

ADDITIONAL MALLOPHAGA FROM OHIO BIRDS.*

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In a paper published in 1928 Peters listed 94 species of Mallophaga from 114 species of birds taken in Ohio.

The following list includes 45 additional species of Mallophaga from 91 species of Ohio birds. A number of these host records are new as there are, to my knowledge, no published records of any parasite species ever having been taken from some of the host species. In some other instances the record of a parasite species on a host form is new for that host.

Most of the collecting of both birds and parasites was done by the writer during the last four years. Many specimens, however, were collected by Charles F. Walker and Milton B. Trautman whose assistance I gratefully acknowledge.

All the specimens from which this list was compiled are located in the University collection and in my own personal collection.

In this list Harrison's sequence is followed where possible.

LIST OF MALLOPHAGA FROM OHIO BIRDS.

Order MALLOPHAGA Nitzsch.

Suborder AMBLYCERA Kellogg.

Family *Menoponidæ* Mjoberg.

Menopon Nitzsch.

M. maestum Kellogg and Chapman. Towhee, *Pipilo erythrophthalmus erythrophthalmus* (Linn.), Columbus.

Colpocephalum Nitzsch.

C. haliaeti Denny. Osprey, *Pandion haliaetus carolinensis* (Gmel.), Columbus.

C. spinulosum Piaget. Baird sandpiper, *Pisobia bairdi* (Coues), Buckeye Lake.

C. unciferum Kellogg. White pelican, *Pelecanus erythrorhynchus* Gmel. Buckeye Lake.

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Cuculiphilus Uchida

- C. fasciatus** (Scopoli). Black billed cuckoo, *Coccyzus erythrophthalmus* (Wilson), Buckeye Lake.

Menacanthus Neumann.

- M. chrysophaeum** (Kellogg). Goldfinch, *Astragalinus tristis tristis* (Linn), Urbana; field sparrow, *Spizella pusilla pusilla* (Wilson), Sugar Grove; song sparrow, *Melospiza melodia melodia* (Wilson), Columbus; meadow lark, *Sturnella magna magna* (Linn.), Columbus; ovenbird, *Seiurus aurocapillus* (Linn.), Buckeye Lake; Connecticut warbler, *Oporornis agilis* (Wilson), Buckeye Lake; northern yellowthroat, *Geothlypis trichas trichas* (Linn.), Columbus.
- M. persignatus** (Kellogg). Robin, *Planesticus migratorius migratorius* (Linn.), Columbus; bronzed grackle, *Quiscalus quiscula aeneus* Ridgway, Columbus.

Myrsidea Waterston.

- M. dissimilis** (Kellogg). Tree swallow, *Iridoprocne bicolor* (Vieill), Buckeye Lake; barn swallow, *Hirundo erythrogaster* Boddaert., Columbus.
- M. incerta** (Kellogg). Olive backed thrush, *Hylocichla ustulata swainsoni* (Tschudi), Columbus; bay breasted warbler, *Dendroica castanea* (Wilson), Columbus; blackburnian warbler, *Dendroica fusca* (Muller), Columbus; hermit thrush, *Hylocichla guttata pallasii* (Cabanis), Columbus.

Machaerilaemus Harrison.

- M. laticorpus** (Carriker). Bobolink, *Dolichonyx oryzivorus* (Linn.), Columbus; indigo bunting, *Passerina cyanea* (Linn.), Columbus; cowbird, *Molothrus ater ater* (Boddaert), Buckeye Lake.

Actornithophilus Ferris.

- A. aegialitidis** (Durrant). Black bellied plover, *Squatarola squatarola cynosurae* Thayer and Bangs, Buckeye Lake; ruddy turnstone, *Arenaria interpres morinella* (Linn.), Buckeye Lake; sanderling, *Crocethia alba* (Pallas), Buckeye Lake.
- A. tigrus** (Kellogg and Mann). Ruddy turnstone, *Arenaria interpres morinella* (Linn.), Buckeye Lake.
- A. timidus** (Kellogg). Sanderling, *Crocethia alba* (Pallas), Buckeye Lake.

Ferrisia Uchida.

- F. laticeps** (Kellogg). Snowy Egret, *Egretta candidissima candidissima* (Gmel.), Buckeye Lake.

Trinoton Nitzsch.

- T. querquedulae** (Linn.). Blue winged teal, *Querquedula discors* (Linn.), Buckeye Lake; green winged teal, *Nettion carolinense* (Gmel.), Buckeye Lake.

