NOTES ON THE OCCURRENCE OF SHORE BIRDS AND WATER-FOWL ON A NEW ARTIFICIAL LAKE¹

BY SAMUEL EDDY

Lake Decatur is an artificial body of water created in 1922 by damming the Sangamon River at Decatur, Illinois. The lake is about twelve miles long and averages over one-half mile in width. The upper end of the lake is quite shallow with extensive swampy shores. Large areas are covered by marshy islands covered with a rank growth of vegetation. The lower end of the lake skirting the edge of the city is quite deep, ranging from twelve to fifteen feet in depth. From this region several shallow inlets formed by old creek valleys radiate away from the city. The largest of these is the Big Creek inlet which extends for several miles, ending in a swamp which duplicates the conditions of the upper lake on a smaller scale.

The former Sangamon River on the outskirts of the city of Decatur was a small turbid stream typical of central Illinois. Lined with willows, bottomland forest, and corn fields, the only waterbirds common to it were the little Green Heron and the Kingfisher. During the spring floods an occasional flock of Mallards, Blue-winged Teal, or a few Coots and Pied-billed Grebes rested on the backwaters. Other waterbirds were rare visitors and seldom seen. The former rare birds and others which were never seen before appeared in great abundance on the new lake. During fifteen years of observation, which the writer has made on the river and lake, only one bird appears on the list which has not been observed on the lake or nearby. This was the Loon noted on one occasion in 1915.²

With the formation of the lake the bird population changed rapidly. The gates of the lake were temporarily closed in the fall of 1922, and almost immediately migratory Redheads, Canvas-backs, Mallards, and Lesser Scaup Ducks appeared by the thousands on the waters of the half filled lake. Although the summer cottages and city homes have rapidly appeared about the shores of the lower lake, the remarkable thing is that the migratory waterfowl continue to swarm there. On one occasion the writer noted forty-eight Coots feeding on the grass of a lawn within the city limits. No shooting is allowed on the lower lake which probably accounts for the greater abundance of the waterbirds closer to the city.

²Since writing this paper, five Loons were observed on the lower lake, October 30, 1926.

^{.1}Contributions from the Zoological Laboratory of the University of Illinois under the direction of Henry B. Ward. No. 301.

More breeding areas have greatly increased the number of breeding birds. This large area of water has proved to be a favorite resting place for many migratory species. Ducks, geese, and herons have shown a great increase both in numbers and in species. Shorebirds were never rare in the old bottom lands during migratory season and now they are much more abundant in the swamps and marshes at the head of the lake and the nearby inlets.

The rails are apparently about as numerous as they were in the old river bottoms considering the more abundant area suitable to them at present. The King Rails and Soras have often been noted in the marshes about the lake. However, owing to the difficulty of observing them, not much information is available concerning them. The American Bittern does not seem to be as abundant on the lake as on the river. This may, however, be due to the more inaccessible places now available to the Bittern. The same seems to be true of the Least Bittern.

This bird, probably owing to its small size and to its shy disposition, has always seemed rare. The herons have shown a very noticeable increase with the creation of the lake. Several American Egrets³ were noted on the upper lake during the summer of 1925. The Black-crowned Night Heron was rather uncommon on the old river. Now it is very abundant on the lake throughout the breeding season. The Great Blue Heron was only occasionally observed on the river. It is very common about all the shores of the lake. The Green Heron was always very common on the river. It is just about as common on the lake, being more confined, however, to the inlets.

PIED-BILLED GREBE. Podilymbus podiceps. This bird was always fairly abundant during migratory season on the river, especially on the backwaters. It has always been abundant in the spring and fall on the shore waters of the lake.

Loon. Gavia immer. Not yet observed on the lake, although it probably will occur. One bird of this species was secured on the river in 1915.

KITTIWAKE. Rissa tridactyla. Several of these birds were observed on the lower lake during a severe cold spell in December, 1923. This was the only occasion that they have been identified.

HERRING GULL. Larus argentatus. Very common on the lake in the spring and fall and throughout most of the winter. Not known to breed here. Never observed on the old river.

³During the month of August, 1926, Egrets were abundant on all shores of the lake. Groups of ten or twelve were a common occurrence. At this time, a single Snowy Egret was reported from the upper lake.

