

(*Aralia hispida*), enchanter's nightshade (*Circaea alpina*), yellow Clintonia (*Clintonia borealis*), painted trillium (*Trillium undulatum*), large coral root (*Corallorhiza maculata*), shin-leaves (*Pyrola elliptica*, *P. cholorantha*, *P. minor*), false-lily of valley, (*Maianthemum canadense*) and twisted stalk (*Streptopus*).

In and around the peat bog were (*Cypripedium acaule*) both normal pink, and albino yellow-petalled specimens, small greenwood orchis (*Habenaria clavellata*), small northern bog orchis (*H. obtusata*), rattlesnake plantain (*Epipactis pubescens*), nodding ladies' tresses (*Spiranthes cernua*), multitudes of grass pink (*Calopogon pulchellus*) and rose pogonia (*Pogonia ophioglossoides*), gold-thread (*Coptis trifolia*), creeping snow-berry (*Chio-genes hispudula*), dwarf raspberry (*Rubus triflorus*), Dalibarda (*D. repens*), both cranberries, three-leaved Solomon's seal (*Smilacina trifolia*), arbutus (*E. repens*), masses of horned bladderwort (*Utricularia cornuta*), lance-leaved violet (*Viola lanceolata*), naked bishop's cap (*Mitella nuda*), Indian cucumber-root (*Medeola virginiana*) and *Aster junceus*, spatulate and round-leaved sundews (*Drosera intermedia* and *D. rotundifolia*), and Canadian and marsh St. John's wort (*Hypericum canadense*, *Triadenum virginicum*).

On the more open hillside opposite camp and toward Dorset were narrow-leaved gentians (*Gentiana linearis*) and the northern bed straw (*Galium boreale*).

The mammals are decidedly of Canadian affinity, but with the rare appearance of wildcat, raccoon, black squirrel, transition zone influences enter.

In the birds more transitional forms appear rarely or sparingly, toward Dorset, southward and westward to wit: towhee, woodthrush, yellow-throated vireo, Baltimore oriole, catbird, whippoorwill, least flycatcher, indigobird, yellow warbler, parula warbler, red-headed woodpecker, Maryland yellow-throat.

Thus in trees, herbaceous under-cover, birds and mammals there is close agreement in the preponderance of Canadian forms. At Otter Lake and northward, the incursion of the transition element is not so pronounced as at Huntsville, where railroad and other civilized encroachments play a greater role. The ride from Huntsville to Dorset and thence by foot to Otter lake emphasizes this difference to the trained observer.

To such as might wish to know what ferns we casually observed the list is:

Woodsia Ilvensis
Osmunda Claytoniana
Onoclea sensibilis
Osmunda cinnanomea

Osmunda regalis
Dicksonia punctilobula
Polystichum acrostichoides
Aspidium noveboracense
Aspidium cristatum
Aspidium marginale
Asplenium Filix-femina
Pteris aquilina
Polypodium vulgare
Phegopteris polypodioides
Phegopteris hexagonoptera
Phegopteris Dryopteris.

II.—THE FISH.

BY A. H. WRIGHT.

The present list of sixteen species reveals the scanty variety of the Highlands of Ontario. Several of these are introduced species. Others are stock introduced to replenish the supply of the waning species in this series of lakes which are two hundred or more feet higher than the Muskoka group. The decided barriers do not permit incursions from the great variety of the Great Lakes. The region, however, abounds in individuals of the few game species it possesses. For comparison, we have employed Meek's¹ results in the Highlands of Ontario. He began at Hawkestone and Orillia on Lake Simcoe and followed the Grand Trunk railroad through Gravenhurst (Muskoka lakes) to Trout Creek and North Bay (Lake Nipissing). All the way northward the railroad bears away from Georgian bay and the stations he successively came to were successively farther away from it in barriers, etc. Lake Simcoe and the Muskoka lakes are much nearer Georgian bay and Lake Ontario than Lake of Bays or Otter lake. Hence the Great Lakes' complex of Lake Simcoe with silversided minnow (*N. atherinoides*), log perch (*Percina caprodes zebra*), spot-tailed minnow (*Notropis hudsonius*), silvery minnow (*Hybognathus nuchalis*), trout-perch (*Percopsis omiscomaycus*) and long-nosed dace (*Rhinichthys cataractae*), or Moon liver just below Muskoka lake (Bala) with log perch, spot-tail minnow and silvery minnow. Such species are never to be expected in Otter lake unless introduced or unless it was geologically connected with the Great Lakes. Otter Lake seems more comparable to Trout Creek. The former has sucker, horned dace, red-bellied dace, fathead, Cope's minnow, shiner, brook trout, pumpkin seed; the latter has suckers, horned dace, red-bellied dace, fathead, blunthead, shiner, brook trout, brook stickleback, nine-spined stickleback and pumpkin seed.

(1) Meek, S. E. Field Columbian Museum Zoological Series, Volume I, No. 17, Publ. 41, November, 1899, pp. 307-311 and Volume III, No. 7, Publ. 67, July, 1902, pp. 131-140.