- 195. Polioptila cærulea.—Blue-gray Gnatcatcher. Common migrant, but not common summer resident. April 18, 1903; April 15, 1904; April 20, 1906.
- 196. Hylocichla mustelina.—Wood Thrush. Common summer resident. Arrival: May 9, 1903; May 5, 1904; April 28, 1906. Departure: September 17, 1904. Nest with two eggs May 28, 1904.
- 197. Hylocichla fuscescens.—Wilson's Thrush. Common migrant. Arrival: May 9, 1903; May 10, 1904; May 11, 1906. September 17, 1904.
- 198. Hylocichia aliciæ.—Gray-cheeked Thrush. Not common migrant. May 11, 1906. September 17, 1904.
- 199. Hylocichla swainsonii.—Olive-backed Thrush. Common migrant. May 10, 1904; May 15, 1906. September 22, 1904.
- 200. Hylocichla guttata pallasii.—Hermit Thrush. Common migrant. April 18, 1903; April 15, 1904; April 20, 1906. October 13, 1904.
- 201. Merula migratoria.—American Robin. Common summer resident. It arrives early in March and departed November 7, 1904. A few remained all winter 1905-6. An albino was noted June 11, 1904. There was a roost in the trees of Jefferson street, Tiffin, in the fall of 1904, from 120 to 180 Robins resorted to the roost.
- 202. Sialia sialis.—Bluebird. Common summer resident. Arriving March 1, departing in November. A few remained all winter 1905-6.
- 203. Helmintophila celata.—Orange-crowned Warbler. May 10, 1904. Observed singing. Rare transient.

Introduced Species.

- 204. Passer domesticus.—English Sparrow. Abundant. Several albinos noted.
- 205. Phasianus torquatus.—Ring-necked Pheasant. Not common, but breeding. Nest found in 1901.

REMARKS ON THE SUMMER BIRDS OF LAKE MUSKOKA, ONTARIO.

BY B. H. SWALES AND P. A. TAVERNER.

During the summer of 1904 we were able to spend a short time on Gibralter Island, situated in Lake Muskoka, Muskoka District, Ontario. This is one of the largest of the many lakes of various sizes that fill the glacial furrows in the heart of the Laurentian formation back of Georgian Bay. The country is noted for its rocky wildness and, although the shores are here and there occupied by the summer cottages of the tourists. their influence scarcely extends back from the lake farther than The country has been lumbered over and the eve can reach. all marketable timber extracted, but if it were not for the rotting pine stumps one sees on every hand the observer, when out of sight of the sparkling waters of the lake, might imagine himself buried in the primeval forest unprofaned by the intruding foot of civilized man. The country has, it is true, suffered the concomitant evils that follow the lumbermen, as the great expanses of burnt ridges manifest, with their gaunt gray skeleton pine standing like the monuments of a vanished age scarred black with fire and bleached with storms to every shade of soft and solemn grey. Scattered clearings exist here and there hemmed around with forest except where they manage to break through the leafy barrier to the lake or run up to the barred ridges from which the life of the soil has been burnt by repeated forest fires.

The Beaumaris side of the lake is settled to a greater extent than the opposite side, and the stage road from Beaumaris to Bracebridge runs through clearings of an older and more settled type. The Bala side, towards which Gibralter Island lies, exhibits all the characteristics of a new country whose agricultural future is almost hopeless. Hay and fodder for a few cattle and sheep and a little green stuff for home and tourist consumption is about all that is raised, and the harvesting among the stumps and rocks has to be done with the almost vanished scythe, while oxen and jumpers largely take the place of horse and farm wagon.

The principal forest growth is pine, both Norway and white, with considerable masses of hemlock scattered about and cedar thickets in the lower parts. Deciduous trees are, however, plentiful and "beech flats" are common enough, while the rest of the land is filled with forest growths of oak, maple, basswood, American hornbeam, and other hardy timber. The second growth is generally poplar mixed with white birch which usually succeeds the former short-lived growth and is in its turn replaced by maple and oak. In the latter stage in ex-

posed places a few struggling pines, pushing their way up and between their neighbors, give a forecast of what final type would triumph in the end if nature had full sway when the cycle is completed.

The shores are naturally wooded to the water's edge, and are generally rocky; marshes or swamp, except of the sphagnum order, about some little land-locked lake are very rare and in consequence the water birds that the innumerable little lakes would otherwise attract are almost entirely absent. The main body of the water fowl pass over this, what would otherwise be to them an attractive land, as quickly as possible and, if they stop at all, make as short a visit as is compatible with their needs.

