

FROM FIELD AND STUDY

Returns of Banded California Brown Pelicans.—Early returns of pelicans banded at Anacapa Island, Ventura County, California, in April, 1939, and May, 1940, were reported by me in 1942 in the *Condor* (44:116-121). Since that time eight additional returns have come in as follows, all but the last one banded on May 15, 1940.

How obtained	Date	Place
Shot	"Season, 1942"	4 miles S San Rafael, Calif.
Found injured	May 22, 1944	Emerald Bay, Laguna Beach, Calif.
Found dead	Aug. 22, 1944	Near Ferndale, Calif.
Shot	Jan. 1, 1945	About 4 km. from mouth of Rio Acaponeta, Nayarit, Mexico
Found	April 30, 1945	Ensenada, Baja Calif., Mexico
Dead on beach	Nov. 4, 1945	Santa Cruz, Calif.
Caught on fish hook	About April 1, 1947	Huntington Beach, Calif.
Found dead	Jan. 4, 1946	Between Coronado and Imperial Beach, Calif.

Thus 8 (7.62 per cent) of the 105 nestings banded on April 16, 1939, and 63 (14.00 per cent) of the 450 banded on May 15, 1940, have been returned. The localities reported are all within the range established by the early returns. The oldest birds so far heard from are the last two listed here: 6 years and about 11 months, and 6 years and about 9 months, respectively.

The bird found at Ensenada may possibly have been nesting in the vicinity, but the question of whether or not there is any attachment to the natal colony is not answered by these returns.—R. M. BOND, *Soil Conservation Service, Portland, Oregon, December 22, 1947.*

The Starling Appears at Leevining, Mono County, California.—On December 8, 1947, following a snowstorm in the night in the Mono Basin, Mr. Ralph V. Beck, of Leevining, California, reported to the writer the occurrence of several "strange-appearing" birds in his backyard. They fed during the forenoon on breadcrumbs placed on a box about six feet from his office window. Five in number and about the size of a Robin, the dark-colored, profusely light-speckled birds were unlike any he had ever seen. The next day, a flock of about a dozen flew low over the yard. From the description given, I inferred that the birds were Starlings (*Sturnus vulgaris*); on December 10 their reappearance at the improvised feed station while I was at Mr. Beck's residence confirmed this. The Starlings fed eagerly at the station at intervals from 11:30 a.m. to 12:15 p.m., and at one time, while seven fed at or near the station, five more loafed in a "close-ordered" row in the sunlight on a power line a block away. Subsequently the Starlings apparently disappeared, and since have not been seen anywhere in the Mono Basin.

Starlings have previously been reported in California from Tule Lake, Siskiyou County, Death Valley, Inyo County, at Chino, San Bernardino County (see Stager, *Condor*, 49, 1947:169) and in the Colorado River valley (Monson, *Condor*, 50, 1948:45). The occurrence herein reported is believed to be the first for the Mono Basin and Mono County.—ELDEN H. VESTAL, *California Division of Fish and Game, June Lake, Mono County, California, January 6, 1948.*

The Effect of DDT on a Bird Population.—At the sewage disposal plant at Modesto, California, are some 20 acres of settling ponds. From August to April such shorebirds as Least, Western and Spotted sandpipers, phalaropes, Black-necked Stilts, Avocets, Wilson Snipe, Dowitchers, Yellowlegs and Killdeer move in and out of the area. Pipits are often present and usually hundreds of Brewer Blackbirds are there at all seasons. For ten years or more I have used part of this area as a banding station, and for five years or so a mosquito abatement group has been giving the area some attention. Until 1946 the group generally used an oil sprayed on the ponds and applied it with a hand-operated rig, but in 1947 it used DDT and power equipment. In the summer an airplane duster was used until it crashed, whereupon a tank-truck with hundreds of feet of hose took over. About September 15 an intensive campaign with the tank-truck was begun. The area was sprayed about every five days with DDT; treatment covered not only the ponds, but the heavy vegetation about some of them. In addition to that, aerosol fog machines put a cloud over the area about equal to a low tule fog.

