

NOTES ON THE BREEDING OF THE RED-HEADED DUCK AT LAKE ST. CLAIR.

Some of your readers are perhaps aware that during the spring of 1882, Mr. Herbert Keays and the writer were collecting specimens of natural history at Mitchell's Bay, Ontario. Perhaps some of the readers of this article may have enjoyed themselves at the little village of this name, as it is the resort of numerous sportsmen during the shooting season. For the benefit of those who may not have visited the spot, I will give a brief description of the localities in which we collected the specimens I intend to describe. The village is situated about half a mile from the shore, and at about the same distance inland, is a dense forest composed chiefly of elm and other soft wood trees. Here the surface of the ground is not more than three or four feet above the level of the bay, but sloping gradually to the water's edge. On the north and south of the village the marsh extends much further from the forests verge and partly encloses the body of water known as "Mitchell's Bay," which is about four miles in extent each way and very shallow, being not more than ten feet deep anywhere. The southern projection of marsh is called "Big Point Preserve," the northern boundary of the bay, "Mud Creek Preserve," and extends to the "Sny" as the outlet of Sydenham River is called. The marsh beyond the river called "St. Ann's Island," is an Indian Reserve, but is now leased and held as a game preserve by a club of sportsmen. Scarcely any part of this island or the adjoining marsh are much above the level of the water, and wherever the water does not form ponds, bays or channels, wild rice, coarse grasses and rushes cover the flats in freshest green. Amid the wiry grass, wild pea vines twine and bloom and the surfaces of the shallower pools are covered with the leaves of lilies and other aquatic plants. During our stay in this place we lived in a scow belonging to Dr. Garnier of Lucknow, to whom I am greatly indebted for many favours. My stay in this delightful spot will ever be dear to memory; sitting at my work—at early lamp-light—listening to the water-fowl and the splashing of the waves against our scow. No lover of nature could visit this spot during the month of May or June without being impressed by its beauties, and to us it was a collectors paradise. There was not a moment of the day

when the lively notes of some bird could not be heard, and sometimes the noise was astonishing; in the evening, when the sun was sinking out of sight, perhaps a loon would start its wailing cry and apparently, at once, every feathered inhabitant of the marsh would join with their own peculiar notes, but the Florida Gallinule, *Gallinula galeata*, was by far the most vociferous. Those who have never heard such an uproar can scarcely understand a written description. Imagine the music that would be made by hundreds of gallinules yelling on every side; the quacking of ducks, piping of rails, crying of loons and the indescribable notes of hundreds of marsh wrens, coots and grebes; the croaking of thousands of bull-frogs to say nothing of the hum of myriads of mosquitoes, and we find a din unparalleled. The first nests and eggs I shall describe are those of the Red-headed Duck (*Aethya Americana*). Early on the morning of May 27th, we started in a canoe to the southern extremity of St. Ann's Island in search of nests. Mr. Keays was wading in water too shallow to pole the canoe in; I paddled about until we took nest after nest of coots, gallinules, grebes, black terns, red-wings, rails &c. A female red-head was then observed by my friend, swimming quietly away among the reeds; he immediately started to search for the nest, which he knew must be near; a few minutes later, my ears were saluted by a shout that clearly indicated success. I lost no time in reaching the place and found him stooping over the nest and handling the eggs in a perfect ecstasy of delight. The nest was placed in six or eight inches of water, among coarse grass and flags, and was composed of those weeds of the previous year, very bulky, being about sixteen inches in depth and diameter; it was built abruptly out of the water, except on one side which had a regular slant of about a yard in length and which led to a passage among the weeds going to the open water. The internal diameter of nest at top was nine inches and the depth five inches. The eggs, ten in number, were of a bluish drab colour; they were uncovered when found, and in an advanced state of incubation; they varied in size, measuring thus, $1\frac{3}{4} \times 2\frac{3}{8}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$, $1\frac{1}{4} \times 2\frac{1}{2}$. While we were taking the eggs, the female duck came twice and flew around us, and when we were a little distance from the place she alighted in the pond and swam rapidly to the nest; we again approached, when she took wing and in a few