

The Polynesian Tattler on St. Lawrence Island.<sup>1</sup>—The United States National Museum has recently received seven specimens of shore-birds from St. Lawrence Island, all collected in June and July, 1932, by Paul Silook, an Eskimo resident of the island. Among them is a fine specimen of the Polynesian Tattler, *Heteroscelus brevipes* (Vieillot), taken in July (no exact date given on the label). The bird, which is unfortunately unsexed, is in quite fresh plumage. This species has been recorded hitherto from only one locality in North America, St. Paul Island, Pribilof Islands, where three specimens have been taken, each at a different time, but all in the months of September and October.—HERBERT FRIEDMANN, *United States National Museum, Washington, D. C., December 15, 1932.*

The Inner Abdominal Feather Region in Brooding Woodpeckers.—In his paper on the pterylography of woodpeckers, Burt (Univ. Calif. Publ. Zool., 30, 1929, p. 435) described a row of feathers lying on either side of the midventral line medial to the principal abdominal tract. This row he named the inner abdominal region in contradistinction to the main or outer abdominal region. While occupied with the preparation of study skins of Hairy Woodpeckers, *Dryobates villosus*, at Ochoco Ranger Station, Crook County, Oregon, in June, 1932, I noticed that breeding adults had lost the feathers of this inner abdominal region in conjunction with the development of a brooding area on the belly. The entire area between the two outer abdominal regions was highly vascularized and entirely nude. Since it is not usual for birds to drop contour feathers to provide a specialized brood patch, I was led to study more closely the nature of the feathers of this inner region.

Burt described the feathers of the region in question as downy in character. Ordinarily, typical down feathers are not represented with any great completeness in pterylographic drawings, since they usually are indefinite in their arrangements, at least in Picidae and Passeriformes. The marked regularity of the downy inner abdominal feathers was evidently the factor that led, justifiably, to the recognition of the row as a distinct region. Closer examination of these feathers shows that they are intermediate between typical downs and contour feathers. Samples plucked from an alcoholic specimen of an Arctic Three-toed Woodpecker, *Picooides arcticus*, possess a definite shaft extending through the proximal half of the feather, well beyond the superior umbilicus; the distal barbs form a loose vane resembling in coloration and texture the contour feathers of the outer abdominal region. In their incomplete shaft and in their abundance of non-cohesive barbs basally they are similar to downs. True downs from this part of the belly of a representative passerine species such as the Oregon Junco, *Junco oreganus*, are essentially without a rachis, have very short quills, and show no cohesion of the distal barbs. Not uncommonly in the juncos, and in some other sparrows, I have observed that the downs tend to form an irregular longitudinal row that is extremely suggestive of the more definite row of larger feathers in the woodpeckers. The downs of the bellies of passerines are, of course, lost in the development of a brood patch.

In two Hairy Woodpeckers, numbers 61360 and 61361, Mus. Vert. Zool., taken June 21, 1932, at Ochoco Ranger Station, new feathers of the inner abdominal row were growing coincident with the replacement of the innermost primaries. No other feathers of the body, wing or tail were molting at this time. Similar coincidence of appearance of new inner abdominal feathers with the earliest phase of the annual molt was noted in Lewis Woodpeckers (*Asyndesmus lewisi*) and Arctic Three-toed Woodpeckers during July, 1932. Since in these woodpeckers both sexes develop brood patches, the method of replacement in the two sexes was the same. Juncos, for example, do not grow downs on the old brood patch until the ensuing annual molt is well advanced and adjacent contour feathers are partly molted. Germs of the inner abdominal feathers of woodpeckers, then, after a prolonged dormancy following the shedding at the time of brooding, begin growth of new feathers with the first surge of molting activity that follows the nesting season. The woodpeckers that were growing new inner abdominal feathers were in most cases still feeding young outside the nest.