Pseudomenopon Mjoberg.

- P. pacificum** (Kellogg). Yellow rail, *Coturnicops noveboracensis* (Gmel.), Westerville; Virginia rail, *Rallus virginianus* Linn., Columbus.
- P. tridens** (Nitzsch). Coot, *Fulica americana* Gmelin., Buckeye Lake.

Family *Ricinidae* Neumann.**Ricinus** DeGeer.

- R. angulatus** (Kellogg). Vesper sparrow, *Pooecetes gramineus gramineus* (Gmel.), Columbus; Lapland longspur, *Calcarius lapponicus lapponicus* (Linn.), Columbus; Savannah sparrow, *Passerculus sandwichensis savanna* (Wilson), Columbus; blue gray gnatcatcher, *Poliophtila caerulea caerulea* (Linn.), Columbus; magnolia warbler, *Dendroica magnolia* (Wilson), Sugar Grove; snow bunting, *Plectrophenax nivalis nivalis* (Linn.), Fredericktown.
- R. pallens** (Kellogg). Prairie warbler, *Dendroica discolor* (Vieillot), Sugar Grove; blackburnian warbler, *Dendroica fusca* (Muller), Columbus; palm warbler, *Dendroica palmarum palmarum* (Gmel.), Columbus; golden crowned kinglet, *Regulus satrapa satrapa* Lichtenstein, Buckeye Lake; Bachman sparrow, *Peucaea aestivalis bachmani* (Aud.), Sugar Grove; tree sparrow, *Spizella monticola monticola* (Gmel.), Columbus; scarlet tanager, *Piranga erythromelas* Vieillott, Sugar Grove; northern yellowthroat, *Geothlypis trichas trichas* (Linn.), Columbus.

Suborder ISCHNOCERA Kellogg.

Family *Phlopteridae* Burmeister.**Goniodes** Nitzsch.

- G. mammillatus** Rudow. Ring necked pheasant, *Phasianus colchicus torquatus* Gmelin, Wellington.

Phlopterus Nitzsch.

- P. conicus** (Denny). Black bellied plover, *Squatarola squatarola cynosurae* Thayer and Bangs, Buckeye Lake; ruddy turnstone, *Arenaria interpres morinella* (Linn.), Buckeye Lake; sanderling, *Crocethia alba* (Pallas), Buckeye Lake.
- P. evagens** (Kellogg). Red headed woodpecker, *Melanerpes erythrocephalus* (Linn.), Columbus.
- P. excisus** (Nitzsch). Barn swallow, *Hirundo erythrogaster* Boddaert, Columbus; tree swallow, *Iridoprocne bicolor* (Vieillot), Buckeye Lake.
- P. fuscoventralis** (Osborn). Olive sided flycatcher, *Nuttallornis borealis* (Swainson), Buckeye Lake.
- P. fusiformis** (Denny). Least sandpiper, *Pisobia minutilla* (Vieillot), Bono.

- P. incisus** (Kellogg). Golden crowned kinglet, *Regulus satrapa satrapa* Lichtenstein, Buckeye Lake; tree swallow, *Iridoprocne bicolor* (Vieillot), Buckeye Lake.
- P. melanocephalus** (Burm.). Parasitic jaeger, *Stercorarius parasiticus* (Linn.), Buckeye Lake.
- P. subflavescens** (Geoff.). White eyed vireo, *Vireo griseus griseus* (Boddaert), Buckeye Lake; blue jay, *Cyanocitta cristata cristata* (Linn.), Columbus; mockingbird, *Mimus polyglottos polyglottos* (Linn.), Columbus; red winged blackbird, *Agelaius phoeniceus phoeniceus* (Linn.), Columbus; migrant shrike, *Lanius ludovicianus migrans* W. Palmer, Columbus; red start, *Setophaga ruticilla* (Linn.), Sugar Grove; red eyed vireo, *Vireosylva olivacea* (Linn.), Sugar Grove; purple finch, *Carpodacus purpureus purpureus* (Gmel.), Buckeye Lake; snow bunting, *Plectrophenax nivalis nivalis* (Linn.), Buckeye Lake; hermit thrush, *Hylocichla guttata pallasi* (Cabanis), Buckeye Lake; field sparrow, *Spizella pusilla pusilla* (Wilson), Sugar Grove; slate colored junco, *Junco hyemalis hyemalis* (Linn.), Sugar Grove; indigo bunting, *Passerina cyanea* (Linn.), Columbus; horned lark, *Otocoris alpestris alpestris* (Linn.), Columbus; white crowned sparrow, *Zonotrichia leucophrys leucophrys* (J. R. Foster), Columbus; tree sparrow, *Spizella monticola monticola* (Gmel.), Buckeye Lake; olive backed thrush, *Hylocichla ustulata swainsoni* (Tschudi), Columbus; Philadelphia vireo, *Vireosylva philadelphica* Cassin, Bono; Kentucky warbler, *Oporornis formosus* (Wilson), Sugar Grove.

