

row, as heard in the adjacent meadows. The call may be very accurately expressed in a human vocable; (which, by the way, is not often possible with paraphrases of bird-calls and bird-songs). Here, then, you have it: "Wish-beer." This odd call I heard, over and over again; sometimes, at ten-foot distances. I never heard a more characteristic bird sound, nor one which, for all its ridiculous feebleness, yet rests so strongly and so powerfully upon my memory. Shall I ever hear it again, I wonder? Truly, I *may* hope to enjoy that out-sounding "Zhay-deel," again, next summer, at the dear old Wisconsin home. But, "Wish-beer"! Anyhow, here's hoping, and *hoping*, that Mr. Perkins and his confreres may hear it, along their tiny cat-tail-willow Indiana swale, the twentieth of next May!

TOPEKA, KANSAS.

SUMMER BIRDS IN THE VICINITY OF PLUM LAKE, VILAS COUNTY, WISCONSIN*

BY ALVIN R. CAHN, PH. D.

When, on June 26, 1925, Governor Blaine of Wisconsin, signed Assembly Bill No. 351, there came into existence the largest public park in the northern part of Wisconsin, and one of the finest preserves in the middle west. The Northern Forest Park, as this new preserve and game refuge is called, comprises an area of some 92,000 acres of forests, swamps and lakes, approximately 76,000 acres of which are state owned. Upon these state owned lands henceforth there will be no hunting and no trapping, and the wild life which still clings desperately and almost miraculously to these northern Wisconsin forests will have its chance to recuperate from the slaughter to which it has been subjected in the past. In this area the generations that are to come will find, we hope, such wild life as we ourselves have enjoyed—perhaps even more. If those who privately own the land within the boundaries of the new park will co-operate with the state in carrying out the spirit as well as the letter of the law by posting their lands against hunters and trappers, we may rest assured that here the generations of tomorrow will find an abundance of wild life.

The new Northern Forest preserve lies in the very heart of the "land-o'-lakes" region of Vilas County, Wisconsin. It includes fine forest areas of large second growth timber, with scattered areas of virgin white pine not unknown. Luxurious undergrowth, untouched by fire for many years, covers the country and offers shelter and breeding

*Contribution from the Zoological Laboratory of the University of Illinois, No. 293.

grounds to all sorts of native animals. Sphagnum bogs, with their pitcher plants and tamarack borders, lie in the valleys between gently rolling wooded hills. Something over forty lakes of various sizes, belonging mostly to the Manitowish River system, teem with fish and afford an almost endless variety of aquatic and semi-aquatic habitats, where thrives a numerous and interesting biota. Large game still roams the woods; the Virginia deer is still common and there are black bear, timber wolves, coyotes and foxes. The lakes have their muskallunge, bass, pike and pickerel and dozens of species of shore minnows and darters. A single railroad pierces the corner of the preserve and Sayner, on the Chicago, Milwaukee and St. Paul Railroad, is the only town within its limits. It is a land of beauty and endless variety, and it is not surprising that its avifauna should be abundant.

The writer has spent parts of many summers in this particular region of northern Wisconsin simply because of its beauty and the abundance of its wild life. The dates of his visits have hardly ever overlapped each other so that the list of birds of the park herewith offered is a composite of observations that cover the region from the middle of June to early September. Despite the fact that the birds will be protected in the future, changes are bound to occur as the biota tends to stabilize itself and find the normal balance which existing conditions will support. Some species will undoubtedly go; others will come. The list is offered as a record of the species known to the writer to inhabit the park now. What changes will come, future notes by others will tell. The list is presented as the first of a series of contributions dealing with the fauna of the park; if it proves of assistance to others in enjoying the wild life of the region as the writer has enjoyed it, its purpose will be fulfilled.

[The following list contains 107 named forms.—Ed.]

HORNED GREBE. *Colymbus auritus*. A breeding species, but not very common. Seen on Nixon, Little Gibson and Razorback Lakes.

PIED-BILLED GREBE. *Podilymbus podiceps*. Somewhat more common than the preceding species, frequenting the more reedy or ricey lakes, and breeding generally throughout the region.

LOON. *Gavia immer*. Abundant. Found breeding on all of the larger lakes, which, however, seldom harbor more than two pairs. Young are out of the nest by the middle of June, often hatching during the first part of the month. Old muskrat houses are used year after year as breeding loci.