At the beginning of this all-out control effort there were from 300 to 400 Least Sandpipers, the usual 40 to 50 Killdeer and 800 to 1000 Brewer Blackbirds feeding in the area. By October 15 the sandpipers had dwindled to 6 or 8 and the Brewer Blackbirds to a couple of dozen. About November 1 Wilson Snipe and Pipits showed up as usual, but few of them stayed and those few did not inhabit the heavily sprayed area, but instead used ponds which were dry at the time of spraying or open ditches of running water. On January 3, 1948, I saw 4 Wilson Snipe instead of the 30 or 40 which are usual at this season; there were no Pipits, which as a rule equal the Wilson Snipe in numbers. There were 10 Least Sandpipers as against the normal 300 to 500. Killdeer and blackbirds were absent whereas there normally are 100 to 300 Red-wings and 500 to 800 Brewers.

The oilings of previous years from the hand-operated sprayers had no visible effect on bird life, but the all-out DDT-aerosol treatment seems to have obliterated insect life in the treated area. Although a flock of seed-eating Lark Sparrows disappeared after the sprayings, White-crowned, Golden-crowned and Lincoln sparrows and other seed eaters which came in afterward are apparently as numerous as in former years. However, there was some rainfall between the last spraying and the appearance of the migrating sparrows. From these observations it is concluded that such mosquito control measures destroy all, or nearly all, the animal life used as food by the birds above the surface, in the water and in the mud of areas which are treated. I saw no dead birds about nor signs of direct harmful effect on them.—IRL ROGERS, *Modesto, California, January 15, 1948.*

A Record of *Tyrannus melancholicus occidentalis* for California.—On October 1, 1947, I was awakened at 6:00 a.m. at my home in Berkeley, California, by the unfamiliar notes of a flycatcher. The bird was perched on a telephone wire, when not darting into the air in characteristic flycatcher fashion. The bird was collected, and subsequent identification by Alden H. Miller proves it to be the tropical kingbird *Tyrannus melancholicus occidentalis*, the first record for the state and the second record north of the Mexican border. Van Rossem (*Condor*, 31, 1929:182) records a specimen taken in Jefferson County, Washington. The normal range of this race is the west coast of Mexico, from Sinaloa southward. The specimen is no. 97666, in the collection of the Museum of Vertebrate Zoology.—WARD C. RUSSELL, *Museum of Vertebrate Zoology, Berkeley, California, January 6, 1948.*

Notes on Behavior of the Turkey Vulture and Prairie Falcon.—On March 31, 1942, Mr. Leland Brown and I spent the day in the piñon-juniper association of Pipes Canyon on the desert side of the San Bernardino Mountains, California. About 3:30 in the afternoon while we were sitting in camp we heard a strange, loud, swishing noise which came from the opposite side of the canyon. Jumping to our feet to see what was happening we saw two Turkey Vultures (*Cathartes aura*) falling earthward just above the edge of the embankment. Our first impression was that they were fighting but soon we saw that one bird was astride the other and that the upper bird held on to the head of the lower with its beak. The noise we heard may have been made by the beating of the male's huge wings as he attempted to get hold of the other bird. As the paired birds fell downward they struck a small ledge; then while still fluttering their wings they fell farther down the stone-covered slope some thirty feet before reaching a landing on a small ledge. As the boulders, gravel and clay which the birds loosened plunged downward, there was caused no inconsiderable uproar and not a little dust. For a moment the birds remained almost motionless; then the male loosed his hold. With a few leisurely flaps of his broad wings he now rose gracefully and flew away. The female lay dazed and prostrate and with the left wing widely extended downward. After a few moments she flapped the extended wing a few times, pulled herself together, ruffled her feathers, and rose into mid-air. She immediately flew up-canyon. The male meanwhile was soaring high above watching her. Soon he joined her and the two flew westward out of sight.

On March 9, 1947, I visited the Negro Buttes with Edward Hamilton. These buttes are picturesque granitic formations of the southern Mohave Desert a few miles north of the San Bernardino Mountains. Some of the giant rocks rise more than a hundred feet above the plain and offer ideal nesting sites for the larger birds of prey as well as for ravens. About nine o'clock in the morning we heard the clear wild cries of a pair of Prairie Falcons (*Falco mexicanus*) and a few minutes later spied one of the birds, which later proved to be the female, sitting motionless in the sunshine atop a large granite dome. This place, judging from the amount of white fecal streaking on its side, had long been used as