One of the most interesting features of the avi-fauna of this country is the difference between the settled and the unsettled portions. The birds of the open are gradually increasing in the most extensive clearings around Bracebridge, but are never seen in the little slashings made by the homesteader on the other side of the lake. In the forest itself during the summer months bird life, to the observer, seems almost entirely absent, although in spring the woods are alive with migrants and the glorious summer evenings are filled with the melody of the Hermit and Wilson's Thrushes, with the silver whistle of the White-throated Sparrow rising above it all. During the period of our stay, however, all this was passed—the sweet songsters had left before the hosts of the fall migrants had arrived. We tramped often all day over a varied route that afforded a variety of country and for hours saw scarcely a single bird or heard a note in spite of the closest attention. Generally, however, early in the morning and before sunset we could find little bunches of warblers around a certain shore of the island, but it required quick work to observe or collect them as they were gone in but a few minutes, not to be found again.

The fact that struck us with most force during this time was the apparent absence of any strong migratory movement. There were migrants present, but their numbers were as nothing, considering the time of the year. When we left Detroit the great rush of migration had already started, and small and

large groups of migrating birds were to be met with at almost any point. We naturally expected to find analogous conditions up here, but in this were disappointed. During this same time at Guelph, about one hundred and twenty miles to the south, the migrations were in full swing and the northern forms were coming in almost daily. Many of the common summer residents had left Muskoka before we arrived. These were not in all cases species that hurry through the southern stations early in the season, but the late comers and long stayers, as White-throated Sparrows, Magnolia and Myrtle Warblers, and others. These birds all breed in Muskoka, the first very commonly, but of it we only saw one and of the others only one or two. Nor were other species from farther north much more common and it looked as if the resident birds had left before the more northern breeders had started to migrate. It may be held, of course, that in this vast extent of wooded territory, the migrants were so widely scattered as to be more easily overlooked than seen, but this hardly satisfies the conditions as we found them. The amount of hard work we put in and the ground we covered would in this case have vielded more individuals if this were the whole explanation. Be the reason what it may, the fact remains, that up here, just when we should expect the first great rush of the migrations, we found the forest and fields ornithologically almost dead and more resembling the quietness of the mid-breeding season than the first flush of the migrating one.

From August 24 until September 4 we were able to record a total of 59 species; a number of these were represented but by one or two specimens and few were common in the ordinary acceptation of the term. These peculiar conditions are interesting and suggestive and may give this report of the trip a little more value than it might otherwise have as a mere catalogue of birds seen.

Gibralter Island is about one half mile long and in places not more than half that distance in width. It is directly across the lake from Beaumaris. The rocks rise abruptly from the lake shore and form an extensive ridge heavily wooded, in the center, which culminates at the north end in a high promontory from which one may view the beautiful lake country, dotted with its numerous wooded islands, for many miles.

Gavia imber.—Loon. One seen on September 2 flying down the lake in a driving rain storm. This species is decreasing in numbers each year at Muskoka. Formerly Taverner heard them on nearly every summer night from the island and they bred here and there throughout the region.

Larus argentatus.—Herring Gull. Fairly common. A few individuals were seen every day following the wake of the little lake steamers that pass up and down each day. The birds hang around Muskoka wharf and Gravenhurst Bay until the steamers go out, when the gulls follow after. They undoubtedly breed in Georgian Bay about thirty miles west.

Duck.—Species? A small flock of six birds passed down the lake on Sept. 2. We saw no others as there are no suitable feeding grounds to attract the birds.

Botaurus lentiginosus.—American Bittern. One bird flushed from a small marsh on Tondern Island on August 29. There was scarcely room here for the bird to turn around in. This is rather a rare species here, a pair or two breeds in Bear Bay, near Gravenhurst, and Taverner has seen it on Black's Creek on the west side of the lake.

Bonasa umbellus togata.—Canadian Ruffed Grouse. Fairly abundant. The extreme tameness of these birds was astonishing to us in contrast with the Michigan birds. One could approach at will within almost striking distance of the parents and brood and even then they would generally simply run out of the path without any attempt at flight. Of course when the shooting season is on this all changes.

Buteo platypterus.—Broad-winged Hawk. But two seen, one on the mainland August 29, the other lived on Gibralter and was observed every day. This is, however, the most abundant hawk here.

Falco sparverius.—Am. Sparrow Hawk. One seen August 29 flying over the clearing on Tondern Island. It is only on the eastern side of the lake where the most extensive clearings are that this species is to be seen here. Perhaps the lack of grasshoppers explains its absence elsewhere.

