The air-line distance from San Jose, California, to Pullman, Washington, is approximately 700 miles. Pullman is more than 150 miles east of the usual route of migration. Jewett, Taylor, Shaw, and Aldrich (Birds of Washington State, 1953:650–651) state that the Golden-crowned Sparrow is a very common spring migrant west of the Cascade Mountains, but eastern Washington is off the main route of migration; in fall the principal mass of migrants apparently moves south along the Cascade Mountains where they seem to prefer the west slope. During several years of netting of *Zonotrichia* in the vicinity of Pullman, only six Golden-crowned Sparrows have been taken, while more than a thousand White-crowned Sparrows were handled. The southernmost known breeding area of the Golden-crowned Sparrow is at Harts Pass in the Cascade Mountains of Okanogan County, Washington (Farner and Buss, Condor, 59, 1957:141).

It may be noted that the two birds escaped four to six weeks prior to the time their flock mates at San Jose started their northward migration. "*Zugunruhe,*" or migratory restlessness, in the birds caged at Pullman, began to develop about April 10 and became well marked about April 27.—L. Richard Mewaldt, *Department of Biological Sciences, San Jose State College, San Jose, California,* and Donald S. Farner, *Laboratories of Zoophysiology, The State College of Washington, Pullman, Washington, January 25, 1957.*

The Cattle Egret in Jamaica, British West Indies.—On a visit to the Bodles livestock experiment station in Jamaica on November 21, 1956, more than 20 Cattle Egrets were seen feeding, in typical fashion, among the steers on an experimental pasture. Bodles is on the low-lying plain on the south side of Jamaica, not far from the town of May Pen. The elevation is estimated at about 50 feet.

Dr. T. P. Lecky, of the Jamaican Department of Agriculture, who was showing us the station, remarked that the birds had appeared about 10 days previous, and that he had never before seen white herons feeding in among the cattle in this fashion. He and Mr. Tom J. Jackson of St. Croix, who were familiar with the white immature Little Blue Heron, were quick to see the difference in heaviness of head and neck and in leg color when these were pointed out.

This sight record is offered because I am thoroughly familiar with the birds in St. Croix, and because I regard it as serving to fill in the range rather than to extend it; the species has been collected in Cuba (Sprunt, Bull. Mass. Audubon Soc., 40, 1956:65–69) and the Virgin Islands (Seaman, Wilson Bull., 67, 1955:304–305), and it is common in Puerto Rico (letter from James Bond to G. A. Seaman, March 4, 1955).—R. M. Bond, *Kingshill, St. Croix, U. S. Virgin Islands, December 3, 1956.*

Precocial Strutting in Sage Grouse.—The annual strutting display by male Sage Grouse (*Centrocercus urophasianus*) in March and April provides game managers with a handy and apparently reliable index to population trends. During the past three years of management-research investigations I have spent 75 early morning periods observing these activities on more than 120 different strutting grounds.

Therefore, it was with considerable surprise that I observed the unmistakable strutting display by a Sage Grouse that was estimated to be about eight weeks old. This incident occurred just after sunrise, along Chicken Creek, 6460 feet elevation, on Sunflower Flat, 11 miles southeast of Mountain City, Elko County, Nevada, on July 14, 1956. The bird was one of a group of about 10 young birds and 4 adult hens.

All phases of the strutting display were observed, including the fanned tail, the three or four shuffling steps forward, the forward wing thrust, and even an attempted pumping of non-existent air sacs. The display was directed toward an adult hen and the whole episode lasted about 15 or 20 seconds, with no observed preliminary or subsequent display.

This precocial behavior of this very young Sage Grouse is particularly interesting when one recalls that immatures of the species are still very inept at strutting when about 10 months old. Apparently they do not regularly participate in this courtship display until their second year (Patterson, The Sage Grouse in Wyoming, 1952:143).—Gordon W. Gullion, *Nevada Fish and Game Commission, Austin, Nevada, January 7, 1957.*

Some Additions to Nesting Data on Panamanian Birds.—In 1956 I found nests of four species of birds in the Province of Chiriquí, Panamá, which provide evidence that extends the known breeding season of these forms.

