

New Swedish records of Feather-wing beetles (Coleoptera, Ptiliidae), and a discussion of two regionally extinct species

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New data on 22 North European species of Feather-wing beetles (Coleoptera, Ptiliidae) are presented. *Actidium coarctatum* (Haliday) and *Actinopteryx fucicola* (Allibert) are considered extinct in Sweden as well as in the Baltic region, the possible reasons for which are discussed. Unknown large scale processes seem to be responsible for their overall retreat in northern and northwestern Europe. *A. coarctatum* should be added to the Danish list. The type material of *Ptilium elongatum* Thomson (= *Actidium coarctatum* (Haliday)) is discussed. Twenty four new provincial records are added to the Swedish catalogue (Lundberg 1995), among them some rare species. The fourth locality known in the world for *Oligella nana* (A. Strand) as well as the southernmost record of *Baranowskiella ehnstromi* Sörensson in the Palearctic region is reported.

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Introduction

Since the publication of the last report on Swedish and North European Featherwing beetles (Sörensson 1994) additional finds as well as new data have increased our understanding of the geographical distribution, dynamics and ecology of the group. Besides new provincial records from Sweden this paper focuses on two species previously recorded from the Baltic region but now considered extinct. There is currently a great need for updating the taxonomic and faunistic knowledge of European Ptiliidae. It is my intention to present similar revisionary notes concerning Ptiliidae on a Central European or Pan-European basis in the future.

Material and collectors

Private as well as public collections of Ptiliidae were investigated. Many recent records are the

result of directed, local inventory work with the aid of window traps. Window traps may be quite efficient for trapping ptiliid species with high or moderate dispersal capacity, i.e. species tied to more or less ephemeral habitats, but is less suited for species inhabiting more stable environments. However, trapping is also dependent on the arrangement and location of the trap. For faunistic inventories of Ptiliidae traps usually has to be supplemented by directed search efforts, primarily by the means of a sieve. In a few cases, e.g. genus *Actidium* Matth. and Nanoselline species such as *Baranowskiella ehnstromi* Sörensson (see below), manual search in specific habitats is required.

If not otherwise stated the specimens referred to below are preserved in the collection of the original collector. New provincial records are marked with an asterisk (*).

Collectors and/or private collections: Göran Andersson (GA), Peter Cederström (PC), Alan Duffberg (AD), Bertil Ericson (BE), Bo Henriksson (BH), Nicklas Jansson (NJ), Åke Lindelöw (ÅL), Roger Pettersson (RP), Henrik Waldén (HW).

Museum collections: BMNH = British Museum of Natural History in London; NMG = Museum of Natural History in Gothenburg (Naturhistoriska museet i Göteborg); RM = Museum of Natural History in Stockholm (Naturhistoriska riksmuseet i Stockholm); ZML = Zoological Museum in Lund (Zoologiska museet i Lund).

Species now extinct in the Baltic region

Actidium coarctatum (Haliday)

Species of *Actidium* Matthews are primarily found in the littoral zone of fresh and saline water. Several species have been recorded from shores of rivers, ponds and lakes but also from coastal areas in tropical and subtropical latitudes. From Sweden only the halophilous *Actidium coarctatum* (Haliday) has been recorded (Fig. 1). It is a western Palearctic species widely distributed along the coasts in the northeastern Atlantic region. It is rather common by the Mediterranean sea and in North Africa. Towards the north it becomes much sparser, and at coasts in northern Europe it is considered very rare.

As with *Actinopteryx fucicola* (Allibert) (see below) this halophilous, seashore-dwelling species has in Scandinavia long been known only from nineteenth century records. Swedish catalogues, from Grill (1896) and onwards, records it from the province of Skåne (Scania) in southernmost Sweden. West (1940-41) mentioned an old find from Copenhagen but doubted its Danish origin, which caused subsequent authors to erroneously delete it from the Danish list of Coleoptera (e.g. Hansen 1996). Scandinavian records sometimes went under the name *Ptilium elongatum* Thomson. Incidentally Thomson's and Haliday's names were published the same year (1855), but Haliday's name has been considered as having priority since.

