

AMENDMENTS TO
THE BRITISH CHECKLIST OF *MENACANTHUS* NEUMANN, 1912
(PHTHIRAPTERA, AMBLYCERA, MENOPONIDAE),
WITH PARTICULAR REFERENCE TO THOSE SPECIES FOUND ON
THE PASSERIFORMES (AVES)

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As part of a study of the ectoparasitic arthropods found on Scottish hosts, I have reviewed literature on the Phthiraptera of the British Isles and it has become apparent that the checklist of the species of *Menacanthus* Neumann, 1912 published by Steel (1964) requires some amendments. This account is divided into three sections: the first two consider the addition of two previously overlooked species to be added to the list and the third reviews the genus as a whole, following the generic revisions by Price (1975: 1977) and Price & Emerson (1975).

Menacanthus alaudae (Schrank, 1776)

Pediculus alaudae Schrank, 1776: 115

Menopon citrinellae Denny, 1842: 200, 220 (syn. by Price, 1977: 210).

Menopon carduelis Denny, 1842: 201, 228 (syn. by Price, 1977: 210).

Menopon parviceps Piaget, 1880: 446 (syn. by Clay & Hopkins, 1954: 226).

Menopon perforatum Piaget, 1880: 454 (syn. by Price, 1977: 210).

Menopon alaskensis Kellogg & Chapman, 1902: 27 (syn. by Price, 1977: 210).

Menacanthus alaudae Schrank: Clay & Hopkins, 1954: 226.

Clay & Hopkins (1954: 226) designated a neotype for *M. alaudae* from the Meinertzhagen Collection (slide no. 3270a), collected from the skylark, *Alauda arvensis arvensis* Linné, from Ushant, France. They also designated neoparatypes from various subspecies of the skylark from the British Isles, France, Sweden and Yugoslavia.

In his world-wide generic revision, Price (1977: 210) redescribed *M. alaudae*, proposed several new synonyms and listed British specimens. From his list of specimens examined it seems that he did not see the types of either *M. citrinellae* Denny or *M. carduelis* Denny. The Natural History Museum contains four series of *M. alaudae* (three from the Meinertzhagen Collection) and two slides of *M. citrinellae* Denny (= *M. alaudae*, syn. in. Price, *op. cit.*) but Denny's specimens of *M. carduelis* Denny (= *M. alaudae*, syn. in. Price, *op. cit.*) cannot be located. Having examined the Scottish series of *M. alaudae* and the two syntypes of *M. citrinellae* and compared these with the key in Price (1977), I can confirm that they are all *M. alaudae*. The data of these British specimens are as follows.

- a) 2♂♂, 12♀♀, 1 Nymph from *Alauda a. arvensis* L. [skylark], South Uist, Outer Hebrides, December 1933 (Meinertzhagen Collection no. 68 – 3 slides).
- b) 1♂, 3♀♀, from *Plectrophenax n. nivalis* (L.) [snow bunting], South Uist, Outer Hebrides, January 1933 (Meinertzhagen Collection no. 82.186 – 1 slide).
- c) 1♀, syntype, from *Motacilla alba* L. [pied wagtail], no locality given (as *Menopon citrinellae*) (Denny Collection: *Mon. Anopl. Brit.* p.220. PL XXI fig. 3, 1852–1898).
- d) 1♂, syntype, from *Emberiza citrinellae* L. [yellowhammer], no locality given (as *Menopon citrinellae*) (Denny Collection).

Other British specimens which were not examined by myself are detailed below.

- e) from *Alauda a. arvensis* L., Kerry, Ireland, January 1935 (Meinertzhagen Collection no. 2630) (det. Dr T. Clay).
- f) 1♂, 1♀, from *Carduelis carduelis* (L.) [goldfinch], Scarborough, Yorkshire, 11.iv.1967 (C.I. Massey) (det. Price, 1975).

Menacanthus alaudae was known to occur in the British Isles from both the literature and specimens in collections when Steel (*op. cit.*) prepared his checklist. It can only be assumed that its omission was an oversight. However, *M. citrinellae* (Denny, 1842) and *M. carduelis* (Denny, 1842), now synonymised under *M. alaudae* (Price, *op. cit.*), were both included in the RES checklist as full species.

