

Notes on the arthropod fauna of Spitsbergen II.

9. Mallophaga from Spitsbergen and Bear Island.

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The samples of bird lice dealt with here were collected on Spitsbergen in 1964 and 1965 and on Bear Island in 1968 by the author NYHOLM and identified by the author HACKMAN.

Records of *Mallophaga* by earlier Spitsbergen expeditions have been published by WATERSTON 1922 and ZUNKER 1933 and altogether 10 species from 12 bird species are listed. The present collection contains 44 species from 27 bird species. In an ectoparasitic group like the *Mallophaga* the biotope is the host and other capture data (locality and phenology) are of minor importance. The latter are given here only to make a later check-up of the samples possible. For identification SÉGUY's handbook (1944) has mainly been used and the nomenclature has been checked with the help of HOPKINS & CLAY (1952).

List of species.

Actornithophilus bicolor (PIAGET).

Spitsbergen: Kapp Linné, 21. VI. 1965, 1 juv. from *Arenaria interpres interpres* (L.) ♂; 1 juv. from a ♀ of the same host.

Type host *Arenaria interpres* (L.)

Actornithophilus umbrinus (BURMEISTER sensu TIMMERMANN).

Spitsbergen: Kapp Linné 21. VI. 1965, 1 juv from *Calidris alpina alpina* (L.) ♀.

Type host *Calidris testacea* (PALLAS). Also on other *Calidris* spp.

Austromenopon fuscofasciatum (PIAGET).

Spitsbergen: Sassendalen 14. VII. 1964, 2♂♂ 2♀♀ 4 juv. from *Stercorarius parasiticus* (L.) ♀; Longyearbyen 26. VI. 1964, 5♀♀ 1 juv. from *Stercorarius longicaudus pallescens* LOPPENTHIN ♀; Adventfjorden 26. VI. 1964, 1♀ from *Phalaropus fulicarius jourdaini* IREDALE ♀.

Type host *Stercorarius pomarinus* (TEMMINCK). ZUNKER (1933) lists *Austromenopon fuscofasciatum* as a parasite of *Stercorarius parasiticus*. The specimen from *Phalaropus fulicarius* is certainly not *A. corporosum* KELLOG & KUVADA (known from *Phalaropus*), because the bristle M.p.s. 3 is long (see CLAY 1959 p. 160), but most probably a straggler of *fuscofasciatum*.

Austromenopon sp. (*nigropleurum* group)

Spitsbergen: Hornsund 28. VII. 1964, 1♀ from *Plautus alle alle* (L.)

A. merguli TIMMERMANN has been described from *Plautus alle* and may be in question.

Austromenopon lutescens (BURMEISTER)

Not in the present collection. Both WATERSTON (1922) and ZUNKER (1933) list the species from *Calidris maritima* from Spitsbergen. The type host is *Philomachus pugnax*.

Menacanthus sp.

Spitsbergen: Adventfjorden 25. VI. 1964, 1 ♀ from *Plectrophenax nivalis nivalis* (L.) ♂.

The specimen resembles *Menacanthus annulatus* (GIEBEL) (host *Passer domesticus*). Possibly a new species.

Menacanthus mutabilis BLAGOVESHCHENSKY

Bear Island: the Radio Station 6. VI. 1967, 1 juv. and eggs on *Sturnus vulgaris* L.
Type host *Sturnus vulgaris* L.

Trinoton anserinum (J. C. FABRICIUS)

Bear Island: the Radio Station 6. VI. 1967, 2 ♀♀ from *Anser fabalis brachyrhynchus* BAILLON ♂.
Type host *Anser anser* L. Also on other *Anser* species. Mentioned by WATERSTON (1922) from two *Anser* species from Spitsbergen.

Trinoton querquedulae (LINNAEUS)

Not in the present collection. Mentioned by ZUNKER (1933) as probably from Spitsbergen. *Nyroca* sp. and *Mergus serrator* are given as hosts, which throws some doubt of the records, since other related *Trinoton* species would appear more likely (*T. mergi* on *Mergus serrator* and *T. nyrocae* EICHLER on *Nyroca* spp.).