Thomson described *Ptilium elongatum* in a paper presenting a monographic review of the Swedish species of Trichopterygia (= Ptiliidae)

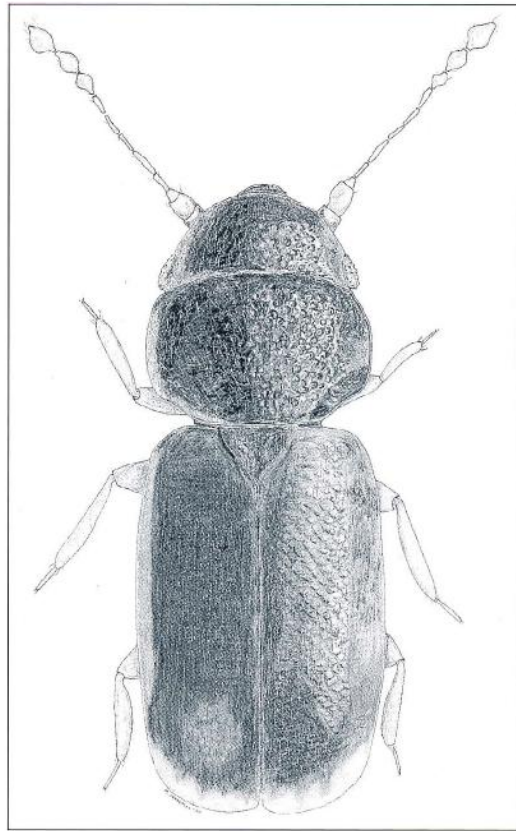


Fig. 1. *Actidium coarctatum* (Haliday). Bodylength: 0.65 mm. Illustration M. Sörensson.

(Thomson 1855). It was an attempt to catch up with the modern results concerning nomenclature, faunistics and taxonomy recently presented by continental authors such as Erichson, Gillmeister and Motschulsky. The work was the result of Thomson's own collecting experience and knowledge of the group, although he leaned heavily on the authorities mentioned.

In this paper Thomson briefly mentioned *P. elongatum* as having been found "under a stone by a dunghill in the Lund vicinity". Collector, date or exact locality were not mentioned. In "Skandinaviens Coleoptera" (Thomson 1862) he slightly altered the phrase to: "Rare. Found at Lund under rotting organic matter", while in the supplement (Thomson 1867) he forwarded completely new information: "found at Malmö by

lector L. Stenberg". Thus there seemed to be two finds of *P. elongatum*, one near Lund and one near Malmö. This information was later reiterated by Grill (1896). The find near Lund, about 10 kilometres inland from the coast of the Baltic Sea, seems extraordinary since this halophilous species is generally known to occur on the seashore under seaweed and other rotting organic matter. However, in Great Britain (Fowler 1889; Hyman & Parsons 1994) and Ireland (Matthews 1883), and in southern Europe (Lundberg et al. 1987) *A. coarctatum* has occasionally been found off the coast in farmyards and hotbeds, in organic refuse along rivers, and even among litter and rotting leaves.

The main collection ("Berlin-collection") of C.G. Thomson in Lund (ZML) contains 4 old pins standing 2+2 in two rows under "Ptilium elongatum" (Thomson's handwriting). The lower right is a very thin contemporary pin with a small, tiny triangular cardboard attached (original Thomson mounting). Unfortunately no specimen is present. The pin bears an old, square label with "Råby stg 9/4" written in ink (Thomson's style). Råby is a small village just outside Lund. The abbreviation "stg" is not decipherable but could possibly be "stallgödsel" (dunghill). Thomson often abbreviated names, since his labels were very small.

The lower left pin is younger, black and rather thick. It bears an almost perfect specimen of *Actidium coarctatum* mounted under a plastic "window" on a larger hexagonal, double cardboard. The following labels are attached: / "(elongatum) coarctatum Type from Thomson Dec.br 1867" (in A. Matthews' handwriting) / "elongatum" (Thomson's handwriting) / "Mö" (printed; = Malmö) / "Stbg" (printed; = Stenberg). The blue label and the mounting technique is typical of the British coleopterist Andrew Matthews, whose main collection of Ptiliidae is preserved in London (BMNH).

It is known that Thomson, on a request from Matthews, sent some ptiliid beetles for investigation (cfr. Matthews 1866), among others *Baeocrara littoralis* (Thomson, 1855) (= *B. variolosa* (Mulsant & Rey, 1861) and *Ptilium elongatum*. Matthews (1868:11) later wrote that he received Thomsons "unique example of

elongatum for comparison" [with *P. coarctatum* Haliday]. The Stenberg-specimen referred to above is obviously identical to that specimen. Matthews' wording "unique" sounds odd since there were more than one Swedish specimen known at the time. It could possibly indicate that the original Råby-specimen was already lost.

