

A LIST OF MALLOPHAGA FROM GALLINACEOUS BIRDS OF NORTH AMERICA

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During the past few years, the author has made a special study of the Mallophaga found on the gallinaceous birds of North America north of Mexico. The taxonomic papers resulting from that study can be found principally in the Journal of the Kansas Entomological Society.

Since it is seldom that a worker has an opportunity to examine such a wealth of material as was loaned for this study, it is believed that the data should be made available to other workers. Little work has been done on the effect of such external parasites as the Mallophaga on the health and vigor of our game birds. Before such an ecological study is undertaken, the investigator should become familiar with the species of lice which are normally found on the various birds. Contrary to much published literature, the author was unable to find many instances of lice infesting birds which were not considered the normal hosts. The only exception encountered was the presence of *Cuclotogaster heterographus* (Nitzsch), normally found on domestic chickens, on hatchery-reared Ring-necked Pheasants from the California Game Farm, Ontario, Canada, and Ithaca, New York.

All host names are from Ridgway and Friedmann, the Birds of North and Middle America, Part X. I wish to take this opportunity to thank the many individuals and institutions who loaned material for this study.

Bonasa umbellus umbellus (Linnaeus)—Eastern Ruffed Grouse.

Goniodes bonasus Emerson, N. Y.

Lagopoecus umbellus Emerson, N. Y., Penn.

Bonasa umbellus phaia Aldrich and Friedmann—Idaho Ruffed Grouse.

Lagopoecus umbellus Emerson, Idaho.

Bonasa umbellus togata (Linnaeus)—St. Lawrence Ruffed Grouse.

Lagopoecus umbellus Emerson, Ontario.

Bonasa umbellus umbelloides (Douglas)—Gray Ruffed Grouse.

Goniodes bonasus Emerson, Colo., Mont.

Callipepla squamata pallida Brewster—Arizona Scaled Partridge.

Colinicola pallida Emerson, Texas.

Goniodes squamatus Emerson, Texas.

Oxylipeurus callipephus (Carriker), Texas.

Canachites canadensis canadensis (Linnaeus)—Hudsonian Spruce Partridge.

Goniodes corpulentus Kellogg and Mann, Alaska, Manitoba.

Lagopoecus sp., Alaska.

Canachites canadensis canace (Linnaeus)—Canadian Spruce Partridge.

Goniodes corpulentus Kellogg and Mann, Ontario.

Canachites franklinii (Douglas)—Franklin's Grouse.

Goniodes corpulentus Kellogg and Mann, Mont.

Lagopoecus sp., Mont.

Centrocercus urophasianus (Bonaparte)—Sage Grouse.

Goniodes centrocerci Simon, Idaho, Mont., Ore., Wy.

Lagopoecus gibsoni Hopkins, Idaho, Mont., Ore., Wy.

Colinus virginianus virginianus (Linnaeus)—Eastern Bobwhite.

Colinicola numidianus (Denny), Ga., Ohio, Okla.