Menacanthus tenuifrons Blagoveshtchensky, 1940

Steel (*op. cit.*) omitted this species from his checklist. However, Price (1977: 217) listed specimens from Shetland in his revision of the genus. The Natural History Museum has a single series of this species in the collection. The specimens agree with both Blagoveshtchensky's original description (1940: 37 & 81) and (Price, *op. cit.*). The data of this series are as follows.

- g) 1♂, 1♀, from *Troglodytes troglodytes* (L.) *zetlandicus* Hartert [Shetland wren], Shetland Isles, August 1939 (Meinertzhagen, Collection no. 13635 – 1 slide) (det. C.H.C. Lyal).

The above Scottish records for *M. alaudae* and *M. tenuifrons* appear to be the earliest documented occurrences in the British Isles.

Menacanthus Neumann, 1912

The papers by Price (*op. cit.*) have a considerable effect on the systematic arrangement of the British species of *Menacanthus* from the Passeriformes. A total of 32 species of *Menacanthus* were listed by Steel (1964), of which 24 are found on Passeriformes, 5 on Galliformes, 1 on Coraciiformes and 2 on Piciformes. From the synonymies proposed by Price (1975 & 1977), the number of species associated with Passeriformes is reduced to 11. Following Price & Emerson (1975: 779) the number of species found on the Piciformes is now one—*M. dryobates* (Eichler, 1953) which is a synonym of *M. pici* (Denny, 1842).

These amendments are detailed in checklist order below which includes all the species in the genus as currently understood to occur in the British Isles.

- MENACANTHUS* Neumann, 1912
EOMENACANTHUS Uchida, 1926
NEUMANNIA Uchida, 1926
nec Trouessart, 1888
UCHIDA Ewing, 1930
PICACANTHUS Eichler, 1953
LANICANTHUS Zlotorzycska, 1965
GALLACANTHUS Eichler, 1972
- abdominalis* (Piaget, 1880)
agilis (Nitzsch, 1866)
alaudae (Schränk, 1776)
carduelis (Denny, 1842)
citrinellae (Denny, 1842)
parviceps (Piaget, 1880)
camelinus (Nitzsch, 1874)
inaequalis (Piaget, 1880)
setosus (Piaget, 1885)
cornutus (Schömmmer, 1913)
curuccae (Schränk, 1776)
minutus (Nitzsch, 1818)
eurysternus (Burmeister, 1838)
pyrrhulæ (Panzer, 1798)
fuscocinctus (Denny, 1842)
sittæ (Giebel, 1866)
- annulatus* (Giebel, 1874)
meniscus (Piaget, 1880)
parvulus (Piaget, 1880)
spiniferus (Piaget, 1885)
minusculus Blagoveshtchensky, 1940
mutabilis Blagoveshtchensky, 1940
exilis (Nitzsch, 1866)
fertilis (Nitzsch, 1866)
gonophaeus (Burmeister, 1838)
laticeps Blagoveshtchensky, 1948
merisui Eichler, 1953
numidae (Giebel, 1874)
pallidulus (Neumann, 1912)
pici (Denny, 1842)
dryobates (Eichler, 1953)
pusillus (Nitzsch, 1866)
sinuatus (Burmeister, 1838)
stramineus (Nitzsch, 1818)
meleagridis (Panzer, 1793)
nec (Linné, 1758)
tenuifrons Blagoveshtchensky, 1940
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- schildmacheri* Eichler, 1953 *nomen dubium*

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I thank Dr C.H.C. Lyal (Natural History Museum) for providing the *Menacanthus* specimens and Dr G.E. Rotheray (National Museum of Scotland) for searching the Scottish Insect Record Index (SIRI) and confirming that there were no literature references for these species occurring in Scotland. Both gentlemen and Mr R.L. Palma (Museum of New Zealand) very kindly commented on the manuscript.

REFERENCES

- Blagoveshtchensky, D.J.**, 1940, Mallophaga from birds of the Talysh Lowlands. (English translation summary), *Parazit. Sb.*, **8**: 25–90. **Clay, T. & Hopkins, G.H.E.**, 1954, The early literature on Mallophaga. Part III, 1776–1786, *Bull. Br. Mus. (nat. Hist.) Ent.*, **3**(6): 221–266. **Price, R.D.**, 1975, The *Menacanthus eurysternus* Complex (Mallophaga: Menoponidae) of the Passeriformes and Piciformes (Aves), *Ann. ent. Soc. Am.*, **63**(4): 617–622; 1977, The *Menacanthus* (Mallophaga: Menoponidae) of the Passeriformes (Aves), *J. med. Ent.* **14**(2): 207–220. **Price, R.D. & Emerson, K.C.**, 1975, The *Menacanthus* (Mallophaga: Menoponidae) of the Piciformes (Aves), *Ann. ent. Soc. Am.*, **63**(3): 779–785. **Steel, R.W.**, 1964, Mallophaga in Kloet & Hincks, A Checklist of British Insects. Second Edition (Revised). Part 1: Small Orders and Hemiptera, *Handbk Ident. Br. Insects* **11**(1): 27.