HERRING GULL. *Larus argentatus*. A visitor only, appearing most frequently after or during heavy winds, when the birds are swept from their normal haunts about the great lakes.

COMMON TERN. *Sterna hirundo*. Seen only in the vicinity of Big Muskallunge and Plum Lakes, but in evidence there constantly during the early summer of 1925. There is no evidence of breeding within the region.

BLACK TERN. *Clidonia nigra surinamensis*. A common breeding species, particularly about lakes with boggy shores or wild rice areas: Nixon Lake, Rice Lake, and suitable areas about the larger bodies of water.

RED-BREASTED MERGANSER. *Mergus serrator*. A common breeding species. A pair with eleven young, evidently very recently hatched, was seen constantly on Big Muskallunge Lake after June 17. It is interesting to note that this same brood was seen on two successive days at points over three miles apart in a straight line, with probably over five miles of shoreline intervening. As the birds very rarely appear away from the shallow water when accompanied by newly hatched young, it is still more interesting to note that on the third day they were back where they were first seen. This in spite of the fact that the young were under two weeks of age.

MALLARD. *Anas platyrhynchos*. A fairly common breeding species about the less frequented regions. A pair with young were seen on Nixon Lake, another on Rice Lake, and a third in Star Lake bay of Plum Lake. Very abundant during migrations.

BLUE-WINGED TEAL. *Querquedula discors*. Fairly common as a breeding species, particularly around wild rice lakes. Several pairs bred near Nixon Lake in 1925. Less common now than formerly.

WOOD DUCK. *Aix sponsa*. Still an occasional breeder in the less disturbed regions of big timber. Several were seen on Plum and Big Muskallunge Lakes in both 1924 and 1925.

REDHEAD. *Marila americana*. An uncommon summer resident occasionally found about the larger bodies of water. Said to breed in the region, but I have no data to offer.

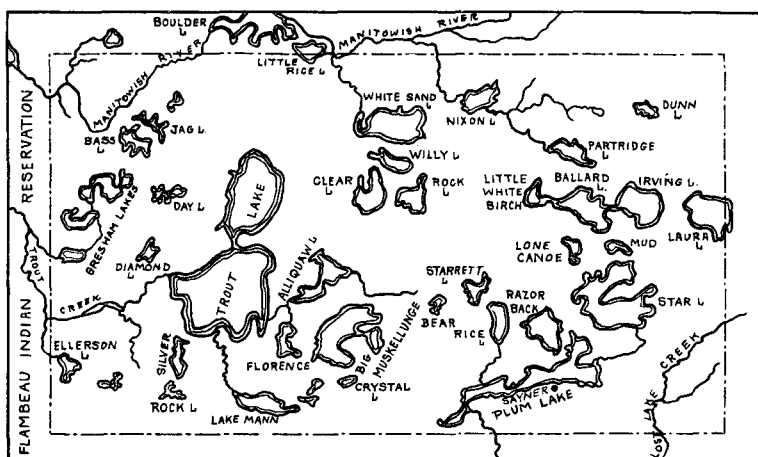
AMERICAN BITTERN. *Botaurus lentiginosus*. A common species about the more reedy lakes, breeding where suitable swampy regions are found: Nixon Lake, Rice Lake.

GREAT BLUE HERON. *Ardea herodias herodias*. An abundant breeding species, rapidly on the decline since the Wisconsin laws have placed it on the black list because of its fish-eating habits. One native

of the north woods tells me with pride of shooting over three hundred Great Blue Herons out of one rookery in one day, as the birds were going and coming with food for their young. Surely the state should reward such a hero!

VIRGINIA RAIL. *Rallus virginianus*. Not uncommon about the smaller swamp-bordered lakes, but more often heard than seen. Breeds about Nixon, Rice, Johnson Lakes, and other small bodies of water.

SORA. *Porzana carolina*. Seen only once, along Johnson Creek in the northern part of Vilas County, and heard several times about Nixon and Rice Lakes. Probably breeds.



Map showing the lakes within the limits of the new Northern Forest Park, Vilas County, Wisconsin.

COOT. *Fulica americana*. An uncommon breeding species. Seen only on Nixon Lake. Abundant during migrations.

WILSON SNIPE. *Gallinago delicata*. An uncommon summer resident, said to be a breeding species. Only seven "Jacks" were seen by the writer in two summers. Decidedly on the decrease.

