

An Experiment in Staining California Gulls.—While teaching in the Glendale High School of Glendale, California, in the spring of 1930, the writer noticed a flock of about forty California Gulls (*Larus californicus*) that often appeared on the school grounds in the middle of the morning and remained until mid-afternoon. These birds, of various ages, perched on the roof, flew about, and came on the ground to eat scraps left over from the students' lunches.

The problem at once presented itself: How far do these individual gulls range from Glendale and do the same birds return day after day? The writer had studied similar problems with several species of land birds at Stanford University, by staining the feathers distinctive colors, and he hoped to find the answer to the above questions by following the same method with the gulls. The stain would show very clearly on the white feathers, and as Glendale is in the heart of the Los Angeles area it seemed reasonable to suppose that many observations of the marked birds would be reported.

The California Gull is hard to capture and in fact only one was reported by the Biological Survey as being banded the previous year. After various unsuccessful attempts to trap these birds the writer succeeded late in the season with a drop trap, six feet square and three feet high, worked by a pull-string from a nearby window. The gulls ordinarily were very tame, but when the trap was set and baited they became wary and it was over a week before the first gull was secured.

Eleven gulls were captured from May 8 to May 16, 1930. They were banded with the numbers 530551-62 (omitting -60). In addition, the feathers on the breast and under the wings were stained a bright red with a stain formed by dissolving an artist oil-color (scarlet lake) in carbon-tetrachloride. This stain was developed by Dr. Wilbur K. Butts of Cornell University. (See Butts, Auk, XLIV, 1927, p. 329.) Several large syringe-fuls of the color were applied to each bird.

After being painted the gulls were at once released and flew rather heavily for a short time until the carbon-tetrachloride evaporated and then circled high overhead for several minutes. Then some flew away while others came to rest on the school roof. One remained there for over half an hour and was still there when the writer had to return to his classes. The other gulls on the roof did not molest it.

Four gulls were stained on May 9, at 12:30 p. m., and half an hour later one of them was seen on the roof of the Doran Grade School about three-quarters of a mile from the high school, and on May 16 two red gulls were seen at the Doran school ten minutes after being painted and released. Several teachers made these observations.

Contrary to the writer's expectations large numbers of the stained gulls did not return to the high school grounds. Only one came back. This one was seen perched on the school roof on May 20, at least four days after it was stained. The writer did not see it himself, but it was reported by several reliable students. The last large flock of gulls for the season appeared at the high school on May 20, and the last stragglers had left by June 1. Perhaps more returns would have been secured if this work had been carried on several months earlier.

Although the writer made several trips to localities frequented by gulls and notified the ornithological societies of his work, only two records of stained gulls were reported from outside of Glendale. On May 11, two days after banding, gull 530556 was found dead on the beach at Venice, California (17 miles from Glendale), by Mr. C. G. Vaughn who was unable to ascertain whether the bird had been shot or otherwise injured.

Miss Blanche Vignos saw one of the red gulls on May 18 (at least two days after staining) with other gulls on the water at Westlake Park, Los Angeles, about six miles from Glendale. She states that the stain was conspicuous, that the bird seemed normal, and that the other gulls did not persecute it.

It may be that further reports of stained gulls will even yet reach the writer. Although but few results were secured from this experiment, they show that this method of studying gull movements has possibilities.—JOHN B. PRICE, *Stanford University, California, January 5, 1931.*

Black-necked Stilts Nesting in the Suisun Marshes, California.—The first and only Black-necked Stilt (*Himantopus mexicanus*) which I have observed in the