

Lake County, California, by an assistant in the Department of Ornithology of the Academy, on April 30, 1919. Evidently the bird was not critically examined at the time, or note would have been made of its peculiar marking. The fact that I have examined hundreds of birds of this species, as museum specimens, in field collecting and in banding operations, without having before noted an adult that did not have at least a little yellow on the head, makes it seem as if such cases as the two just mentioned are worth recording.—JOSEPH MAILLIARD, *California Academy of Sciences, San Francisco, California, October 31, 1928.*

Some Observations on the Feeding Habits of the Burrowing Owl.—Since early childhood the sight of one or more Burrowing Owls (*Speotyto cunicularia hypugaea*), suspended on fluttering wings in silhouette against the sunset sky of early summer evenings, has been a familiar sight to me. Sometimes, at a considerable elevation above the ground, they hover thus for some time, perhaps dropping to a lower level to hover again before the final descent to capture the prey observed from their vantage points. I have also known for years that, when the young are nearly full grown and are making great demands on the parents for food, the adults do considerable hunting in broad daylight.

Late in June, 1927, I had an opportunity to observe the daylight hunting of one parent of a hungry brood. Each week-day, about noon, I stopped to eat my lunch near a burrow inhabited by six nearly full-grown young. This burrow, the remodeled tenement of a ground squirrel, was on a small rise of ground at the edge of an alkali flat; and the mound of earth scratched out of it sloped down to this flat and was clear of weeds on the side toward me. The young owls were usually in a compact group on the highest part of the mound, while the adult, only one parent being observed, had several lookout stations, the nearest one being the top of a pile of baling wire and other junk on the alkali flat, and the others were fence posts at various distances from the burrow.

The usual program was as follows: The adult, frequently looking skyward, sighted some flying insect passing over, launched out in pursuit, climbing rather laboriously upward at a sharp angle and sometimes spirally, often to a height of 150 feet or more, and on overtaking the flying prey seized it with one foot. Then came a pause during which the prey was transferred to the beak, then a long glide, on set wings, directly to the nest. The young, on seeing the adult coming with food, rushed down the slope toward it, and then turned and rushed back as the adult passed over their heads to alight on the highest point of the mound. Then came a scuffle that would have done credit to a football game. However, actual possession of the coveted morsel seemed to be respected, and the lucky youngster was allowed to devour it at leisure. After a brief pause the adult returned to a vantage point to watch for more game.

This performance was observed many times, over a period of two weeks or more, with only slight variations in the sequence of events. The young are quite good runners and sometimes use their partly feathered wings to help them along. On one occasion the adult was seen to stop and feed a young one that had wandered about twenty feet from the burrow, and, after doing so, the old bird flew on to the mound before returning to the lookout. Once the adult flew at, and scolded, a ground squirrel that ventured too near the burrow; and several times it was itself annoyed by a California Shrike while on lookout. Once the adult seemed to miss the prey it was after, and an alarm note was sounded as it flew toward the burrow, whereupon the young did not rush to meet it as usual but dived into the burrow. No cause for this alarm could be seen.

During June, 1928, I had further opportunity to observe this method of hunting. A brood of four young in the same neighborhood was watched and more distant observations made of several other families in the same pasture. In this case both parents were engaged in feeding the young. The first case of "flycatching" was observed on June 9, and it continued until about the end of the month, when the young were scattered and learning to hunt their own prey. There was more variation, with this pair of birds, in the observation points used and in the technique of hunting: They were observed sometimes to transfer the prey to the beak while in the

air, and sometimes to retain it in the claws until the nest mound was reached when it was transferred to the beak before it was given to the young. These young did not seem so eager for the food, probably because in this case two adults provided for four young, instead of one adult providing for six young; but they were ever on the alert and would show by their actions that they could distinguish between the flights after prey and the occasional shifting of the adults from one vantage point to another. These adults sometimes captured prey on the ground as well as in the air. As the young grew older and learned to fly they sometimes flew toward and intercepted the adult before the burrow was reached; this was successful only in cases where the adult flew close to the ground after making a low, or a ground, capture. The adults sometimes ate the prey themselves, and in this case it was sometimes held up to the beak with one foot while the bird stood on its perch.

On one occasion a weasel appeared, crossing the pasture, and was immediately assaulted by the owls. The young were flying quite well at this time and they joined in the attack, hovering over the scurrying weasel and swooping at it from behind with extended claws. The weasel paused and faced them at times and then hurried on; I could not be sure that they actually struck him, but they came close enough to do so. Birds from other families joined the fun, and at one time there were ten owls in the air together. The weasel was escorted about one hundred yards before the chase was abandoned.

Even with the aid of 8-power binoculars I was unable to determine the nature of the winged prey, except that it consisted of insects of some kind. Examination of pellets from the burrow and various lookout stations showed them to be composed of the bones and fur of small mammals, legs and wing cases of several kinds of beetles, mandibles of Jerusalem crickets, and more or less sand and vegetable fibers; and of this assortment, the beetles seemed the only ones likely to be captured in the air. The remains of several crayfish were also found in the vicinity.—JOHN MCB. ROBERTSON, Buena Park, California, December 2, 1928.

EDITORIAL NOTES AND NEWS

FOURTH ANNUAL MEETING OF THE COOPER ORNITHOLOGICAL CLUB.—The widespread personal satisfaction and the stimulus to the cause that have resulted from the past three Annual Meetings of the Cooper Club have lead to the decision to hold a fourth meeting the coming spring. Informal conferences among certain members have resulted in the decision by Loye Miller, President of the Board of Governors, to hold this year's meeting in the San Francisco Bay region, on the dates May 17 to 19. The present notice may, therefore, be considered as a preliminary announcement, and further notices with respect to exact places for the meetings and nature of the program will be sent out in due time, through THE CONDOR or otherwise. President Miller has appointed the following committeemen, under the general chairmanship of Tracy I. Storer: program, H. S. Swarth; finance, J. Grinnell; hospitality, C. B. Las-

treto; halls, cinema facilities, etc., Alden Miller; printing and publicity, T. I. Storer. There are planned, in addition to the scientific programs, a dinner for Club members and their guests, local field trips and, probably, an exhibition of ornithological pictures. Call is now made upon each member of the Club, wheresoever located, to plan to attend in person, and to submit to Mr. Swarth title of such contribution to the program as he will find himself ready to present. It is none too early to begin arrangements for the occasion.

A retired business man, Mr. William H. Hoffstot, 14 East 55th Street Terrace, Kansas City, Missouri, has adopted as his hobby furtherance of popular activity in attracting wild birds. He has compiled, at his own expense, an explicit set of directions as to "How to Build a Bluebird House." Anyone applying to him, send-