Amazilia edward niveoventer. Snowy-breasted Hummingbird. A new cup-shaped nest of this species was located in a small tree eight feet from the ground on March 14 about 4500 feet above sea level outside of the village of Volcán. The measurements were: outside diameter, 48 mm.; outside depth, 45; inside diameter, 22; inside depth, 24. The outside was decorated with moss and red and greenish lichens. The body and lining were composed of fine brown plant fibers. The bird was collected. Skutch, without describing the nest, gives dates for this species for November and December (Ibis, 1950:202) in Costa Rica.

Fig. 1. Nest holes of Streak-breasted Tree-hunter (*Thripadectes rufobrunneus*), near village of Volcán, Panamá, March 1, 1956.

Lampornis castaneoventris. White-throated Mountain-gem. A nest of this species was found on February 16, at 6800 feet on Mount Copete above the village of Boquete. This nest was in a bush next to a trail overlooking a considerable drop into a valley. It contained two very small young. The dimensions were: outside diameter, 59 mm.; outside depth, 59; inside diameter, 27; inside depth, 20. A large amount of moss made up the outside and there were very few lichens on the upper part of one side. The inner body and lining were composed of fine brown plant fibers. The female bird was collected. Skutch mentions nesting in January, February, April and July (Ibis, 1900:200) for this species but he was concerned with a different race and he did not describe the nest.

Selasphorus scintilla. Scintillant Hummingbird. A deep cup-shaped nest of this species was obtained at 7000 feet above sea level on Mount Copete on February 10. It was located on a knoll in a bush about 5 feet high surrounded by other bushes and trees. The dimensions were: outside diameter, 43 mm.; outside depth, 55; inside diameter, 18; inside depth, 15 to 18. The nest was composed of fine downy white fibers which also served as a lining. The outside was plastered with lichens and some moss. One fresh egg was found in the nest. The female was collected. Blake described the nest and eggs of this species collected in the same area in November and December (Condor, 58, 1956:386–387).

Thripadectes rufobrunneus. Streak-breasted Tree-hunter. On March 1, 1956, nest holes (fig. 1) of this species were discovered in a cut made by a logging road on the side of a forested hill about 4500 feet above sea level outside of the village of Volcán. There were two holes twelve inches apart and seven feet above the road in soft volcanic soil. Each hole was four inches wide by three and one-

half inches high. The tunnel on the right containing the nest was twenty-six inches long, being expanded at the rear to a chamber six inches in diameter in which a thick nest of rootlets (fig. 2) had been placed. The latter contained two, much incubated pure white eggs measuring 20.30×31.34 mm. and 20.80×30.80. Four days before the nest hole was investigated, the male bird flew out of the nest hole and was collected. Just before the nest was uncovered four days later, the female was watched for a short time. It was first seen as it flew into the hole. In six minutes it came to the entrance. After a few minutes there, it left to return to a nearby branch a little later.

Fig. 2. Nest and eggs of Streak-breasted Tree-hunter (*Thripadectes rufobrunneus*) removed from tunnel.

The left hand hole was about ten inches deep and had no enlargement. It may have been a "trial" hole. Whether it was used for roosting was not learned.

Worth described the nest and eggs of this species taken on August 4 near Boquete (Auk, 56, 1939:306). Underwood collected eggs on May 9 and 28 (Ogilvie-Grant, Cat. Coll. Birds Eggs Brit. Mus., 5, 1912). Worth found his incubating bird to be a male. In our birds, evidently the male had been incubating when the holes were first discovered, while at the second visit the female was incubating. Whether normally the sexes take turn about in incubation we do not know.

Eugene Eisenmann kindly furnished some of the references used in this note.—FRANK A. HARTMAN, *Department of Physiology, Ohio State University, Columbus, Ohio, April 10, 1957.*