

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

a lookout station by birds of prey. The bird's cries suddenly became more spirited and frequent. A few seconds later we saw another falcon wheeling in toward her. It was soon evident that this was the male. Without any preliminary display by either bird, other than the crouching of the female, the male sailed gracefully down and mounted her; coitus immediately followed. During the coital act the wings of both birds were high upraised and rapidly and excitedly fluttered. Copulation lasted about ten seconds. Then the male dismounted and flew away, leaving the female perched on the rock. There she remained for more than half an hour with scarcely a motion. From time to time we heard her cries but the male did not return—EDMUND C. JAEGER, *Riverside College, Riverside, California, November 30, 1947.*

Winter Occurrence of the Harlequin Duck in the Sacramento Valley.—On January 4, 1948, in the late morning, while driving through the Sacramento National Wildlife Refuge, Glenn County, California, I saw a small flock of ducks take to the air and fly over the road about 25 feet in front of the car. This group consisted mostly of Mallards and Baldpates with a few Pintails intermixed. A single duck, flying somewhat apart from the main group and nearest to the car was immediately identified as a male Harlequin Duck (*Histrionicus histrionicus*). I followed this bird for several seconds, until he landed in an adjacent pond and was obscured by the glare of the sun. According to Grinnell and Miller's "Distributional List of the Birds of California" (Pacific Coast Avifauna No. 27, 1944:87), the Harlequin Duck breeds in the central Sierra Nevada and winters on the central California coast, and although this duck must pass between these two areas, no record from the intervening Sacramento Valley has been reported.—PAUL A. DEHNEL, *Museum of Vertebrate Zoology, Berkeley, California, January 9, 1948.*

White Pelican and Ring-necked Duck in Humboldt County, California.—On the morning of September 11, 1947, three White Pelicans (*Pelecanus erythrorhynchos*) were noted flying over the edge of the northern arm of Humboldt Bay, California. On the afternoon of the same date, the three were again noted high up over the Samoa Channel of Humboldt Bay. On the morning of September 14, 1947, a single one flew over Eureka and the Eureka Channel of the bay.

A single Ring-necked Duck (*Nyroca collaris*) was closely observed at Big Lagoon, Humboldt County, California. The bird, a male, was swimming and diving parallel to the highway bridge which spans the lagoon. Although there was considerable traffic on the bridge, and the observer hung over the rail, the bird appeared undisturbed and remained within fifteen to twenty feet of the bridge.

Both these species are recorded from many parts of the state of California, but there seem to be no data on them from this northern coastal region.—ROBERT R. TALMADGE, *Eureka, California, December 17, 1947.*

Behavior of the Gila Woodpecker, Ruby-crowned Kinglet, and Broad-tailed Hummingbird.—When parent Gila Woodpeckers (*Centurus uropygialis*) virtually gorged their young with thick, granulated honey that was placed in a saucer on a sycamore stump, I thinned the honey to the consistency of syrup. Not so easily scooped, the liquid was fed by the male parent in a clever manner. He gouged pea-sized lumps of bark from the stump, dipped them in the syrup, and gave the honey-coated pellets to his fledglings. He repeated this trick for many days, sometimes varying it by using grains or sunflower seeds which were in a hollow of the same stump. This was observed in the first half of July, 1947, at my home, 2 miles south of Globe, Arizona, at 3700 feet.

On January 6, 1947, a Ruby-crowned Kinglet (*Regulus calendula*) twitched about on a branch, so near that I glimpsed his white eye-ring and scarlet topknot. Suddenly he hovered over a flowering shrub amid a swarm of bees. Without alighting, he caught a bee in his bill, darted back to the tree, and with a quick flip of his head swallowed the bee entire. After repeating this stunt three times, he flew to a shallow, water-filled metate and took a bath.

While rain was falling gently on August 6, I spied a Broad-tailed Hummingbird (*Selasphorus platycercus*) in a cypress by my window, taking a shower bath with much fluttering and preening. When the rain came faster he edged toward the center of the tree, clamped his feet to a branch, and braced his body against the trunk. For a few minutes there was a deluge—a cascade such as is purposely braved by some hummingbirds. The bird now straightened up his body and pointed his beak