LEAST SANDPIPER. *Pisobia minutilla*. An uncommon summer resident, seen by the writer only once: July 14, 1925, on Plum Lake.

SPOTTED SANDPIPER. *Actitis macularia*. A fairly common summer resident, seen almost daily, but never in any numbers. It frequents all of the lakes where sandy shores predominate.

SOLITARY SANDPIPER. *Tringa solitaria solitaria*. Five individuals were seen during my stay in 1925, three on Big Muskallunge Lake, and two on Plum Lake.

KILLDEER. *Oxyechus vociferus*. Rather uncommon as a summer resident, as there is relatively little breeding ground for the species. Several breed on the golf course at Plum Lake each year, and the young are often seen running about on the course.

CANADA SPRUCE PARTRIDGE. *Canachites canadensis canace*. Almost exterminated. A small covey still holds out near Little Johnson Lake, and this is the only flock I saw. The opening of the shooting season on the species will practically wipe the birds out. It is to be hoped that those few birds within the new game preserve will be spared.

RUFFED GROUSE. *Bonasa umbellus umbellus*. I was surprised to see so very few partridges in evidence; they are positively scarce, and are doomed to be scarcer still with the opening of the shooting season. A breeding species where found.

PRAIRIE CHICKEN. *Tympanuchus americanus americanus*. A resident breeding species. Almost unknown within Vilas County ten years ago, the species has increased wonderfully—so wonderfully that the law opens on the species this fall (1925). That spells the doom of the species in the county in general, but some may hold out within the new sanctuary. Let us hope so, at least.

TURKEY VULTURE. *Cathartes aura septentrionalis*. An uncommon summer resident, seldom seen unless there is a carcass about. Then the birds appear as by magic. I know nothing of their breeding within the region.

MARSH HAWK. *Circus hudsonius*. A common breeding species. Seen most frequently flying low over the swamps or fields in search of food.

SHARP-SHINNED HAWK. *Accipiter velox*. Unfortunately, rather common. The chief victims of this bird seem to be Myrtle Warblers, Vesper, Song and White-throated Sparrows.

COOPER'S HAWK. *Accipiter cooperi*. Not an uncommon breeding species, which, like the above species, does much damage to the smaller song birds. The only White-crowned Sparrow I saw in the region was in the talons of a Coopers' Hawk!

RED-TAILED HAWK. *Buteo borealis borealis*. Usually seen or heard high overhead, where the red tail, catching the sunlight, differentiates the species conspicuously. Breeds in the more isolated spots: Big Johnson, Little Gibson Lakes.

BALD EAGLE. *Haliaeetus leucocephalus leucocephalus*. A beautiful pair has bred for many years on Razorback Lake. Not infre-

quently seen about Big Muskallunge Lake, where I suspect another pair is breeding.

SPARROW HAWK. *Cerchneis sparverius sparverius*. The most abundant of the smaller hawks, met with almost exclusively in burned over areas or areas of young second growth. Feeds almost exclusively on grasshoppers, meadow and deer mice.

OSPREY. *Pandion haliaetus carolinensis*. An abundant breeding species. The nests, in the very tops of dead pine trunks, are features of many landscapes. Seen constantly over the large lakes, where they feed upon almost any species of fish available. A bird was seen over Big Muskallunge Lake carrying a sucker that must have weighed all of two pounds to its nearby nest.

BARRED OWL. *Strix varia varia*. The commonest of the large owls, but not often seen unless one frequents the big timber. Breeds near Nixon Lake, where nearly fully developed young have been seen out of the nest early in July.

SCREECH OWL. *Otus asio asio*. Quite frequently heard during the early evenings about the dwellings, but very difficult to discover during the daytime. It is a common breeding species.

GREAT HORNED OWL. *Bubo virginianus virginianus*. Heard more frequently than seen. It inhabits the less settled regions, and breeds about Little and Big Johnson, Little Gibson, and Rice Lakes.

BLACK-BILLED CUCKOO. *Coccyzus erythrophthalmus*. Haunter of the deeper thickets, this bird is seldom seen, but is not at all uncommon if one seeks it. It is not unlikely that the Yellow-billed Cuckoo also occurs, and both species probably breed within the region, but I happen to have no data on the subject.

KINGFISHER. *Ceryle alcyon*. A common species wherever there is country suitable for its burrowing nesting habits.

HAIRY WOODPECKER. *Dryobates villosus villosus*. Seen commonly about the residences, and breeding in the hardwood areas.