Ricinus sp.

Bear Island: Padda 9. VI. 1967, 1 ♂ 1 ♀ 2 juv. from *Plectrophenax nivalis nivalis* (L.).

Possibly a new species.

Ricinus sp.

Bear Island: Fugleodden 9. VI. 1967, 1 ♂ from *Oenanthe oenanthe oenanthe* (L.)

Lagopoecus affinis (CHILDREN)

Not in the present collection. The record by ZUNKER (1933) of *Lagopoecus cameratus* (BURMEISTER) from *Lagopus mutus* from Spitsbergen probably refers to *Lagopoecus affinis*.

Philoferus sp.

Spitsbergen: Longyearbyen 4. VII. 1964, 2 ♂♂ 5 ♀♀ 4 juv. from *Oenanthe oenanthe leucorrhoea* GMELIN ♂; 7. VII. 1964, 1 ♀ from the same host species, ♀. — Bear Island: Fugleodden 9. VI. 1967, 3 ♀♀ 1 juv. from *Oenanthe oenanthe oenanthe* (L.).

Probably a new species belonging to the "subflavescens" complex.

Philoferus sp. (*citrinellae* group)

Bear Island: Teltvika 5. VI. 1967, 1 ♂ 1 ♀ from *Emberiza schoeniclus schoeniclus* (L.).

Philoferus hamatus PACKARD (?)

Bear Island: Padda 4. VI. 1967, 1 juv. from *Plectrophenax nivalis nivalis* (L.).
The type host of *P. hamatus* is *Plectrophenax nivalis* L.

Philoferus sp.

Bear Island: Kapp Posadowsky 9. VI. 1967, 2 juv. from *Eremophila alpestris flava* GMELIN.

Saemundssonina breviappendiculata (PIAGET)

Spitsbergen: Longyearbyen 5. VII. 1964, 3 ♂♂ 2 ♀♀ 1 juv. from *Larus fuscus graellsii* BREHM.
Type host *Larus fuscus* L.

Saemundssonina cephalus (DENNY)

Spitsbergen: Sassendalen 14. VII. 1964, 3 ♀♀ from *Stercorarius parasiticus* (L.) ♀.
Type host *Stercorarius parasiticus* L.

Saemundssonina gonothorax (GIEBEL) (?)

Not in the present collection. ZUNKER (1933) mentions as hosts from Spitsbergen *Larinae* of four genera and obviously several species of the *S. gonothorax* group are involved.

Saemundssonina grylle (O. FABRICIUS)

Spitsbergen: Hornsund 27. VII. 1964, 1 ♀ from *Uria grylle mandtii* MANDT.
Type host *Uria grylle arctica* BREHM.

Saemundssonina lari (O. FABRICIUS)

Spitsbergen: Longyearbyen 30. VI. 1964, 4 ♂♂ 8 ♀♀ 27 juv. from *Larus hyperboreus hyperboreus* GUNNERUS.
Type host *Larus hyperboreus* GUNNERUS.

Saemundssonina merguli (DENNY)

Spitsbergen: Longyearbyen 20. VI. 1964, 1 ♀ from *Plautus alle alle* (L.) ♂; Hornsund 28. VII. 1964, 2 ♀♀, same host species. — Bear Island: Tunheim 9. VI. 1967, 1 ♀ from the same host species.

Type host *Plautus alle* (L.).

Saemundssonina scolopacisphaeopodis (SCHRANK)

Spitsbergen: Adventfjorden 22.—23. VI. 1965, 4 ♀♀ from *Numenius phaeopus phaeopus* (L.) ♂; 1 ♂ 7 ♀♀ from a ♀ of the same host species.

Type host *Numenius phaeopus* (L.)

Saemundssonina sterna (LINNAEUS)

Spitsbergen: Kapp Linné 21. VI. 1965, 4 ♀♀ from *Sterna paradisaea* PONTOPIDAN ♂; Adventfjorden 3. VII. 1964, 1 ♀ 1 juv. from the same host species.

Type host of *Saemundssonina sterna* is *Sterna hirundo* L.

