

the other was a Ross's Goose (*Chen rossii*). The latter bird was crippled by Mr. Daigle on the George Bauer ranch in Jefferson County, between Hamshire and China, Texas.

On January 3, 1954, U. S. Game Management Agent Robert S. Bach checked a hunter on Lissie Prairie near Eagle Lake, Colorado County, Texas, who had bagged a Ross's Goose. State Game Warden Tom Waddell obtained the bird and had it mounted.

Kortright (*The Ducks, Geese and Swans of North America*, 1942, pp. 147-148) lists California as the wintering ground for the Ross's Goose, and so far as I know these are the first records of this species from the Gulf Coast of Texas, although it has been reported from Colorado, Arizona, and Cameron Parish, Louisiana. Other Ross's Geese may have wintered on the Texas coast last year, for our Texas U. S. Game Management Agents received several reports from waterfowl hunters concerning diminutive snow geese. Mr. Daigle donated the crippled birds to the San Antonio Zoo.—RAYMOND J. BULLER, *Assistant Regional Supervisor, Fish and Wildlife Service, P. O. Box 1306, Albuquerque, New Mexico.*

**A Record of the Mexican Crossbill (*Loxia curvirostra stricklandi*) from Fort Worth, Texas.**—Occurrence of any species of crossbill in Fort Worth, Tarrant County, is previously unknown. On May 17, 1954, Sister St. Andrew found a dead Red Crossbill on the grounds of Our Lady of Victory College located in the southern part of the city. Although the ants had slightly eaten the head, I was able to make a study skin of the specimen which proved to be a dull, yellow-colored female. Examination of the body did not reveal any abnormalities, and death was attributed to natural causes.

The skin was forwarded to Allen J. Duvall of the U. S. Fish and Wildlife Service who identified it as the Mexican Crossbill (*Loxia curvirostra stricklandi*). The specimen is now No. 458021 in the U. S. National Museum. Griscom in his Red Crossbill monograph (*Proc. Boston Soc. Nat. Hist.*, **41**, 1937: 135) mentions the occurrence of this race in Texas on the basis of a June sight record of a small flock in the Chisos Mountains. He goes on to state that identification of any race by sight is purely conjectural. So far as known to me, the Fort Worth specimen is the first authentic record of the Mexican Crossbill for the State of Texas.

Sight records of the Red Crossbill were also reported from the Turtle Creek area of Dallas, Dallas County, about 32 miles east of Fort Worth by Mrs. T. E. Winford (*in litt.*). Five birds, reported to be two males and three females, were observed by various members of the Dallas Audubon Society from March 21 to 25. This appears to be the only other report of crossbills in nearby areas for the spring of 1954.

I am sincerely grateful to Allen J. Duvall for his subspecific identification of this specimen.—WARREN M. PULICH, 2720 Frazier Ave., Fort Worth, Texas.

**The Identity of *Pyrrota valeryi* J. and E. Verreaux.**—Zimmer (*Amer. Mus. Novit.*, 1304: 15, 1945) discussed a suggestion made by James Bond (*in litt.*) that this bird, now known as "*Tachyphonus valeryi*," might in reality be the troupial *Lampropsar tanagrinus* and concluded that, pending a critical study of the type and paratype, Bond's suggestion should be followed. On June 14, 1954, I was able to study the type and paratype (catalogue numbers 7829D and 7829F, respectively, in the Museum National d'Histoire Naturelle, Paris) and to compare them directly with examples of *Tachyphonus rufus* and *Lampropsar tanagrinus*. The type and paratype of *Pyrrota valeryi* differ from males of *Tachyphonus rufus* and agree with

specimens of *Lampropsar tanagrinus* in the form of the bill, the details of scutellation of the tarsus, the width of the remiges, the lack of a white shoulder patch, and the more extensive but duller gloss on the body feathers. They are, as Bond suggested, indistinguishable from *Lampropsar*. Therefore, *Pyrrota valeryi* J. and E. Verreaux (Rev. Mag. Zool., ser. 2, 7; 351, 1855) should be placed in the synonymy of *Lampropsar tanagrinus tanagrinus* (Spix).—ROBERT W. STORER, *University of Michigan Museum of Zoology, Ann Arbor, Michigan.*

#### **Suggestions Regarding Alcoholic Specimens and Skeletons of Birds.—**

Dr. Josselyn Van Tyne (1952, Auk, 69: 27–33) recently discussed problems related to the preparation of study skins and emphasized the importance of recording accurate and complete data on the bird-skin label. My work on avian anatomy has made me aware of deficiencies both in the labels and the preservation of specimens in "alcoholic" and in skeleton collections. Wet-preserved specimens require considerable storage space; use of such space is not warranted if the specimens are nearly useless for dissection. Specimens without adequate data serve only part of the use to which they could be put.

The need for spirit collections is great. The complete appendicular myology is known for very few genera of birds. The internal anatomy of most genera, and even of many subfamilies, is unknown. The study of one region in many genera, such as has been made by Beecher on jaw muscles, is dependent almost entirely on spirit collections in the larger museums. An understanding of phylogenetic relationships of the larger taxonomic categories can be had only when the anatomy of those forms is known. Furthermore, it is not enough to know the myological formulae of the leg; the total appendicular myology must be known if one is to understand functional as well as phylogenetic relationships.

Alcohol or formalin are most frequently used to preserve specimens, but each has its disadvantages. There is a need for experimentation with other preservatives in order to learn which will give optimal fixation and preservation. Consideration should be given to the use of a modified embalming fluid (see Woodburne and Lawrence, Anat. Rec., 114, 1952: 507–514). However, phenol slowly decalcifies bone; toluene might prove to be an adequate substitute.

The most important factor in securing adequate preservation, however, probably is the time between collecting the specimen and placing it in the preservative. This interval, especially in the tropics, should be as short as possible. For small birds, one needs only to make a slit in the ventral abdominal wall to permit entrance of the fluid into the body cavity, though use of a detergent may also be desirable to insure penetration through the feathers to the skin. Incisions along the lateral margins of the sternum should be avoided because they cut through the sternal portion of the ribs and the muscles covering them.

Intravenous injection is the best method for insuring rapid and proper preservation, especially for large birds, but this may be impractical in the field. In the absence of this procedure, injection of major muscle masses, the brain, and the orbit is necessary for large birds. The following areas should be injected: breast, arm, thigh, crus, and neck. It may also be desirable to inject the thoracic cavity by passing the hypodermic needle posteriorly along the lateral side of the esophagus. An incision through the abdominal wall should, of course, be made. Incisions in the skin should not be made in any other part of the body.

The specimen should not be skinned nor should the feathers be plucked. Skinning removes or damages dermal muscles; obviously, it is not possible on a plucked bird to determine the relative lengths of primaries, secondaries, rectrices, and alula quills, and the location or absence of the carpal remex and its covert.