- Goniodes ortygis* Denny, Ala., Ga., Iowa, Md., N. C., Ohio, Okla., S. C.
Menacanthus sp., Okla.
Oxylipeurus clavatus (McGregor), Md., Okla.
- Colinus virginianus floridanus* (Coues)—Florida Bobwhite.
Colinicola numidianus (Denny), Fla.
Goniodes ortygis Denny, Fla.
- Colinus virginianus texanus* (Lawrence)—Texas Bobwhite.
Goniodes ortygis Denny, Mont., Ore., Texas, Wash.
- Cyrtonyx montezumae mearnsi* Nelson—Mearns's Harlequin Quail.
Colinicola mearnsi Emerson, Ariz.
Goniodes submamillatus Emerson, Ariz.
Oxylipeurus montezumae Emerson, Ariz.
- Dendragapus obscurus obscurus* (Say)—Dusky Grouse.
Goniodes merriamanus Packard, Wy.
- Dendragapus obscurus fuliginosus* (Ridgway)—Sooty Grouse.
Lagopoecus obscurus Emerson, Calif., Wash., Brit. Col.
- Dendragapus obscurus richardsonii* (Douglas)—Richardson's Grouse.
Goniodes merriamanus Packard, Mont.
Lagopoecus obscurus Emerson, Mont., Brit. Col.
- Lagopus lagopus alascensis* Swarth—Alaska Willow Ptarmigan.
Amyrsidea lagopi (Grube), Alaska.
Goniodes lagopi (Linnaeus), Alaska.
Lagopoecus affinis (Children), Alaska.
- Lagopus lagopus albus* (Gmelin)—Keewatin Willow Ptarmigan.
Amyrsidea lagopi (Grube), N. W. T., P. Q.
Goniodes lagopi (Linnaeus), N. W. T., P. Q., Ont.
Lagopoecus affinis (Children), N. W. T., P. Q., Ont.
- Lagopus lagopus alexandrae* J. Grinnell—Alexander's Ptarmigan.
Amyrsidea lagopi (Grube), Kodiak Isl.
Goniodes lagopi (Linnaeus), Kodiak Isl.
Lagopoecus affinis (Children), Kodiak Isl.
- Lagopus lagopus leucopterus* Taverner—Baffin Island Ptarmigan.
Goniodes lagopi (Linnaeus), Baffin Isl.
Lagopoecus affinis (Children), Baffin Isl.
- Lagopus leucurus peninsularis* Chapman—Kenai White-tailed Ptarmigan.
Goniodes sp., Alaska.
Lagopoecus affinis (Children), Alaska.
- Lagopus mutus dixonii* J. Grinnell—Dixon's Ptarmigan.
Amyrsidea lagopi (Grube), Alaska.
Goniodes lagopi (Linnaeus), Alaska.
Lagopoecus affinis (Children), Alaska.
- Lagopus mutus rupestris* (Gmelin)—Rock Ptarmigan.
Amyrsidea lagopi (Grube), N. W. T.
Goniodes lagopi (Linnaeus), Southampton Isl.
- Lophortyx californica californica* (Shaw)—Valley Quail.
Colinicola docophoroides (Piaget), Calif., Brit. Col.
Goniodes mamillatus Rudow, Calif., Brit. Col.
- Lophortyx californica brunnescens* Ridgway—California Quail.
Colinicola docophoroides (Piaget), Calif.
Goniodes mamillatus Rudow, Calif.
- Lophortyx gambelii gambelii* Gambel—Gambel's Quail.
Lagopoecus gambelii Emerson, Ariz.
- Meleagris gallopavo silvestris* Vieillot—Eastern Turkey.
Chelopistes meleagridis (Linnaeus), Okla., Penn., Va.
Menacanthus stramineum (Nitzsch), Okla., Va.
Oxylipeurus polytrapezius (Burmeister), Mo., Okla., N. C., Texas.
- Meleagris gallopavo merriami* Nelson—Merriam's Turkey.
Chelopistes meleagridis (Linnaeus), Ariz.
Oxylipeurus polytrapezius (Burmeister), Ariz.
- Meleagris gallopavo osceola* Scott—Florida Turkey.
Oxylipeurus polytrapezius (Burmeister), Fla.
- Oreortyx picta picta* (Douglas)—Plumed Mountain Quail.
Goniodes picta Emerson, Calif.
Lagopoecus californicus Kellogg and Chapman, Calif., Nev.

- Pedioecetes phasianellus phasianellus* (Linnaeus)
—Northern Sharp-tailed Grouse.
Goniodes nebraskensis Carriker, Manit.,
Ont.
Lagopoecus perplexus (Kellogg and Chap-
man), Ont.
- Pedioecetes phasianellus campestris* Ridgway—
Prairie Sharp-tailed Grouse.
Amysrsidea sp., Wisc.
Goniodes nebraskensis Carriker, Nebr.
- Pedioecetes phasianellus columbianus* (Ord)—
Columbian Sharp-tailed Grouse.
Goniodes nebraskensis Carriker, Mont.
Lagopoecus perplexus (Kellogg and Chap-
man), Wash.
- Pedioecetes phasianellus jamesi* Lincoln—Great
Plains Sharp-tailed Grouse.
Goniodes nebraskensis Carriker, N. D.
- Perdix perdix perdix* (Linnaeus)—Hungarian
Partridge.
Cuclotogaster heterogrammicus (Nitzsch),
Calif., Mont., Wash., Brit. Col.
Goniocotes microthorax (Nitzsch), Mont.,
Brit. Col.
Goniodes dispar Burmeister, Calif., Mont.,
Ohio, Va., Wash., Brit. Col., Prince Ed-
wards Isl., Sask.
- Menopon pallescens* "Nitzsch", Brit. Col.,
Prince Edwards Isl.
- Phasianus colchicus torquatus* Gmelin—Ring-
necked Pheasant.
Cuclotogaster heterographus (Nitzsch),
Calif., N. Y., Ont.
Goniocotes chrysocephalus Giebel, Mont.
Goniodes colchici Denny, Calif., Iowa,
Mont., Ore., Brit. Col., Ont.
Lagopoecus colchicus Emerson, Ill., Mich.,
Mont., Utah.
Lipeurus maculosus Clay, Conn., N. J.,
Ore., Wisc., Brit. Col.
Menacanthus sp., Ill., Brit. Col.
Oxylipeurus colchicus Clay, Ill.
- Tympanuchus cupido pinnatus* (Brewster)—
Greater Prairie Hen.
Goniodes cupido Rudow, Nebr., Okla.,
Canada.
Lagopoecus sp., Okla.
- Tympanuchus pallidicinctus* (Ridgway)—Lesser
Prairie Hen.
Goniodes cupido Rudow, Okla.
Lagopoecus sp., Okla.

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