

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

AN ANATOMICAL NOTE ON THE GENUS *CHORDEILES*
SWAINSON.

BY ALEX WETMORE.

Mr. F. E. Beddard* in 1886, quoting a manuscript note left by Professor Garrod, stated that the genus *Chordeiles* possesses no gall bladder. Two years later Dr. R. W. Shufeldt† in comparing *Chordeiles* with *Antrostomus* says that "*Antrostomus* possesses a small gall-bladder, while the several species of *Chordeiles* lack this organ." Still later Beddard‡ again stated that *Chordeiles* possesses no gall bladder. Following these authorities Mr. H. C. Oberholser§ used the lack of a gall bladder as one of the minor characters upon which he founded the family Chordeilidæ.

Bearing these statements in mind, I was interested in examining critically such individuals of the genus *Chordeiles* as came into my hands. The dissections made by Garrod and by Shufeldt, recorded above, may have been made upon specimens of nighthawks that were poorly preserved, as on opening a specimen of *Chordeiles virginianus*, killed near the mouth of Bear River, Utah, during the past fall, I found a distinct receptacle for bile developed in the right hepato-enteric duet and later found the same condition in two additional specimens.

As is the case in other related forms the right lobe of the liver is the larger in the nighthawk. On raising this lobe

* On the Syrinx and Other Points in the Anatomy of the Caprimulgidae, P. Z. S., 1886, p. 151.

† Studies of the Macrochires, Morphological and Otherwise, Linn. Jour.-Zool., Vol. XX, 1883, p. 317.

‡ Structure and Classification of Birds, London, 1893, p. 234.

§ Monograph of the Genus *Chordeiles* Swainson, Type of a New Family of Goatsuckers, Bull. 86, U. S. N. M., 1914, p. 9.

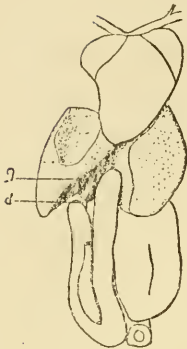


FIG. 4.

Viscera in *Chordeiles virginianus* with right lobe of liver raised to show position of gall bladder. *g.* gall bladder; *d.* cysto-enteric duct (about life size).

the gall bladder (Fig. 4, *g*) is found in the usual position above it in contact with the anterior end of the small intestine and the adjacent side of the stomach. It lies externally to the median line of the lobe. Seen from above when fully distended this cyst is elliptical. In outline from the side it appears somewhat triangular with rounded angles. This triangular appearance is intensified in alcoholic specimens. In several examined the posterior portion, nearly empty of bile, projects from the main body of the cyst as an elongate sac. In one specimen (A. W. No. 2783) the gall bladder measures approximately 7 mm. long by 3.5 mm. wide.

The cysto-enteric duct (Fig. 4, *d*) rises near the center of the sac on its external side and passes back to empty into the ascending arm of the duodenum near its summit.

Through the courtesy of Dr. C. W. Richmond, Acting Curator of Birds in the United States National Museum, I have been able to examine three alcoholic specimens of *Chordeiles acutipennis* (U. S. N. M. Nos. 17,487, 17,488 and 18,791) in the Division of Birds. In each of these a gall bladder, identical in position and form with that above described in *C. virginianus* was found. In No. 17,487 this cyst measured 6.8 mm. long by 3.4 mm. in vertical diameter. In the other two specimens the sac was less perfectly preserved. In these specimens the cysto-enteric duct had the same point of origin and emptied into the same portion of the duodenum as in *Chordeiles virginianus*.

In the preparation of this paper no attempt has been made to distinguish subspecies among the nighthawks, as the work was done entirely with alcoholic specimens, difficult to determine other than specifically. In the drawing (Fig. 4), made from *Chordeiles virginianus*, the points illustrated are necessarily made somewhat diagrammatic. The right lobe of the liver has been raised to show the gall bladder and the upper portion of the pancreas removed to uncover the cysto-enteric duct. The point of origin of this duct is hidden, as is also the place at which it empties into the intestine.