RING-BILLED GULL. Larus delawarensis. Never observed on the spring and late fall of 1924, 1925, and 1926. Never observed on the river. This bird was quite abundant on the lower lake in the early river.

BONAPARTE'S GULL. Larus philadelphia. Several of these birds were identified on the lower lake on May 1, 1926. This is the only time that it has ever been observed in this locality.

FORSTER'S TERN. Sterna forsteri. Never observed on the river or lake until May 1, 1926. Quite abundant on the upper lake on this date.

COMMON TERN. Sterna hirundo. Several of this species were observed on the lower lake in the spring of 1924 and 1925. Never observed before.

Least Tern. Sterna antillarum. Several of this species were identified on the lower lake, May 31, 1925. Never observed on the river.

BLACK TERN. Clidonias nigra surinamensis. Never noted on the river. This bird has been quite common on the lake during the summers of 1923, 1924, 1925, and was observed in May, 1926.

DOUBLE-CRESTED CORMORANT. Phalacrocorax auritus auritus. Never noted on the former river but very common on the lower lake during the migratory season in 1924, 1925, and 1926.

MERGANSER. Mergus americanus. Very abundant on the lower lake throughout the winter of 1925-26. Often flocks of several hundred lined the edges of the ice about the open water. These birds left about April 5, 1926. They had not been observed prior to the spring of 1925.

Red-breasted Merganser. Mergus serrator. Several small flocks were observed in April, 1926, on the Big Creek Inlet. This is the only time this bird has been observed in this locality.

Hooded Merganser. Lophodytes cucullatus. Two pairs were observed feeding in company with Mallards and Pintails in the swamp at the head of the Big Creek Inlet, April 5, 1926. Never observed before.

MALLARD. Anas platyrhynchos. Quite common on the former river during migratory season. Very abundant on the lower lake during migration. Flocks of several hundred are a common sight. Abundant in 1926 from January 24 until April 11. A few Mallards breed in the swampy areas.

BLACK DUCK. Anas rubripes. Abundant in the spring migration of 1926, from January 31 to April 4. Not observed before.

BALDPATE. Mareca americana. Abundant on the lower lake in company with Pintails during the migration 1925-26. Never common before.

Green-winged Teal. Nettion carolinense. Common in the migratory season in the inlets. Very abundant in April, 1926, in the swamps at the head of the Big Creek Inlet. Rarely observed on the former river.

BLUE-WINGED TEAL. Querquedula discors. Very abundant in the marshes at the heads of the inlets during migration. Rather common but never as abundant on the sloughs and backwaters of the old river.

Shoveller. Spatula clypeata. Common in migratory season in the swamps and along the shores of the lake. Rather a late arrival. Never very abundant before the formation of the lake.

PINTAIL. Dafila acuta tzitzihoa. This bird was very abundant in March and April of 1926, resting on the open waters and feeding in the inlets of the lower lake. It was not abundant until 1926.

WOOD DUCK. Aix sponsa. This bird was not observed by the writer but several flocks were reported by a competent observer in the fall of 1926 as feeding and roosting in an oak grove at the upper end of the lake. Never observed or reported before.

REDHEAD. Marila americana. Abundant on the open and shore waters of the lower lake in both spring and fall migrations. Often observed in flocks of more than a hundred. Small flocks of these birds were formerly found only on the larger sloughs of the old river during migratory season.

CANVAS-BACK. Marila valisineria. This bird seems to have the same distribution and abundance as that of the Redhead. Owing to the close resemblance to this species, identification was not always satisfactory.

SCAUP DUCK. Marila marila. Very abundant on the open waters of the lower lake during migration. Rarely seen on the river.

LESSER SCAUP DUCK. *Marila affinis*. Very abundant on the lake during migration. This is one of the last ducks to leave in the spring. Not uncommon on the former river but much more abundant on the open waters of the lake.

RING-NECKED DUCK. *Marila collaris*. Only one pair observed on the Big Creek Inlet, April 5, 1926. Not observed before.

BUFFLE-HEAD. Charitonetta albeola. Several observed in February, 1926, on the lower lake. Never observed before.