To summarize, the inner abdominal region is composed of a row of feathers intermediate structurally between typical downs and contour feathers. In the definite

<sup>1</sup> Published by permission of the Secretary of the Smithsonian Institution.

arrangement of the feathers, the region resembles a division of the ventral tract of contour feathers. The homology with feathers of a downy type found on the bellies of passerines is strongly suggested by similarity of position and arrangement, and by the fact that they are lost during brooding. In the matter of time of replacement after brooding, the inner abdominal feathers do not correspond with the annual molt of nearby contour feathers of the belly. They are much more prompt in their re-appearance than are the downs of the bellies of passerines.—ALDEN H. MILLER, *Museum of Vertebrate Zoology, Berkeley, California, January 8, 1933.*

**Nesting of the Crissal Thrasher in Coachella Valley, California.**—A trip was made to the Coachella Valley, Riverside County, on February 12, 1933, in company with Fred Frazer and Rex Parker to see if we could make spring seem nearer by finding some birds busy with nest building. Our quest was rewarded by the finding of three nests of the Crissal Thrasher (*Toxostoma dorsale dorsale*), two of them containing two much incubated eggs each and the third, two eggs and one newly hatched young. The eggs in the latter nest were unquestionably deposited in January and constitute an early nesting date for California. The earliest previous record by me was February 28.

The shallow nests of the Crissal Thrasher are almost invariably placed in mesquite trees or salt bushes and I believe I have never seen one in a cactus. Probably ninety-nine per cent of the large deep nests of the Leconte Thrasher (*Toxostoma lecontei lecontei*) which I have observed have been in cacti.

My records indicate that two or three eggs usually make a complete clutch for the Crissal Thrasher; out of seventy-six nests containing either complete sets or young, I found that forty contained two, thirty-four contained three, and only two contained four eggs. The number in a complete clutch seems to vary from year to year. An examination made in March, 1931, showed twelve nests with two eggs and three with three eggs, while in the corresponding month of last year, in the same locality, there were two nests with two, ten nests with three, and one nest with four eggs.

I have never observed an egg with shell markings. The average weight of over one hundred fresh eggs was 5.05 grams. The sets including the largest and the smallest eggs contained but two eggs each while a set of four had the second largest eggs. The combined weight of the set of four large eggs was 178 per cent greater than of the set containing the two small eggs. The weights (in grams) of the individual eggs in these three sets follow: No. 4049, 5.94, 5.84; no. 1707, 4.09, 4.02; no. 2615, 5.82, 5.75, 5.72, 5.26.—WILSON C. HANNA, *Colton, California, February 20, 1933.*

**Bird Notes from Mount Pinos, California.**—During the past thirty or more years the region of Mount Pinos, lying in Ventura and Kern counties, California, has been visited by many collectors and a knowledge of its avifauna has increased constantly. I made two trips to this locality during the summer of 1932 and obtained some notes which may be of interest. These observations were made in the vicinity of San Emigdio public camp, elevation 5900 feet, at the west end of Cuddy Valley, Kern County.

*Sphyrapicus varius daggetti*. Sierra Nevada Red-breasted Sapsucker. Rather uncommon on the mountain. A male seen June 12, 1932, is my only record for the locality.

*Phainopepla nitens lepida*. Phainopepla. I was surprised on June 12, 1932, to notice a male of this species flying about high among the yellow pines and perching in them. This bird was noticed about a quarter of a mile west of the camp at 6200 feet. It evidently was a straggler from the Mohave Desert via Cuddy Valley.

*Myadestes townsendi*. Townsend Solitaire. Has been noticed only once on Mount Pinos during the summer. On June 8, 1929, Seth Benson noticed a pair at 8000 feet and collected an adult male (*Condor*, 32, 1930, p. 102). On August 4, 1932, I observed an adult solitaire in the public camp grounds on the edge of the sage belt. The next day, while watching a small band of Clark Nutcrackers close to camp, I discovered an immature solitaire. This bird, a male, was collected. The Mount Pinos region is probably the westernmost breeding ground for the species in southern California.—JAMES STEVENSON, *Berkeley, California, February 11, 1933.*