DOWNY WOODPECKER. *Dryobates pubescens medianus*. Also common, but less often seen than the Hairy. Found generally in the same associations.

YELLOW-BELLIED SAPSUCKER. *Sphyrapicus varius varius*. A common breeder throughout the region. The belt-like borings of the species are very much in evidence on both hardwoods and evergreens, and there is evidence of a not inconsiderable damage wrought by the birds.

NORTHERN PILEATED WOODPECKER. *Phloeotomus pileatus abieticola*. Rare. Found only in the heaviest timber, far away from the ordinary track of tourists. A pair was seen near Little Johnson Lake. Called locally "cock of the woods."

RED-HEADED WOODPECKER. *Melanerpes erythrocephalus*. A common breeding species, seen frequently along the road-sides and about the dwellings; less frequently in the heavy timber.

NORTHERN FLICKER. *Colaptes auratus luteus*. Like the preceding, a bird of the road-side timber. Common breeder.

WHIP-POOR-WILL. *Antrostomus vociferus vociferus*. Common wherever found, but extremely local in distribution. Around the forest ranger's look-out tower (Camp Two) the birds are abundant.

NIGHTHAWK. *Chordeiles virginianus virginianus*. Common throughout the region, breeding abundantly. The birds are much in evidence at dusk, when they feed on an abundance of gnats, midges, and mosquitoes.

CHIMNEY SWIFT. *Chaetura pelagica*. Common about the farms and dwellings, where they nest in their accustomed chimneys.

RUBY-THROATED HUMMINGBIRD. *Archilochus colubris*. One female was seen at Forest Home on Plum Lake on June 20; a male and a female on Big Muskallunge Lake August 12. An old nest was found along Rice Creek just above Plum Lake.

KINGBIRD. *Tyrannus tyrannus*. An abundant and very characteristic bird of the roadsides and more open woods, breeding often near streams.

CRESTED FLYCATCHER. *Myiarchus crinitus*. The characteristic voice of this species was heard daily about Forest Home on Plum Lake, but the birds were only seen twice. A breeding species.

PHOEBE. *Sayornis phoebe*. Commonly found about the dwellings, where old nests are not infrequently seen. Not often found in the deeper woods.

PEWEE. *Myiochanes virens*. A bird of the deeper woods, less often seen about the dwellings. A common breeding species.

LEAST FLYCATCHER. *Empidonax minimus*. One of the most characteristic of the smaller species found in the north woods. There was hardly a region visited where the familiar call of the species did not greet me.

PRAIRIE HORNED LARK. *Octocoris alpestris praticola*. Seen only on the golf course on Plum Lake, where probably a dozen individuals were found to be very tame.

BLUE JAY. *Cyanocitta cristata cristata*. Common throughout the region, but strangely quiet for so garrulous a bird.

CANADA JAY. *Perisoreus canadensis canadensis*. Locally common only. Seen only about the Camp Two lookout station, where the birds acted up to their traditional familiarity to perfection.

RAVEN. *Corvus corax principalis*. A very few ravens are still to be found about Little Johnson Lake; three were seen on August 10 in the heavy timber.

CROW. *Corvus brachyrhynchos brachyrhynchos*. A breeding species, but not nearly as common as I have found them in similar localities in northern Minnesota and Michigan.

COWBIRD. *Molothrus ater ater*. A frequenter of the pastures and open fields, abundant where cattle are found.

RED-WINGED BLACKBIRD. *Agelaius phoeniceus arctolegus*. Locally common, but of very limited distribution. The largest number were seen at the east end of Big Muskallunge Lake, feeding along the rocky shore.

MEADOWLARK. *Sturnella magna magna*. A bird of the open fields and pastures, never met with away from civilization. Common on the farms and on the Plum Lake golf course.

BRONZED GRACKLE. *Quiscalus quiscula aeneus*. A common breeding species in the evergreens. The birds begin to flock as soon as the young can fly, after which they visit the cultivated fields—to the annoyance of the farmer.

PURPLE FINCH. *Carpodacus purpureus purpureus*. Not common, but several small flocks were noted in July and August. Abundant as a migrant, particularly so in the spring.

GOLDFINCH. *Astragalinus tristis tristis*. A common species, found most frequently along the fences in cultivated regions, where they breed.