Anatoecus Cummings.

- A. dentatus** (Scopoli). Blue winged teal, *Querquedula discors* (Linn.), Buckeye Lake; gadwall, *Chaulelasmus streperus* (Linn.), Buckeye Lake; wood duck, *Aix sponsa* (Linn.), Buckeye Lake; bufflehead, *Charitonetta albeola* (Linn.), Buckeye Lake.

Degeeriella Neumann.

- D. complexiva** (Kellogg and Chapman). White rumped sandpiper, *Pisobia fuscicollis* (Vieillot), Buckeye Lake; western sandpiper, *Ereunetes mauri* Cabanis, Buckeye Lake; red backed sandpiper, *Pelidna alpina sakhalina* (Vieillot), Buckeye Lake.
- D. fusca** (Nitzsch). Sharp shinned hawk, *Accipter velox* (Wilson), Buckeye Lake; red tailed hawk, *Buteo borealis borealis* (Gmel.), Columbus; marsh hawk, *Circus hudsonius* (Linn.), Attica.
- D. illustris** (Kellogg). Bronzed grackle, *Quiscalus quiscula aeneus* Ridgway, Lancaster; bobolink, *Dolichonyx oryzivorus* (Linn.), Columbus.
- D. infecta** (Kellogg and Kuwana). Red phalarope, *Phalaropus fulicarius* (Linn.), Buckeye Lake.
- D. longa** (Kellogg). Tree swallow, *Iridoprocne bicolor* (Vieillot), Buckeye Lake; purple martin, *Progne subis subis* (Linn.), Columbus; rough winged swallow, *Stelgidopteryx serripennis* (Aud.), Buckeye Lake.

- D. picturata** (Osborn). Meadow lark, *Sturnella magna magna* (Linn.), Columbus.
- D. simplex** (Kellogg.) Mockingbird, *Mimus polyglottos polyglottos* (Linn.), Buckeye Lake.
- D. vulgata** (Kellogg). Slate colored junco, *Junco hyemalis hyemalis* (Linn.), Lancaster; white throated sparrow, *Zonotrichia albicollis* (Gmel.), Columbus; Bachman sparrow, *Peucaea aestivalis bachmani* (Aud.), Sugar Grove; cedar waxwing, *Bombycilla cedrorum* Vieillot, Sugar Grove; blue winged warbler, *Vermivora pinus* (Linn.), Sugar Grove; swamp sparrow, *Melospiza georgiana* (Latham), Columbus; English sparrow, *Passer domesticus domesticus* (Linn.), Attica; Bewick's wren, *Thryomanes bewicki bewicki* (Aud.), Columbus.

Rallicola Johnston & Harrison.

- R. advena** (Kellogg). Coot, *Fulica americana* Gmelin, Buckeye Lake.
- R. bisetosa** (Piaget). Yellow rail, *Coturnicops noveboracensis* (Gmel.), Westerville.
- R. californica** (Kellogg and Chapman). Virginia rail, *Rallus virginianus* Linn., Columbus.

Esthiopterum Harrison.

- E. botauri** (Osborn). Least bittern, *Ixobrychus exilis* (Gmel.), Buckeye Lake.
- E. comstocki** (Kellogg and Chapman). Yellow rail, *Coturnicops noveboracensis* (Gmel.), Westerville.
- E. columbae** (Linn.). Mourning dove, *Zenaidura macroura carolinensis* (Linn.), Columbus.
- E. crassicorne** (Scopoli). Pintail, *Dafila acuta tzitzihoa* (Vieillot), Buckeye Lake; bufflehead, *Charitonetta albeola* (Linn.), Buckeye Lake.
- E. forficulatum** (Nitzsch). White pelican, *Pelecanus erythrorhynchos* (Gmel.), Buckeye Lake.

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