Saemundssonina tridactylae TIMMERMANN

Spitsbergen: Edgeøya 26. VII. 1964, 1 ♂ 1 ♀ from *Rissa tridactyla tridactyla* (L.) ♂; Adventfjorden 3. VII. 1964, 1 ♂ from the same host species, ♀; Longyearbyen 27. VII. 1965, 1 ♂ 1 ♀ from same host species, ♂.

Type host *Rissa tridactyla* (L.).

Saemundssonina tringae (O. FABRICIUS)

Spitsbergen: Longyearbyen 25. VII. 1965, 3 ♂♂ 4 ♀♀ from *Calidris maritima maritima* (BRÜNNICH). — Bear Island: Herwichamna 9. VI. 1967, 1 ♂ from same host species.

Type host *Calidris maritima* (BRÜNNICH). The record of *Philopterus fusiformis* by ZUNKER (1933) from *Calidris maritima* from Spitsbergen probably refers to *S. tringae*.

Saemundssonina variabilis (DENNY)

Spitsbergen: Adventdalen 7. VII. 1964, 2 ♀♀ from *Calidris alpina alpina* (L.) ♂ and 3 ♀♀ from *Phalaropus lobatus* (L.) ♂.

Type host *Calidris alpina schinzii* BREHM. Also known from *Phalaropus lobatus* (L.) (see *Philopterus alpinus*, SÉGUY 1944).

Saemundssonina sp.

Spitsbergen: Longyearbyen 2. VIII. 1965, 2 ♀♀ from *Fulmarus glacialis glacialis* L. (J. KAISILA and E. KEMILÄ leg.).

Saemundssonina sp.

Bear Island: the Radio Station 6. VI. 1967, 1 juv. from *Crocetia alba* (PALLAS).

Anatoecus brevimaculatus (GIEBEL)

Bear Island: Laksvatnet 6. VI. 1967, 10 ♂♂ 23 ♀♀ 15 juv. from *Anser fabalis brachyrhynchus* BAILLON ♀; the Radio Station 6. VI. 1967, 2 ♂♂ 7 ♀♀ from the same host species, ♂; 7. VI. 1967, 2 ♂♂ 4 ♀♀ 2 juv. from same host species, ♀.

Type host *Anser albifrons* (SCOPOLI). The above specimens agree the figure for *A. brevimaculatus* given by SÉGUY (1944).

Anatoecus mollissimae KELER (?)

Spitsbergen: Kapp Linné 20. VI. 1965, 1 ♀ from *Somateria mollissima borealis* BREHM ♂.

Type host *Somateria mollissima* (L.).

Quadriceps conformis (BLAGOVESHCHENSKY) (?)

Bear Island: Gravodden 8. VI. 1967, 3 juv. from *Tringa totanus robusta* SCHIØLER.

Type host *Tringa totanus totanus* L.

Quadriceps hiaticulae (O. FABRICIUS)

Spitsbergen: Longyearbyen 30. VI. 1964, 4 ♂♂ 2 ♀♀ 1 juv. from *Charadrius hiaticula hiaticula* L. ♀; 20. VII. 1965, 7 ♂♂ 3 ♀♀ from same host species, ♀; Adventdalen 28. VII. 1964, 1 ♂ same host species, ♂. — Bear Island: Herwichamna 9. VI. 1967, 2 ♀♀ from same host species.

Type host *Charadrius hiaticula hiaticula* L.

Quadriceps phalaropi (DENNY)

Spitsbergen: Adventfjorden 26. VI. 1964, 1 ♀ from *Phalaropus fulicarius jourdaini* IREDALE ♀.

Type host *Phalaropus fulicarius* (L.).

Quadriceps strepsilaris (DENNY)

Bear Island: the Radio Station 10. VI. 1967, 2 ♂♂ 1 ♀ from *Arenaria interpres interpres* (L.).

Type host *Arenaria interpres* (L.).