PINE SISKIN. *Spinus pinus*. One small flock was seen in a tamarack swamp near Little Gibson Lake on July 11, 1925, the only record I have.

ENGLISH SPARROW. *Passer domesticus*. Abundant about the villages and to a much less extent about the isolated dwellings. Entirely absent elsewhere.

VESPER SPARROW. *Pooecetes gramineus gramineus*. A characteristic bird of the roadsides and open fields. Very common, breeding throughout the region.

WHITE-CROWNED SPARROW. *Zonotrichia leucophrys leucophrys*. Uncommon. The only specimen seen was in the talons of a Cooper's Hawk! Perhaps more abundant than present data indicate.

WHITE-THROATED SPARROW. *Zonotrichia albicollis*. Common, but much less so than I have found the species in similar regions in northern Minnesota. The song is frequently heard, and the birds breed throughout the area.

CHIPPING SPARROW. *Spizella passerina passerina*. These little chaps, abundant as they are, seem strangely out of place in the north woods. Yet there they are, in full song, as prosperous as on the well kept city lawns. They breed throughout the area.

SLATE-COLORED JUNCO. *Junco hyemalis hyemalis*. A common summer resident, seen on several occasions carrying food. They frequent the roadsides, and were never seen in the woods.

SONG SPARROW. *Melospiza melodia melodia*. Very common all over the region, seen most frequently about the smaller lakes. Three nests were found in July, 1925, all with nearly fledged young.

SWAMP SPARROW. *Melospiza georgiana*. Seen frequently about Little Gibson and Nixon Lakes. Probably a breeding species.

CHEWINK. *Pipilo erythrophthalmus erythrophthalmus*. Common throughout the area, breeding usually among the hardwoods near the smaller lakes. Plum, Nixon, Rice, Little Johnson Lakes.

ROSE-BREASTED GROSBEAK. *Hedymeles ludovicianus*. Not common anywhere within the reservation. Seen only twice, but heard several times.

INDIGO BUNTING. *Passerina cyanea*. Like the Vesper Sparrow, a bird of the roadside, most frequently seen sitting on telephone or light wires. Probably breeds, but no data are at hand.

SCARLET TANAGER. *Piranga erythromelas*. Rather abundant, and always a joy to see. I have found them all over the region, both near the dwellings and in the deep woods. A nest with newly hatched young was found on July 8, 1925.

PURPLE MARTIN. *Progne subis subis*. Abundant wherever inducement in the form of a nesting site is offered. Elsewhere entirely absent.

BARN SWALLOW. *Hirundo erythrogastra*. Common around the villages; elsewhere rare. A pair nested in 1925 on the boathouse door of Forest Home, Plum Lake.

TREE SWALLOW. *Iridoprocne bicolor*. Common around the smaller swampy lakes, where the birds nest in hollows in dead tree trunks; absent from the vicinity of villages.

BANK SWALLOW. *Riparia riparia*. Common only where suitable sand banks offer nesting sites. Since these are rare and local, the species is local in distribution.

ROUGH-WINGED SWALLOW. *Stelgidopteryx serripennis*. Less common than the preceding species, and likewise confined to few and scattered nesting areas.

CEDAR WAXWING. *Bombycilla cedrorum*. A common breeding species. Almost as soon as the young are out of the nest the birds begin to gather in small flocks.

MIGRANT SHRIKE. *Lanius ludovicianus migrans*. Not common. A Chipping Sparrow and a Myrtle Warbler pinned on a thornapple tree at Plum Lake bespoke the activities of this bird.

RED-EYED VIREO. *Vireosylva olivacea*. One of the most characteristic singers of the woods. Seldom seen, though the birds are really common. Some half dozen nests have been found.

WARBLING VIREO. *Vireosylva gilva gilva*. Decidedly less numerous than the preceding, but more frequently seen as they prefer the vicinity of dwellings to the deeper woods.

BLACK AND WHITE WARBLER. *Mniotilta varia*. Abundant as a migrant, but one can expect to find the species at almost any time during the summer. Seen both in July and August about Plum Lake. Possibly a breeding species, but no data are at hand.

TENNESSEE WARBLER. *Vermivora peregrina*. Several were seen during July, 1925, about Forest Home on Plum Lake, as well as in camp on Little Gibson Lake.

YELLOW WARBLER. *Dendroica aestiva aestiva*. Not common, but occasionally seen about the more cultivated dwellings, where the birds are likely to breed in rose bushes or currant patches.

