

Rose-breasted Grosbeak (1), Towhee (1), and White-throated Sparrow (1).

The various conditions noted by Dr. Beaudette and his assistant, Mr. Hudson, were: Physical injuries (12), No diagnosis due to decomposition (11), Malaria (5), Parasitic worms (4), *Microfilaria* (2), Subcutaneous emphysema (1), and Abscess of kidney (1).

5. Washington, D. C., Division. Dr. Shillinger reports that W. Bryant Tyrrell has sent in several birds, physical injury having been the cause of death in each case.

The above summaries of the work being done at the various stations, although containing many interesting disclosures, are purposely made very brief and non-committal. The reason for this is that in no single species has a sufficient number of specimens been examined during all months of the year and over a sufficient period of years to give a comprehensive view of the struggles with disease which a given species must wage. In a long-term project such as this one the most significant results are achieved only through prolonged and persistent research.

It is to be hoped that continued enthusiasm and coöperation of bird-banders will eventually lead us to a knowledge of the diseases of all the common birds of the North American Continent.—C. Brooke Worth, Chairman, Disease Study Project, Swarthmore College, Swarthmore, Pa.

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## PACIFIC GULL, COLOR-BANDING PROJECT

By MRS. M. C. SARGENT

A LETTER started the Pacific Project—the letter written March 20, 1937 by Mr. Whittle, Editor of *Bird-Banding*, to Mr. E. L. Sumner, at that time President of the Western Bird Banding Association, telling of the newly organized Herring Gull Project in the East and suggesting that Western banders start a similar study.

The idea caught on rapidly. Very little is known about the migration and life history of the numerous western species of gulls. The time was too short to obtain colored bands for the summer of 1937, but by 1938 the following project heads had been chosen: Mr. G. D. Sprot, Cobble Hill, British Columbia, for British Columbia; Mr. Henry B. Loeff, Oak Harbor, Washington for Washington; Mr. Reed Ferris, Beaver, Oregon, for Oregon, and Mrs. M. C. Sargent, Scripps Institute of Oceanography, La Jolla, California, General Chairman of the Project.

During the summer of 1938, 1800 young gulls of three species were color-banded at seven colonies ranging from Vancouver Island, B.C., to the Coronado Islands just over the Mexican Border.

Glaucous-winged Gulls (*Larus glaucescens*) were banded at three colonies in British Columbia. Mr. Theed Pearse banded 85 young birds on Mittenatch Island, Gulf of Georgia, B.C., with the combination YS-Y (yellow over Survey on right leg, and yellow on the left leg). Mr. Dennis Ashby banded 149 young birds on Yellow Island, Haro Straits, B. C., using combination YB-S (yellow over blue on right leg, a Survey band on left). Mr. Kenneth Alexander banded 75 young birds on East Bay, Gambier Island, B. C. using combination YS-B (yellow over Survey band on right leg, and blue on left).

Two subspecies of Western Gulls were banded. In Oregon, Mr. Reed Ferris banded 150 young *Larus occidentalis occidentalis* on Three Arch Island, Oregon—10 miles north of Cape Lookout, with the combination S-RB (Survey band on right leg, red over blue on left); and 675 young *Larus o. occidentalis* on Haystack Rock, Oregon—10 miles south of Cape Lookout, using B-RS (blue band on right leg, red over Survey on left).

Wyman's Western Gulls (*Larus o. wymani*). 153 young birds, were banded on North Coronado Island, Mexico—20 miles off San Diego, California, by H. David Michener and Mrs. M. C. Sargent with the combination RSR- red over Survey band over red on right leg.

California Gulls (*Larus californicus*) were banded on Mono Lake, California—the large desert lake lying east of the Sierra Nevada and Yosemite National Park. Mr. Walter Nichols banded 510 young birds with the combination BS-B (blue over Survey band on right leg, and blue on left).

It is of course too soon to draw conclusions from the encouraging number of observations and sight recoveries which have been received on the gulls, but the early reports on the Western Gulls are of considerable significance.

Breeding on many islands off the California and Oregon Coast, the Western Gulls have always been regarded by authorities as a resident species, although little has been known of their movements. The RSR Coronado Island birds were banded July 21, 1938. On August 21 two birds were caught by a fisherman on his lines while near the Coronado Islands and the numbers recorded. Sight observations were made of single birds at or within 15 miles of San Diego, California, on October 25, December 1, December 12, 1938 and January 11, 1939. On October 6, 1938, a single bird was observed at San Pedro, California (120 miles north of San Diego). On November 19 one bird was again recorded at San Pedro in a large mixed flock of gulls which included one BS-B Mono Lake California Gull. On January 9 and January 11, 1939, single birds were recorded in large flocks of immature Western Gulls at Monterey, California, 450 miles north of San Diego.

The Haystack Rock (Oregon) Western Gulls were banded July 8 and 16, 1938 by Reed Ferris. On August 25 Mr. Ferris saw about

75 immature Westerns on the beach near Haystack Rock, about half of them banded with the Haystack combination B-RS. October 25 a bird was recorded at the mouth of Mad River, Humboldt County, California, about 300 miles south of Haystack Rock. January 5, 1939, a bird was recorded near Seattle, Washington (about 200 miles north-east of Haystack Rock). On December 1, 1938, a bird was recorded at Monterey, California (about 600 miles south of Haystack Rock). On January 9, 1939, at Monterey, California, a bird was twice seen in the same large flock of immature Western Gulls which contained an RSR- Coronado bird.

Thus while some of the young Western Gulls of these two colonies have remained "in residence" near the islands where they were raised, others have scattered widely in mixed flocks up and down the Pacific Coast.

The reliability of the records used above can be established by giving details as to their source. The first San Pedro record was made by Mr. C. V. Duff, a Los Angeles bander, while leading an Audubon Society group, all of whom saw the bird; the second San Pedro record was made by a Los Angeles Audubon Society group, led by Mrs. O. M. Stultz, President. The San Diego record in January was made by a city garbage collector who captured the gull in a garbage hopper and took down the number. The three Monterey records were made by Mr. Laidlaw Williams, a Carmel bander, and well known to western ornithologists for the accuracy of his field observations. The Humboldt County record came from Mr. James Byers of San Francisco, who reported to the Biological Survey that he had observed while fishing "... a banded sea gull. The bands were below the knee joint and were red on the left and blue on the right." The Seattle record was obtained by Mr. F. C. Gaitsick on the Steamship *Missouri*. He observed while on board his ship there in Puget Sound near Seattle, a gull with a red and white band on its left leg and a blue band on its right leg and reported this to Mr. Webster H. Ransome, U. S. Game Management Agent at Seattle.

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