

Fig. 3.—Horizontal section through the left eye from the same animal as Fig. 2. The cornea is folded, due to the hardening fluid. x48.

Fig. 4.—Enlarged view of lens from the same eye as Fig. 3. The peculiar cartilage-like cells are shown. x270.

Fig. 5.—Enlarged view of lens from the same eye as Fig. 2. x270.

NOTES ON INDIANA BIRDS.

BY AMOS W. BUTLER.

The following notes are given here in order that they may be placed on record. In them are included such records of special interest as have been brought to my attention since the publication of my report on "The Birds of Indiana," at the beginning of 1897. In them, it will be observed, are added two species to the list of birds of this State. These are the Caspian Tern and Bachman's Warbler. There are also some interesting notes on the appearance of the Wild Pigeon.

AYTHYA VALLISNERIA (Wils.).

Canvas-back Duck.—A male and female were killed in the marsh at English Lake, Indiana, November 4, 1899. Never known to have been taken there in the fall before.

A single one was seen at the same place November 24, 1899. (Ruthven Deane.)

CLANGULA HYEMALIS (LINN.).

Old Squaw Duck.—February 12, 1899, a flock of thirteen Old Squaws alighted in the water where ice was being cut at English Lake, and all were killed. (Ruthven Deane.)

October 29, 1889, a specimen was taken at Calumet Heights, Indiana. This is a very early record.

LOXIA CURVIROSTRA MINOR (BREHM).

American Crossbill.—Dr. Stanley Coulter reports at least two dozen on Purdue University Campus November 3, 1898.

LOXIA LEUCOPTERA (Gmel.).

White-winged Crossbill.—Reported quite abundant around Chicago in the past two weeks. (Ruthven Deane, in Epist. 11-26-99.)

Reported from near Richmond, where a male was seen May 1, 1899, by Joseph F. Honecker.

A male was found dead beneath the electric wires at Greensburg, Indiana, November 7, 1899, by a little colored boy, who brought it to Prof. Geo. L. Roberts, in whose collection it now is. Upon investigation, a few minutes thereafter, Professor Roberts found six or eight others among the maple trees in a yard near by.

ECTOPISTES MIGRATORIUS (LINN.).

Passenger Pigeon.—Six were seen July 10, 1899, at St. Peters, Franklin County, Indiana; also found four nests near Oak Forest, Indiana.

October 23, 1898, a flock of sixty-eight was seen near Springfield in the same county. (Jos. F. Honecker.)

One mounted by Beasley & Parr, of Lebanon, was killed by Frank Young, Willson P. O., Shelby County, Indiana, near that place, about September 24, 1898. It was in company with two doves in a patch of wild hemp when found. The specimen is in the possession of W. I. Patterson, Shelbyville, Indiana.

Joseph F. Honecker has reported these birds several times from the vicinity of Oak Forest, Franklin County. Under date of July 13, 1898, he says:

"On June 13, 1898, I found a place where about forty wild pigeons were roosting in a woods about one-half mile from Oak Forest, Franklin County, Indiana. The owner of the woods informed me that the pigeons stayed there for the last three years, roosting on a maple tree which was blown down by a severe wind storm June 28, 1898. The pigeons are, I think, staying in that same woods yet, but where I am unable to find out. The pigeons are breeding in the woods, as I found fourteen nests with nestlings. This is the third flock of wild pigeons I have seen in this county in the last five years."

STERNA TSCHEGRAVA (LEPECH).

Caspian Tern.—Mr. J. Grafton Parker, Jr., reports the identification of

five specimens of this Tern at Miller's, Indiana, in August, 1898. None were taken.

Mr. F. M. Woodruff, of Chicago, says the Caspian Tern is not a rare bird on the lake in the early fall. "A few are seen each year at Miller's, Indiana. They are very shy, but I have managed to obtain four of them."

HELMINTHOPHILA BACHMANI (AUD.).

Bachman's Warbler.—A female of this rare warbler was taken May 2, 1899, near Greensburg, Indiana, by Mr. W. F. West. The captor says: "It had no song. It was taken from the lower branches of a large elm tree, situated on the bank of a small stream which flows through an open woods." The following is the description: Forehead, sides of head, upper neck and breast, bright yellow; crown and band across neck, black; belly and under-tail coverts, whitish; above, back of head and neck, grayish; back, wing coverts and edge of quills, tinged with olive green; upper tail coverts, bright olive green; wings, grayish; tail apparently same color; but two feathers, however, remain for determination. Length, 4.50; tail, about 2.00; wing, 2.37. Male.—Greensburg, Indiana, May 2, 1899, Col. W. F. West.

It is interesting to note this extralimital record of this rare bird. Its range is South America and the Gulf States west to Louisiana; Cuba in winter. It has been taken as far north as southern Virginia and Arkansas.

BIOLOGICAL CONDITIONS OF ROUND AND SHRINER LAKES, WHITLEY COUNTY, IND.

By E. B. WILLIAMSON.

Whitley County is situated in the northeastern part of Indiana. It is bounded on the east by Allen County, of which Fort Wayne is the county seat; Columbia City, situated very nearly in the center of the county, is the county seat of Whitley County. Round, Shriner and Cedar lakes lie in the northern part of the county, above seven miles from Columbia City. Shriner and Cedar lakes lie parallel to each other, directly west of Round Lake, into which they empty their waters. Round Lake is drained into