Falco peregrinus anatum.—Duck Hawk. During our present stay we failed to observe this species. It has, however, bred for many years on Crown Island just north of Gibralter and the nest has seldom been disturbed. Notwithstanding this fact the number of birds in this region seems to be restricted to a single pair. Taverner took a set of four eggs from this nest on May 23, 1898, and it is upon this one record that the various Ontario records in Macoun's Catalogue of Canadian Birds are based. On August 30th we visited this nest, which is situated on the side of a cliff on the highest portion of Crown

Island about 75 feet above the lake. The nest contained many bones of the Ruffed Grouse, Flicker, Blue Jay, and Pileated Woodpecker.

Antrostomus vociferus.—Whip-poor-will. One bird heard calling on the evening of August 26, two birds on August 27 from the mainland directly across from our cabin. None were heard after this date and we naturally supposed that they had left.

Ceryle alcyon.—Belted Kingfisher. One pair observed each day during our stay in the vicinity of the island. Where this species nests is unknown as the nearest place known to Taverner is around Bracebridge river which has in some places banks of considerable heights. In our vicinity on the lake rarely more than a single pair is seen and these are generally roaming about.

Dryobates viilosus.—Hairy Woodpecker.—But one bird seen—on August 28. This is, however, a common resident species. There is some doubt as to the occurrence of **leucomelas** here. All specimens so far taken have been **villosus...**

Dryobates pubescens medianus.—Downy Woodpecker. A common species in all sections visited.

Sphyrapicus varius.—Yellow-bellied Sapsucker. Not uncommon in the higher portions of the island and on the mainland. Is much less abundant on the islands. Breeds.

Colaptes auratus luteus.—Northern Flicker. Fairly abundant on the adjacent mainland, rarer on the islands.

Chordeiles virginianus.—Nighthawk. One noted August 31, apparently one of the last birds of the season. A common summer resident.

Chætura pelagica.—Chimney Swift. A number were seen hawking over the lake every evening during our stay and were still present when we left September 4th. As there cannot be in this region enough chimneys to afford all the birds a nesting place the main body must use hollow trees. Every flue is, however, occupied.

Trochilus colubris.—Ruby-throated Hummingbird. One male seen August 31. This species is quite common here in the clearings, especially if there are any flowers about. Otherwise the bird would appear quite rare.

Myiarchus crinitus.—Crested Flycatcher. We observed but one bird, on August 29. The species is, however, quite common here, especially on Gibralter.

Sayornis phœbe.—Phœbe. An abundant bird on the island and in the various clearings around Beaumaris. One pair has nested for many years on the porch of the Taverner cottage and also against the smooth sides of the boat-house.

Nuttalornis borealis.—Olive-sided Flycatcher. In the wooded sections of the mainland we observed what we were certain were this species, but as we did not take any specimens did not prove the matter. The birds in question were generally confined to the dense

woods, where they were perched at the top of some tall dead pine. This species is, however, an abundant bird in this region.

Horizopus virens.—Wood Pewee. This was one of the most abundant species on the islands and mainland until September 1, after this date we failed to either see or hear it.

Empidonax minimus.—Least Flycatcher. Not uncommon, noted about every day on the island and mainland.

Cyanocitta cristata.—Blue Jay. We were able to find but *one* bird, which was rather surprising, as this is usually an abundant bird here. The only explanation we can offer is that the resident birds had left and the northern birds had not yet come down.

Corvus brachyrhynchos.—American Crow. Abundant.

Agelaius phæniceus.—Red-winged Blackbird. But one male seen, generally common in certain localities as Bear Bay, or back of Tondern Island. Unless one happens to meet with a flock in these suitable localities the species appears to be quite rare.

Quiscalus quiscula æneus.—Bronzed Grackle. One seen August 26, another at Gravenhurst walking on the logs in the bay, on September 4. They are generally common here and on parts of Tondern Island.

Carpodacus purpureus.—Purple Finch. Three birds were met with near the head of Gibralter Island on August 27, another on September 3.

Astragalinus tristis.—American Goldfinch. A common species in the cleared portions of Tondern Island and on the mainland back of Beaumaris.

Poœcetes gramineus.—Vesper Sparrow. We found this well distributed in the fields running back from Beaumaris on August 29. Three more were noted on August 31.

Zonotrichia albicollis.—White-throated Sparrow. We saw but one bird—on the day of our arrival. This is another case of the migrants leaving before the northern birds come in. This is a regular common breeder on Gibralter. Mr. A. B. Klugh at Guelph reported many migrants there some time before we left Muskoka.

