

prenasal region and weaker in general appearance. The fossil closely resembles *S. passerina* in these respects and is now referred to that species. The specimen is U. C. Mus. Vert. Paleo. no. 34745.

The specimens previously described have also been catalogued. Their numbers are: *Spinus pinus* 34741; *Spinus tristis* 34742; *Amphispiza bilineata* 34743; *Amphispiza belli* 34744; *Spinus* sp. 34746.—CHARLES G. SIBLEY, *Museum of Vertebrate Zoology, Berkeley, California, August 17, 1939.*

The Brown Thrasher in New Mexico.—On November 24, 1938, Mr. Lawrence V. Compton and I observed a Brown Thrasher (*Toxostoma rufum*) in a thicket along the Rio Grande, four miles north of Albuquerque, New Mexico. The bird was wary and remained in the heaviest cover. Later the same day we returned to the site and collected the bird which proved to be an adult male. Dr. Joseph Grinnell identified the specimen as belonging to the western race, *longicauda*, which race has been resuscitated by Oberholser in his recent book, "The Bird Life of Louisiana." The specimen, bearing field number A.E.B. 6087, has been deposited in the Museum of Vertebrate Zoology, Berkeley, California, and furnishes the first record of this species in New Mexico.—ADREY E. BORELL, *Soil Conservation Service, Albuquerque, New Mexico, September 5, 1939.*

Nesting Habits of the Red-breasted Nuthatch.—On the morning of May 13, 1939, while on a bird walk near the Clark Fork of the Stanislaus River at an elevation of 5500 feet, Tuolumne County, my attention was attracted by a persistent pounding, which, after a few moments, I traced to a hole in a dead red fir stub where a Red-breasted Nuthatch (*Sitta canadensis*) was busily building its nest. The bird seemed not to mind my presence at all, but pounded away inside the cavity, appearing periodically at the entrance to throw out bill-fulls of chips. The chips were so fine that they blew away in the wind like sawdust. Once, after pounding, the nuthatch appeared at the entrance hole eleven times, and each time threw out sawdust. The nest tree was in an open forest, with yellow pines, red firs, and incense cedars predominating. The nest was only about fifteen feet above the ground and the entrance faced east; the entire circumference of the hole was liberally smeared with pitch.

Due to an unseasonable rainy spell, it was five days before I returned to the nest, but on May 18 I found both birds at the nest at 8 a.m. The male was uttering scolding notes, like those of a Bewick Wren, and his feathers were so ruffled that he looked as if he had just taken a bath and had preened them vigorously. Actually, this was not the case, for I saw him in a similar condition repeatedly. Construction was still in progress. When the male came to the entrance to scold, or to throw out chips, he braced himself with one foot on either rim of the entrance hole, head downward, in typical nuthatch posture. Often he called from a tiny twig just above the entrance hole, filling the air with his nasal honking. When thus perched, he sat very erect, lifting the head and depressing the tail in the manner of a singing sparrow. The female, for the most part, remained silent and out of sight.

On May 31, the male was still throwing out very small puffs of sawdust, hopping in and out of the nest, scolding and ruffling his feathers, but I never once saw the female actually at work on the nest. She seldom appeared and when she did, she remained silent.

Due to the location and nature of the nest, I was unable to ascertain when the eggs were deposited, how many eggs the female laid, or the exact date on which incubation began. However, by June 6 the female definitely was incubating and I made detailed observations from 8 to 11 a.m. and from 1 to 4 p.m. On June 7, I observed from 11 a.m. to 1 p.m.; on June 8, from 6 to 8 a.m. and on June 19, from 4 to 6 p.m.

From these observations, it was learned that the female alone incubated; she left the nest only during the warmer hours of the day and was fed by the male at other times. The male never fed the female more than three times an hour, and he did not approach the nest without calling, except during the early morning hours when his comings and goings were silent. As he approached, his notes increased in frequency, but he did not bring food with him. He flew either to the nest tree or to some tree close by, called, and then flew off to forage, later to return with his offering.

The female's exits and entrances were so swift and so silent that I had to watch the entrance hole constantly to note them. In the twelve hours of observation she left the nest for periods of 9, 17, 20, 33, and 40 minutes, the longest absence occurring when the nest received the most sunlight (between 10:20 and 11:00 a.m.).