HARLEQUIN DUCK. *Histrionicus histrionicus*. One pair reported on the Big Creek Inlet by a competent observer April 4, 1926. This is the only local record for this bird.

RUDDY DUCK. Erismatura jamaicensis. This bird is never very abundant although there have always been a few on the lower lake during migration. Generally a late arrival about the first of April. Not observed on the former river.

WHITE-FRONTED GOOSE. Anser albifrons gambeli. Never observed on the river. Only observed once on the lake, April 5, 1926, when a flock of forty-eight were observed feeding at the head of the Big Creek Inlet.

Canada Goose. Branta canadensis canadensis. This bird was rarely found on the former river. It is quite abundant on the lower lake during migration. During the winter of 1925-1926 a few remained around the open water until spring.

AMERICAN COOT. Fulica americana. Although this bird was never rare during migration on the river, it is much more abundant at that season on the lake. Flocks of several hundred feeding on the grass of nearby pasture lands are a common sight.

AMERICAN WOODCOCK. Rubicola minor. Observed on several occasions during migratory season in the former river bottoms. Not observed on the lake marshes but probably occurs rarely as it was noted several miles from the lake in May, 1926.

WILSON'S SNIPE. Gallinago delicata. Occasional in the wet areas of the river bottoms during migration. Observed in large numbers in May, 1926, on the marshes of the upper lake.

Pectoral Sandpiper. *Pisobia maculata*. This bird was observed on the Big Creek Inlet, May 10, 1925. Very rare on the former river.

LEAST SANDPIPER. *Pisobia minutilla*. Observed in small flocks in May, 1925, on the Big Creek Inlet and in May, 1926, on the upper lake. Not observed before although it undoubtedly occurred.

Sanderling. Calidris leucophaea arenaria. Not observed until May 17, 1926, in the marshes of the upper lake.

GREATER YELLOW-LEGS. Totanus melanoleucus. This bird was an occasional migrant on the river. Now it is very abundant during migration on the marshes of the upper lake.

Yellow-legs. Totanus flavipes. Never as abundant at T. melanoleucus. Occasional on the river. Observed in May, 1925, at the head of the Big Creek Inlet. Only occasional in the more remote marshy regions of the lake.

SOLITARY SANDPIPER. Tringa s. solitaria. Always common during migration on the banks of the river. Abundant on the marshy shores of the lake especially in the spring.

UPLAND PLOVER. Bartramia longicauda. Not observed on the former river or on the present lake shore but it was occasionally found on the nearby uplands.

Spotted Sandpiper. Actitis macularia. This bird was always very common along the banks of the river throughout the breeding season. It is very common about the lake especially in the inlets and marshes.

AMERICAN BLACK-BELLIED PLOVER. Squatarola s. cynosurae. Not observed on the former river but noted on the lake May 24, 1925.

GOLDEN PLOVER. Pluvialis d. dominica. Rather rare in the wet areas of the former bottom lands. Observed May 10, 1925, on the Big Creek Inlet and in great abundance on the upper lake on May 1, 1926.

KILLDEER. Oxyechus vociferus. Not limited to any extent in the immediate vicinity of the lake. This bird has always been common throughout the surrounding uplands of both lake and river.

SEMIPALMATED PLOVER. Aegialitis semipalmata. Not observed on the former river but quite common on the shores of the lake in May, 1925 and 1926.

URBANA, ILLINOIS.

A BRIEF STUDY OF CANADIAN LIFE ZONE BIRDS IN HIGHLAND COUNTY, VIRGINIA

BY JOHN B. LEWIS

For a number of years my son, M. G. Lewis, of Lexington, Virginia, and myself had planned to go to Highland County in the nesting season, for the purpose of studying the birds of the Canadian Fauna, which reaches a long finger down the back-bone of the mountains; but not until last June were we able to realize our dream, and then for only two days, which is too short a time to do anything like justice to the work.

We motored from Lexington to Staunton, and then turning northwest, drove into Highland County, over a fairly good road and through scenery of ever-increasing beauty and grandeur. We crossed ridge after ridge, each a few hundred feet higher than the last. As the altitude increased the hemlock, white pine, butternut, and white birch began to appear in the landscape; and numerous wild flowers new to us, including the rhododendron and flame-colored azalea, were seen on the mountain-sides.