Quadriceps normifer (GRUBE)

Spitsbergen: Sassendalen 14. VII. 1964, 17 ♂♂ 18 ♀♀ 2 juv. from *Stercorarius parasiticus* (L.) ♀; Adventfjorden 25. VI. 1965, 2 ♂♂ 5 ♀♀ 5 juv. from *Stercorarius longicaudus pallescens* LÖPPENTHIN ♂; Longyearbyen 26. VI. 1964, 1 ♂ from *Stercorarius longicaudus pallescens* ♀.

Type host *Stercorarius parasiticus* (L.).

Quadriceps klatti TIMMERMANN

Spitsbergen: Longyearbyen 20. VI. 1964, 1 ♂ from *Plautus alle alle* (L.) ♂.

Type host *Plautus alle* (L.).

Quadriceps klatti differs distinctly from *Q. obliquus* (MjöBERG), which lives on *Alca torda* (see further TIMMERMANN 1954).

Quadriceps sp. (*hospes* NITSCH ?)

Bear Island: Lakselva 6. VI. 1967, 1 juv. from *Calidris canutus canutus* (L.).

Carduiceps complexivus (KELLOG & CHAPMAN)

Bear Island: Kapp Posadowsky 10. VI. 1967, 2 ♂♂ 4 ♀♀ from *Crocetia alba* (PALLAS).

Type host *Crocetia alba* (PALLAS).

Carduiceps zonarius (NITSCH)

Spitsbergen: Longyearbyen 20. VI. 1964, 1 juv. from *Calidris maritima maritima* (BRÜNNICH); 25. VII. 1965, 1 ♀ from same host species. — Bear Island: Herwichamna 9. VI. 1967, 1 ♂ 1 ♀ from same host species; Padda 10. VI. 1967, 2 ♀♀ from the same host species.

Type hosts *Calidris minuta* (LEISLER) and *C. alpina* (L.). *Carduiceps zonarius* has been reported by ZUNKER (1933) from *Calidris maritima* in Spitsbergen.

Lunaceps actophilus (KELLOG & CHAPMAN)

Spitsbergen: Longyearbyen 20. VII. 1965, 2 ♀♀ from *Charadrius hiaticula hiaticula* (L.).
— Bear Island: Herwighamna 9. VI. 1967, 3♂♂ 3 ♀♀ from the same host species.

Type host *Crocetia alba* (PALLAS). ZUNKER (1933) reports the species from *Charadrius hiaticula* (from Spitsbergen).

Lunaceps phaeopi (DENNY)

Spitsbergen: Adventfjorden, 23. VI. 1965, 1♂ 3 ♀♀ from *Numenius phaeopus phaeopus* (L.) ♀.
Type host *Numenius phaeopus* (L.).

Ornithobius hexophthalmus (NITSCH)

Spitsbergen: Sassendalen 14. VII. 1964, 2♂♂ 4 ♀♀ 1 juv. from *Branta leucopsis* (BECHSTEIN).
Type host *Branta leucopsis* (BECHSTEIN).

Anaticola anseris (LINNAEUS)

Spitsbergen: Sassendalen 14. VII. 1964, 1♂ 2 ♀♀ 1 juv. from *Branta leucopsis* (BECHSTEIN).
— Bear Island: the Radio Station 7. VI. 1967, 5 ♀♀ 5 juv. from *Anser fabalis brachyrhynchus* BAILLON♂; 2♂♂ 6 ♀♀ 2 juv. from the same host species, ♀.
Type host *Anser anser* L.

Perineus nigrolimbatus (GIEBEL)

Spitsbergen: Longyearbyen 2. VIII. 1965, 1 ♀ from *Fulmarus glacialis glacialis* (L.) (J. KAISILA and E. KEMILÄ leg.).
Type host *Fulmarus glacialis glacialis* (L.).

Perineus sp.

Spitsbergen: Adventfjorden 30. VI. 1965, 1 ♀ from *Sterna paradisaea* PONTOPIDAN.

Host list of the species in the above material.

Procellariidae

Fulmarus glacialis glacialis (L.)

Saemundsonia sp.

Perineus nigrolimbatus (GIEBEL)

Anatidae

Anser fabalis brachyrhynchus BAILLON

Trinoton anserinum (J. C. FABR.)

Anatoecus brevimaculatus (GIEBEL)

Anaticola anseris (L.)