On June 24 I first noted the parent nuthatches feeding young, and on July 5 I observed the activity at the nest for three hours. Both parents entered the nest to feed, whereas the male always fed the female during incubation from outside the nest. Both perched on twigs either on the nest tree or on a nearby tree before flying into the nest and both invariably poked their heads out of the entrance hole immediately after entering. Insects were still in their bills when their heads reappeared. The adults poked their heads out several times during a two or three second period of feeding.

I was unable to ascertain what insects these nuthatches fed their young, but I saw the male bring a long, jointed green worm, a long white worm, and a white-winged insect. One day, as I was attempting to photograph the nest, a Slender-billed Nuthatch (*Sitta carolinensis aculeata*) flew to the entrance hole and peered in, and another day a Douglas squirrel came head-first down the tree and poked his nose inside.

The young nuthatches left the nest on July 7. We then chopped down the fir stub and found that the hole was 6 inches deep and free of lining of any sort. There was a deep layer of fine sawdust on the bottom, however, and again I noticed the liberal coating of pitch around the entire circumference of the hole.—ANITA GUNDERSON, *Dardanelle, Tuohumne County, California, August 4, 1939.*

Some "Butcher-bird" Activities of the California Shrike.—The California Shrike (*Lanius ludovicianus gambeli*) is known in my vicinity as a canary killer. A caged canary placed out of doors on the porch for sunshine and air is an invitation to our numerous butcher-birds to "come and get it."

Some types of banding traps offer similar opportunities to shrikes. I have observed on several occasions that my W.B.B.A. two-compartment trap has received the attention of butcher-birds. Not always, however, will the object of the shrike's attention become victimized. A shrike may simply look in interestedly on a trapped bird from alongside or from the top of the trap, causing intense freight to its occupant.

A few specific instances occurring in Benicia, California, show that shrikes are attracted to birds in banding traps. On October 24, 1932, I caught a shrike in one compartment of a trap while a Nuttall Sparrow (*Zonotrichia leucophrys nuttalli*) was in the other compartment. On November 1, 1936, I caught a shrike in one section while a Golden-crowned Sparrow (*Zonotrichia coronata*) was the occupant of the other section. On January 21, 1937, a shrike killed a Nuttall Sparrow through the

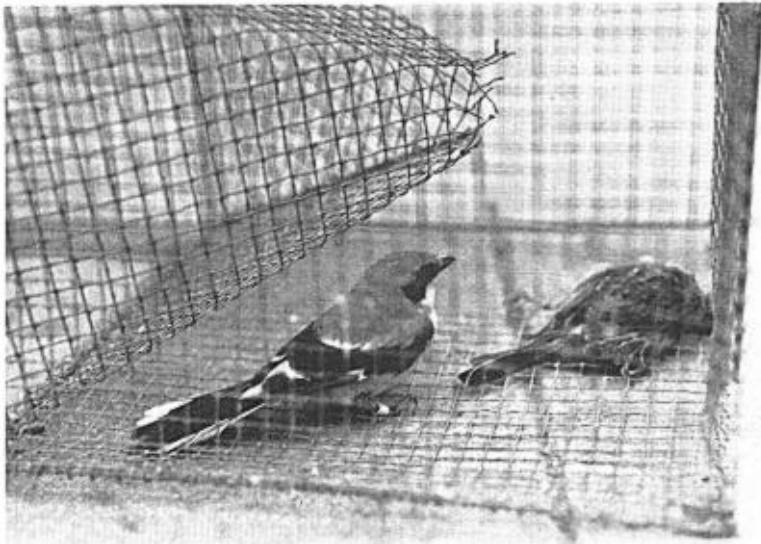


Fig. 54. California Shrike in banding trap with its victim, a Golden-crowned Sparrow; March 27, 1939, Benicia, California.

bars of a trap, and in an endeavor to get the bird out of the cage, the shrike was captured in the adjoining compartment. This season I added a government sparrow trap to my banding equipment into which on March 27, 1939, a California Shrike entered and killed a Golden-crowned Sparrow (fig. 54).

Although a bird lover dislikes this killing of visitors to his traps, I have to date banded and released these avian butchers.—EMERSON A. STONER, *Benicia, California, August 21, 1939.*