appears that vertebrates (particularly rodents and lizards) constitute the staple prey of Gurney's Buzzard during the breeding season in the Chilean Puna.

Acknowledgments.—We appreciate the contribution of Enrique Silva in identifying some prey items, and the critical reading of R. Paynter Jr. and an anonymous reviewer.

LITERATURE CITED

BROWN, L. AND D. AMADON. 1968. Eagles, hawks and falcons of the World. Two volumes. Country Life Books, Felthom, Middlesex, England.

JAKSIĆ, F. M. AND J. E. JIMÉNEZ. 1986. The conservation status of raptors in Chile. Birds Prey Bull. 3:95–104.

JOHNSON, A. W. 1965. The birds of Chile and adjacent regions of Argentina, Bolivia and Peru, I. Platt Establecimientos Gráficos, Buenos Aires, Argentina.

———. 1967. The birds of Chile and adjacent regions of Argentina, Bolivia and Peru, II. Platt Establecimientos Gráficos, Buenos Aires, Argentina.

MARTI, C. D. 1987. Raptor food habits studies. Pp. 67–80 *in* Raptor management techniques manual (B. A. Giron Pendleton, B. A. Millsap, K. W. Cline, and D. M. Bird, eds.). National Wildlife Federation, Washington, D.C.

PAYNTER, R. A. 1988. Ornithological gazetteer of Chile. Cambridge, Massachusetts.

VAURIE, C. 1962. A systematic study of the Red-backed Hawks of South America. Condor 64:277–290.

JAIME E. JIMÉNEZ AND FABIAN M. JAKSIĆ, *Departamento de Ecología, Universidad Católica de Chile, Casilla 114-D, Santiago, Chile.* *Received 4 May 1989, accepted 25 Aug. 1989.*

Wilson Bull., 102(2), 1990, pp. 346–348

Nest, eggs, and young of the Green-and-Gold Tanager, with notes on timing of breeding.—Little or nothing is known of the breeding biology of half of the 50 species of tanagers in the genus Tangara (Isler and Isler, *The Tanagers*, Smithsonian Institution Press, Washington, D.C., 1987). One such species, the Green-and-Gold Tanager (*Tangara schrankii*), is a common bird of the canopy of terra firme rainforest in western Amazonia, from the base of the eastern Andes in s.e. Columbia south to n. Bolivia and s.w. Brazil (Isler and Isler 1987). Isler and Isler (1987) gave a brief description of a nest and eggs of *T. schrankii* found in southeastern Peru by T. S. Schulenberg. Herein, I provide a detailed description of a nest found by myself, the nest found by T. S. Schulenberg, and of a third nest found by Phyllis Isler. To investigate the timing of breeding, gonad data from specimen labels were analyzed.

In 1987, a field party from Louisiana State University Museum of Natural Science conducted an ornithological survey in a previously unexplored area of Peru ca 65 km ENE of Pucallpa, Dpto. Ucayali. On 31 July, I flushed an adult *Tangara schrankii* from an understory sapling 3 m in height in tall rainforest. On the sapling, I found a cup-shaped nest composed of and lined predominately with dried leaves, but also mixed with rootlets and lichens. It was built at the base of a branch 75 cm above the ground and concealed by an overhanging fern frond woven to the sapling. Other live and dead fronds and leaves of a *Philodendron* sp. also concealed the nest. The dimensions of the nest were 12.2 cm from top to bottom, 10.2 cm from outer side to outer side, and 6.6 cm deep. It contained two pale reddish brown eggs densely speckled with darker red. Three days later, both young had hatched. The chicks were sparsely covered in downy feathers and had a whitish gape and a Spectrum Red (Ridgway, *Color Standards and Nomenclature*, Washington D.C., 1912) mouth-lining. The adult (18 g, ovary 10 × 7 mm, oviduct 2 mm wide, and all ova under 1 mm), young and