Branta leucopsis (BECHSTEIN)

Ornithobius hexophthalmus (NITSCH)

Anaticola anseris (L.)

Somateria mollissima borealis BREHM

Anatoecus mollissimae KÉLER

Charadriidae

Charadrius hiaticula hiaticula (L.)

Quadriceps hiaticulae (O. FABR.)

Lunaceps actophilus (KELLOG & CHAPMAN)

Scolopacidae

Tringa totanus robusta SCHIÖLER

Quadriceps conformis (BLAG.)

Calidris alpina alpina (L.)

Actornithophilus umbrinus (BURM.)

Saemundsonia variabilis (DENNY)

Calidris maritima maritima (BRUNN.)

Saemundsonia tringae (O. FABR.)

Carduiceps zonarius (NITSCH)

Calidris canutus canutus (L.)

Quadriceps sp.

Crocetia alba (PALLAS)

Saemundsonia sp.

Carduiceps complexivus (KELLOG & CAPM.)

Arenaria interpres interpres (L.)

Actornithophilus bicolor (PIAGET)

Quadriceps strepsilaris (DENNY)

Phalaropus fulicarius jourdaini IRED.

Austromenopon fuscifasciatum (PIAGET)

Quadriceps phalaropi (DENNY)

Phalaropus lobatus (L.)

Saemundsonia variabilis (DENNY)

Numenius phaeopus phaeopus (L.)

Saemundsonia scolopacisphaeopi (SCHRK.)

Stercorariidae

Stercorarius parasiticus (L.)

Austromenopon fuscifasciatum (PIAGET)

Saemundsonia cephalus (DENNY)

Quadriceps normifer (GRUBE)

Stercorarius longicaudus pallessens LÖPPENTHIN

Austromenopon fuscifasciatum (PIAGET)

Quadriceps normifer (GRUBE)

Laridae

Rissa tridactyla tridactyla (L.)

Saemundsonia tridactylae TIMM.

Larus fuscus graellsii BREHM

Saemundsonia breviappendiculata (PIAGET)

Larus hyperboreus hyperboreus GUNN.

Saemundsonia lari (O. FABR.)

Sterna paradisaea PONTOPIDAN

Saemundsonia sternae (L.)

Perineus sp.

Alcidae

Uria grylle mandtii MANDT

Saemundsonia grylle (O. FABR.)

Plautus alle alle (L.)

Austromenopon sp.

Saemundsonia merguli (DENNY)

Quadriceps klatti (TIMM.)

Alaudidae

Eremophila alpestris flava GMELIN

Philopterus sp.

Turdidae

Oenanthe oenanthe oenanthe (L.)

Ricinus sp.

Philopterus sp.

Oenanthe oenanthe leucorrhoea GMELIN

Philopterus sp.

Sturnidae

Sturnus vulgaris vulgaris L.

Menacanthus mutabilis BLAG.

*Fringillidae**Emberiza schoeniclus schoeniclus* (L.)*Plectrophenax nivalis nivalis* (L.)*Philopterus* sp.*Menacanthus* sp.*Ricinus* sp.*Philopterus hamatus* PACKARD?

References: CLAY, T. 1959. Key to the species of Austromenopon Bedford (Mallophaga) parasitic on the Charadriiformes. Proc. Royal Ent. Soc. London (B) 28, p. 157–168. — HOPKINS, G. H. E. & CLAY, T. 1952. A check list of the genera & species of Mallophaga. 362 pp. Norwich. — SÉGUY, E. 1944. Insectes Ectoparasites (Mallophages, Anoplures, Siphonapteres) in Faune de France 43. 684 pp. Paris. — TIMMERMANN, G. 1954. Neue und wenig bekannte Kletterfederlinge von charadriiformen Wirten. Zool. Anz. 152, p. 163–177. — WATERSTON, J. 1922. On the Mallophaga of the Spitsbergen Expedition. Trans. Ent. Soc. London 1922, p. 251–253. — ZUNKER, M. 1933. Die Mallophagen des Arktischen Gebietes. Fauna Arctica 4, p. 281–294.