	50	25	....	....	....
Sooty Shearwater	25	25	....	....	25	Thousands	Hundreds	....	5	25
Fork-tailed Petrel	....	....	....	....	1	....	1	....	....	....
Leach Petrel	....	....	....	....	1	....	1	....	....	....
Ashy Petrel	....	1	....	....	1	1	1	....	....	....
Brown Pelican	....	2	....	....	1	....	....	....	1	4
Double-crested Cormorant	....	sev.	....	....	sev.	sev.	sev.	....	sev.	sev.
Pelagic Cormorant	....	sev.	....	....	sev.	sev.	sev.	....	sev.	sev.
Red Phalarope	....	2	....	....	....	2	....	....	12	....
Western Gull	few	few	few	few	few	many	few	many	few	many
Common Murre	....	few	....	....	....	few	60	....	1	2
Cassin Auklet	....	....	....	....	....	....	2	....	....	....
Tufted Puffin	....	2	....	....	....	2	8	....	1	....
Mourning Dove	....	....	....	....	....	....	....	....	....	1
Unidentified Warbler	....	....	....	....	....	....	....	....	....	1
Unidentified Sparrow	....	....	....	....	....	....	....	....	....	1

species on the hypothetical list for the state of Oregon; Grinnell and Miller (*op. cit.*:161) list ten definitely known occurrences for California. I saw two birds only which I felt certain were Long-tailed Jaegers on the basis of extreme length of central tail feathers. One approached our ship at Area 4 on July 17, and the other, accompanied by three Parasitic Jaegers (?), passed over the ship on September 11 at the same area.

*Larus argentatus*. Herring Gull. I saw Herring Gulls only at Areas 1 and 2 on my first two voyages to those locations. This species followed the ship off and on from the time we left the Farallon Islands until we arrived at the areas. From February 24 to March 19 at Area 2, adult and immature *argentatus* were near us at all times; the maximum number of individuals seen at one time was twenty-five. Between April 10 and May 1, only a few Herring Gulls were seen at Area 1; at times none would be present.

*Larus glaucescens*. Glaucous-winged Gull. Four immatures frequented the vicinity of our ship at Area 2 between February 11 and March 19. These birds, accompanied by Herring Gulls and the Black-footed Albatrosses, fed on the galley scraps.

*Rissa tridactyla*. Black-legged Kittiwake. Seen only at Areas 1 and 2; none was seen on the second trip to Area 2. A ship seems to offer no attraction for this species; all individuals passed by without so much as swinging near the ship.

*Xema sabini*. Sabine Gull. On two occasions these gulls were observed passing over us at Area 1 and 2. None was seen again until August 30, at Area 4, when five flew over. Throughout the latter part of August and the first part of September several remained in the vicinity of the ship. The largest number seen at one time was six.

*Zenaidura macroura*. Mourning Dove. On September 15, fifteen miles off the mainland between the Farallon Islands and the Golden Gate a Mourning Dove attempted to land on the ship. I last saw it going in a southerly direction paralleling the coast.

*Chordeiles minor*. Nighthawk. At 10:30 a.m. on September 1 at Area 4, lookouts discovered a Nighthawk on the bow of the ship. The bird after being molested flew within a few feet of me several times before it departed on a westerly course. The storm mentioned above (see under Pintail) may have blown this bird to sea.

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