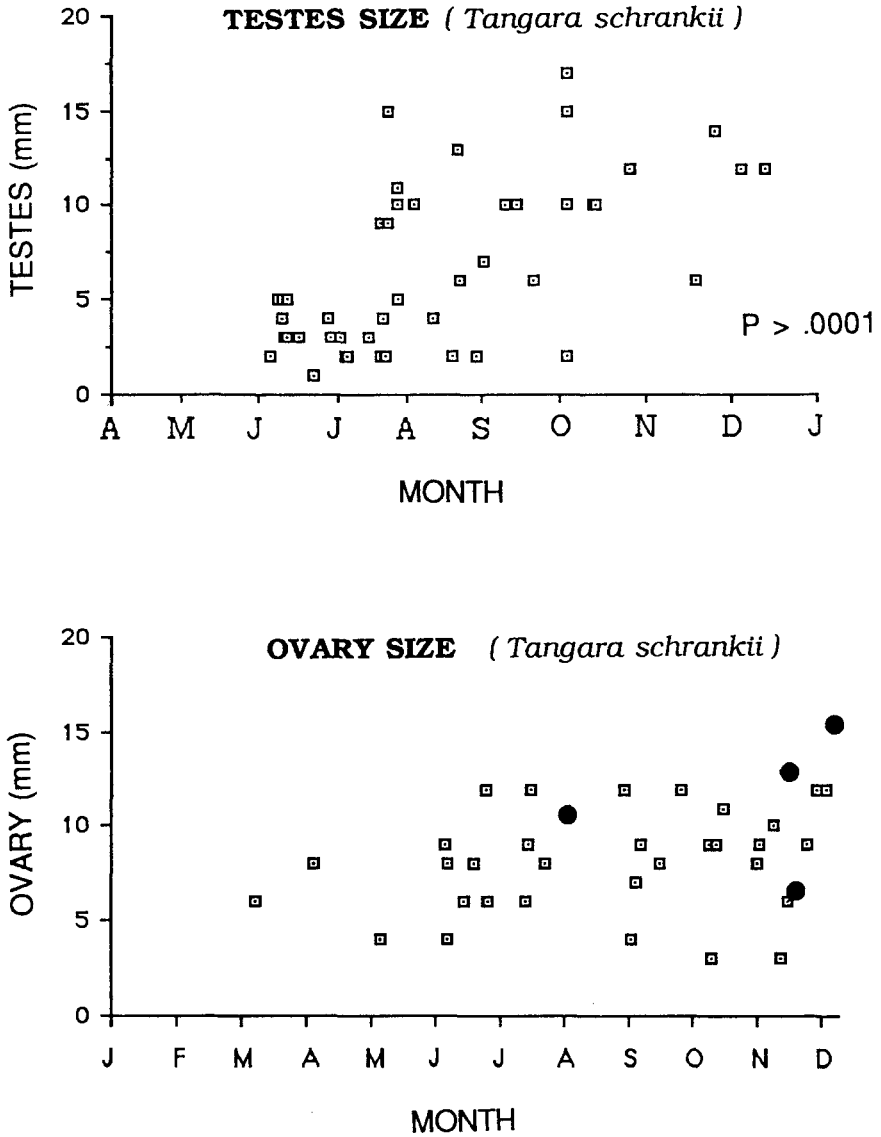

FIG. 1. Gonad data for *Tangara schrankii*. When gonad data were taken from the specimen label, the largest dimension was plotted. If testes were classified on specimen labels as "TM" (testes minute), "TSE" (testes slightly enlarged), or "TE" (testes enlarged), they were placed into "2 mm," "6 mm" and "10 mm" size categories. Ovary data noted on specimen labels with an acronym was not used. Solid circles represent enlarged ova or oviducts.

nest were collected and will be deposited in the Louisiana State Univ. Museum of Natural Science. Unfortunately, due to uncontrollable circumstances, all specimens remain in Peru and no catalog numbers are available at this time. Photographs of the nest and young have been deposited with Vireo (v06/6/001-003). The only other *Tangara* species known to construct a nest almost entirely with dried leaves is the Lesser Antillean Tanager (*T. cucullata*); the majority of known *Tangara* nests consist largely of moss (Isler and Isler 1987).

Schulenberg found a nest (Isler and Isler 1987) at the mouth of the Rio la Torre on the south bank of the Rio Tambopata, Dpto. Madre de Dios, Peru. He flushed an incubating bird on the morning of 3 August (1987) and collected the nest and eggs the following evening; they are deposited at the Museo de Javier Prado, Lima, Peru.

This nest was similar in structure to the first described, being composed mainly of dried leaves, although lined with plant fibers. It was 2 m above the ground at the base of a *Geonoma* palm frond. Fallen leaves trapped by surrounding fronds rendered the structure inconspicuous. The nest contained two eggs, similar in color to those described above; they measured 22 mm × 15 mm and 24.5 mm × 15.5 mm. That nest was 7.0 cm × 4.8 cm deep and across, and the cup measured 6.0 cm × 4.3 cm deep and across.

On 11 October, 1987 in the same general location of the Schulenberg nest, Phyllis Isler (pers. comm.) discovered an adult *Tangara schrankii* building a nest in a small sapling (d.b.h. = 5 cm) that had broken off about 1 m off the ground. The nest, which was being built near the top of the broken stump, was completely concealed by one large leaf of *Philodendron* sp. above and several smaller leaves surrounding it. The nest was built of dead leaves and vines with some additional dead leaves trapped or possibly placed around it for camouflage.

Gonad data were obtained from 116 museum specimens (Fig. 1). Although most are from Peru, a few specimens from Bolivia, Ecuador, and Columbia were included. Unfortunately, most specimens were collected between June and November, and only 6 of the 116 were from December to May. Testes increased in size from early July to early December (Fig. 1). A significant correlation (Spearman-rank, $r = 0.63$, $P = 0.0001$) was found between testis size and date during this period. Females in obvious breeding condition (enlarged ovary) were collected from 31 July to 10 December, although no obvious breeding period stands out.

In the experience of preparators (J. V. Remsen and S. W. Cardiff, unpubl. data) at the L.S.U. Museum of Natural Science, ovary size, the most frequently reported index of reproduction on most specimen labels, is not a particularly good indicator of breeding condition. The size of the largest ovum may be a better measure of reproductive condition. Unfortunately, up until 15 years ago, bird preparators noted female reproductive condition with acronyms such as "ONE," "OE," and "OSE" and others. It is not clear whether the "O" in these acronyms refers to ova or ovary. Interpretations of such label data must, therefore, be made with caution.

Acknowledgments.—Field research was made possible by a National Geographic Society Grant to J. P. O'Neill. I am grateful to the following for providing data from specimen labels: M. Robbins (Academy of Natural Sciences, Philadelphia), B. Stein (Museum of Vertebrate Zoology), D. Willard (Field Museum of Natural History) and L. Kiff (Western Foundation of Vertebrate Zoology), and to J. Bates, M. Foster, M. and P. Isler, K. V. Rosenberg, T. A. Parker III, and J. V. Remsen for assistance with the manuscript. I would also like to thank P. Isler and T. S. Schulenberg for allowing me to report their nest descriptions.

PETER P. MARRA, *Museum of Natural Science, 119 Foster Hall, Louisiana State Univ., Baton Rouge, Louisiana 70803. (Present address: Dept. of Biological Sciences, Dartmouth College, Hanover, New Hampshire 03755).* *Received 27 Feb. 1989, accepted 8 Oct. 1989.*