Biblopectus tenebrosus (Reitt.) (Col., Pselaphidae) in a damp woodland site in Bedfordshire. — *Biblopectus tenebrosus* appears to be an uncommon beetle in the British Isles, often associated with *Sphagnum* moss or grass tussocks in bogs and fens. In the British Red Data Books (Shirt, D.B. (ed), 1987, 2 Insects), it is given a status of 'Vulnerable' or Red Data Book 2. However, more recently Hyman and Parsons (*Review of the scarce and threatened Coleoptera of Great Britain*, part 2, U.K. Nature Conservation, 12) suggest that it should have a revised status of 'Insufficiently Known' or Red Data Book K. This latter work lists records from six vice-counties, including recent records from South Hampshire, Huntingdonshire, East Norfolk, Glamorganshire and Mid-west Yorkshire. No previous records from Bedfordshire have been found.

Between 1992 and 1994, a survey of beetles was made at Flitwick Moor, an S.S.S.I. site owned and managed by the Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trust. Initially a peat fen, the moor has evolved to a damp birch woodland, with a mixture of drier areas, bogs and open water, supporting the diverse flora normally associated with such habitats. In each year of the survey, a different area of the site was studied using a range of techniques including sweep and water netting, pitfall traps, and heat extractions of moss and leaf litter using a modified Tullgren funnel apparatus.

On 27.i.1994 a small sample of moss, subsequently identified as *Brachythecium rutabulum* (Hedwig), was taken from the ground in a wet area of the moor. Amongst the insects in a Tullgren funnel extraction of this moss were four pselaphid beetles. Two of these were males, readily identified from their aedeagi as *Biblopectus tenebrosus* (Reitter), and the females were assumed to be the same species because of the presence of the males. Another sample of moss taken from the same area on 12.ii.1994 produced a further three males and four females. Unlike the experience of Welch (1983, *Entomologist's mon. Mag.*, 119: 38), pitfall traps run between January and June 1994 did not catch the beetle, even though some traps were placed amongst the moss from which they were extracted in Tullgren funnels.

Brachythecium rutabulum is a common moss, and occurs frequently at Flitwick Moor, but the area of this moss that has been found to support *B. tenebrosus* is restricted to patches on wet ground covering an estimated area of 30 metres by 20 metres. The beetle was absent from other patches of moss, including some samples of *Sphagnum* sp., all growing within the same general area. Similarly, many samples of moss and leaf litter taken from the parts of Flitwick Moor investigated in 1992 and 1993 did not contain this pselaphid. However, because of the wet, boggy nature of this site, many areas are not easily accessible and it is possible that other colonies are awaiting discovery.

I would like to thank the following who have helped with various aspects of the survey: English Nature and The Wildlife Trust for allowing me to sample the site, Dr R.C. Welch for confirming my identification of *Biblopectus tenebrosus*, and Mr A.R. Outen for identifying the moss *Brachythecium rutabulum*. — J.E. ASHBY, Entomology and Nematology Department, IACR-Rothamsted, Harpenden, Hertfordshire, AL5 2JQ: March 23rd, 1995.

REVIEW

'THE HORSEFLIES OF YORKSHIRE', ANDYG Publications. Kirkbymoorside. By ANDREW GRAYSON. 48 pp., 37 figs., 16 maps. 1995. Price £3 post free.

This is a comprehensive county review based on data from 48 sources. Full data is given for all records and there are 1 km square distribution maps for 11 species. A key to Yorkshire species and some good line drawings of whole insects provide encouragement to record these flies. This careful piece of work will be useful to anyone who may be tempted to record Tabanidae in northern England. Copies may be obtained from ANDYG Publications, 39 Piercy End, Kirkbymoorside, York, YO6 6DQ (cheques payable to A. Grayson). — ALAN STUBBS