BLACK-THROATED BLUE WARBLER. *Dendroica caerulescens caerulescens*. Several seen and heard about Plum and Little Gibson Lakes, July, 1925.

MYRTLE WARBLER. *Dendroica coronata*. Seen constantly about Forest Home on Plum Lake, several times carrying insect food, but no nest or young could be discovered.

CHESTNUT-SIDED WARBLER. *Dendroica pensylvanica*. Forest Home on Plum Lake on June 19; again on August 11. No breeding data.

BLACK-POLL WARBLER. *Dendroica striata*. Seen during both July and August, most frequently on evergreen and tamaracks than on hardwoods.

BLACK-THROATED GREEN WARBLER. *Dendroica virens*. Two males and one female near Little Johnson Lake are the only records on hand. July 11, 1925.

PINE WARBLER. *Dendroica vigorsi*. A single individual at Plum Lake, Forest Home, is the only summer record.

OVENBIRD. *Seiurus aurocapillus*. Abundant throughout the region, much more frequently heard than seen. The "teacher" call of the Ovenbird was heard almost daily. Breeder.

MARYLAND YELLOW-THROAT. *Geothlypis trichas trichas*. Heard commonly and frequently seen about Big Muskallunge, Plum and Nixon Lakes, where they breed in suitable localities.

REDSTART. *Setophaga ruticilla*. Quite common in the more open woods about Plum Lake. A nest of young was found near Little Johnson Lake on July 11, 1925.

CATBIRD. *Dumetella carolinensis*. A common breeding species most in evidence about the lawns of towns and villages. Less often seen in the woods, though a pair nested at Forest Home on Plum Lake in July, 1924.

BROWN THRASHER. *Toxostoma rufum*. Common about the towns and even about the houses in the woods, where the singing of the birds is a rare delight. A breeding species.

HOUSE WREN. *Troglodytes aedon aedon*. Breeds almost any place an attractive wren house is put up; a common summer resident throughout the more settled areas.

WINTER WREN. *Nannus hiemalis hiemalis*. Usually seen scurrying like a little mouse in and out of brush piles and tangled thickets. Shows a decided preference for cedar and tamarack swamps. Not a songster.

LONG-BILLED MARSH WREN. *Telmatodytes palustris palustris*. Not an uncommon breeding species where cat-tail swamps are to be found. Absent elsewhere.

BROWN CREEPER. *Certhia familiaris americana*. Seen often about Plum Lake, and probably common throughout the region, more especially among the hardwoods.

WHITE-BREASTED NUTHATCH. *Sitta carolinensis carolinensis*. A common breeding species, using the holes made by the Downy Woodpecker for the site. Shows little preference in the matter of tree species.

RED-BREASTED NUTHATCH. *Sitta canadensis*. Somewhat more common, I believe, than the preceding; most common among the evergreens. No breeding data at hand.

CHICKADEE. *Penthestes atricapillus atricapillus*. A common breeding species, particularly about Plum and Razorback Lakes. A pair with seven babies were much in evidence during early July, 1925.

GOLDEN-CROWNED KINGLET. *Regulus satrapa satrapa*. Several pairs were seen about Little Johnson and Little Gibson Lakes during early July. Probably nesting in the area, but it is not a common species.

WILSON'S THRUSH. *Hylocichla fuscescens*. Not common, but several were seen, and others heard, during July and August. One of the finest of the songsters.

OLIVE-BACKED THRUSH. *Hylocichla ustulata swainsoni*. Somewhat more common than the preceding—at least more frequently seen because it tends to avoid the denser woods. Breeds in hardwoods or bushes, often near dwellings.

HERMIT THRUSH. *Hylocichla guttata pallasi*. Haunter of the hardwoods only, the Hermit Thrush is, next to the Robin, the commonest of the thrushes. Two nests with young were found early in July, 1925, at Plum Lake.

ROBIN. *Planesticus migratorius migratorius*. The sight of the Robin, hunting insects along the water's edge, far from civilization (or at least cultivation), makes one feel at home at once. Robins are surprisingly abundant even in the more remote portions of the region. Breeds throughout the area.

BLUEBIRD. *Sialia sialis sialis*. Birds of the more open country, the Bluebird is not at all common in the region. Seen, however, along the roadsides, and about the more open country of the towns. Several pairs were seen about the Plum Lake golf course, breeding in woodpecker holes.

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