Spizella socialis.—Chipping Sparrow. Rather common on Tondern Island, near Beaumaris. A few were around our cabin on Gibralter.

Junco hyemalis.—Slate-colored Junco. Abundant all over the island and the country bordering the lake shore—much rarer inland.

Melospiza cinerea melodia.—Song Sparrow. Rare except in the immediate vicinity of the clearings on Tondern Island and on the mainland. Is generally common directly across from the island on the edges of Broadlay's farm.

Hirundo erythrogaster.—Barn Swallow. Observed in some numbers on August 28 and 29 near cleared land. Formerly nested in Broadley's barn on the adjacent mainland.

Iridoprocne bicolor.—Tree Swallow. In the little marsh back of the hotel at Beaumaris we saw one flying over the water on August 29.

Ampelis cedorum.—Cedar Waxwing. An abundant species everywhere—we found it present on all the islands visited, on the mainland, etc.

Vireo olivaceus.—Red-eyed Vireo. A common species on the island. Several nests we examined of the past summer's construction were beautiful little affairs constructed on the outside mainly of white birch bark.

Mniotilta varia.—Black and White Warbler. Fairly common in all parts of Gibralter Island.

Compsothlypis americana usneæ.—Northern Parula Warbler. Fairly common, on August 28 and 29 we saw two on each day and one on August 31 and September 1.

Dendroica cærulescens.—Black-throated Blue Warbler. A pair or so seen throughout our stay on the island, several seen August 29 on the mainland.

Dendroica coronata,—Myrtle Warbler. Only one bird noted, a female, taken in the pines directly back of our cabin.

Dendroica maculosa.—Magnolia Warbler. But three birds found—two on August 29, and one on September 4. This is a common migrant here and we think that a few pairs remain and breed.

Dendroica blackburniæ.—Blackburnian Warbler. Fairly common, three seen August 29, a few individuals at different times during our stay. This is a fairly common breeder here. Taverner shot quite a large, young Cowbird being fed by one of these warblers in September, 1896.

Dendroica striata.—Black-poll Warbler. One taken September 1. No others recorded.

Dendroica virens.—Black-throated Green Warbler. This was by far the most abundant warbler present until September 2d, after this date we failed to find it. A common breeder here.

Dendroica vigorsii.—Pine Warbler. Rather common until September 1st, we did not find it later.

Seiurus aurocapillus.—Oven-bird. While working through a low part of the island on August 29th we flushed one bird. Is a common summer resident.

Geothlypis trichas brachidactyla.—Northern Yellow-throat. We secured a male in the small marsh back of Beaumaris on August 29. This is not a common species here.

Wilsonia canadensis.—Canadian Warbler. Not uncommon. Noted at various times during our stay.

Setophaga ruticilla.—American Redstart. Fairly common, observed every day.

Troglodytes aëdon,-House Wren. We found this common on the

outskirts of Beaumaris on August 29. It was confined to the brush heaps and the snake fences.

Olbiorchilus hiemalis.—Winter Wren. But two birds seen—one on September 1, another on the 4th. This is a fairly common summer resident on the island and breeds in the dense brush.

Certhia familaris americana.—Brown Creeper. Very common everywhere.

Sitta caroliensis.-White-breasted Nuthatch. Common.

Sitta canadensis.—Red-breasted Nuthatch. On September 1 we saw one in a small birch near the cabin which was secured. No others were noted.

Parus atricapillus.—Chickadee. An abundant species everywhere. Hylocichla fuscescens.—Wilson's Thrush. Two birds seen, on August 27 and 30. This is a common summer bird on the island.

Hylocichia guttata pallasii.—Hermit Thrush. On September 3rd we secured one bird in the center of the island. A common breeder here.

Merula migratoria.—American Robin. On the island this was far from common but we found it much more numerous on the mainland near Beaumaris.

Sialia sialis.—Bluebird. On August 29, on quite an extended trip on the mainland back of Beaumaris, we found this present in some numbers in all cleared land. Five were seen August 31.

Detroit, Mich.

TWO ALL-DAY RECORDS IN NORTHERN OHIO.

BY LYNDS JONES.

There are migrations and migrations of the birds in May, and the migrations which appeal most to the most ardent among us are those which certain conditions of weather make conspicuous by reason of the great abundance of bird life on one or more days. As far as northern Ohio is concerned the experiences of more than ten years in the study of the migrations make it possible to formulate certain laws which govern the movements of the birds northward across that region. These laws are not new, nor are they laws which have not been announced already, but they are of sufficient importance to bear repetition.

Considered purely from the standpoint of migration, warm weather accompanied by clear or fair skies during the night