The pair of pins in the upper row are similar to each other, stout, contemporary with large heads. The cardboards are triangular but with the apex cut off in a characteristic manner. The left cardboard has three specimens irregularly mounted while the right has only one. All specimens are well preserved and belong to *Actidium coarctatum*. No labels are present. These pins and mounts are identical to a third pin standing in Thomson's collection of doublettes. This pin holds three well preserved specimens of *A. coarctatum*, irregularly mounted, and an elongate label in Thomson's handwriting (pencil) with interesting information: "Ptilium elongatum Tång" (Tång = seaweed). At this time entomologists generally only labelled the first pin in a row. The identical pins and mounts suggest that all three pins belong to one and the same collecting series. The word "Tång" indicates that the specimens probably were collected in Sweden, possibly somewhere along the Scanian coastline, under seaweed.

In collectio Boheman (RM) a fifth pin bearing a Swedish specimen of *A. coarctatum* was discovered under "Ptilium elongatum". It is mounted on a very small, square cardboard attached to a very thin, contemporary pin. Two small, square labels are present: / "Sc" / "Stenb" (= Scania/L. Stenberg) written in ink (not Thomson). This specimen possibly also emanates from Stenberg's collecting site at Malmö.

I suspect that the Råby-pin with the missing specimen bore the (sole?) syntype of *Ptilium elongatum* Thomson, 1855. The accurate description and the correct interpretation of additional specimens indicate that Thomson's interpretation of the species was correct, and that the missing specimen therefore was correctly identified. In preparing a revision of the Thomson species of Ptiliidae these conclusions are important for the interpretation of his species and their bearing on the nomenclature.

To summarize, nine specimens are still present in Swedish collections, two from Skåne and Malmö, and seven from one or two unknown localities, probably in Skåne. The specimen from Råby outside Lund is missing.

From these records it may be deduced that the southern coast of Sweden during the 1850's and some decades onwards housed a stable population of *A. coarctatum*, a situation which reminds of the ecologically related *Actinopteryx fucicola* (see below). Having in mind that *A. coarctatum* may not be strictly bound to seaweed on the seashore but occasionally occurs inland, and also that the coastal province peasants in the old days manured the arable land with seaweed collected along the coasts, I find it reasonable to assume that the find at Lund and the Danish find from a garden in Copenhagen not far from the coast (West 1940-41) both originated from populations along the southern Baltic coasts.

The questions of when and why the populations went extinct have no easy answers. It is clear, however, that there was a decline, more or less simultaneously, all over northern Europe (including Great Britain) during the early 20th century. Both Horion (1949) and L. Benick (1952) stated that *A. coarctatum* appeared in the bay of Lübeck as late as in 1933 (leg. G. Benick), and Horion (1949) also related old finds from Königsberg (Kaliningrad) in the south-eastern Baltic region. I know of no later records, and Benick's finds from the Lübeck region thus probably concern the very last observations of *A. coarctatum* within the Baltic Sea area.

In Great Britain *A. coarctatum* was last recorded in 1924 (Hyman & Parsons, 1994). The North Sea area has no modern records except for a single find made 1982 on the island of Nordstrand of the west coast of Schleswig-Holstein, northernmost Germany (Meybohm 1994; Meybohm in litt.). Thus, despite indications of a general population decline the modern Nordstrand find shows that *A. coarctatum* has survived in low and hidden populations along the North sea coast, presently representing the northernmost in Europe. The degree of isolation and possible connections to populations further south is unknown.

Actinopteryx fucicola (Allibert)

This species is a typical inhabitant of seaweed along the coasts, primarily in areas of warmer climates. The world distribution covers tropical and subtropical coasts of the Atlantic Ocean, the western Indian Ocean and the Black Sea, but extends well into the temperate zone in Europe. It is rather common on the coasts of the Mediterranean. Except for the finds presented below there are no further records from the Baltic region.

In Scandinavia this species has for long been known only by 19th century finds from Falster (Denmark) (West 1940-41) and from Skåne (Scania), southernmost Sweden. Grill (1896) mentioned the species in the first Swedish catalogue and others cited it thereafter. The catalogue record originates from a paper published by C.G. Thomson in "Opuscula Entomologica" (Thomson 1870:136). In this paper Thomson presented some Coleoptera previously not recorded from Sweden, among them *Actinopteryx fucicola*, "found under seaweed at Lomma, Skåne". The Zoological Library of the Zoological Institute in Lund holds some of Carl Gustaf Thomsons personal copies of his own works. In his copy of "Opuscula Entomologica" under *A. fucicola*, Thomson has deleted "Lomma" and added partly in pencil: "[found] in 2 specimens [under seaweed at] Trelleborg [Skåne] by Dr. G.F. Möller". This surprising note caused me to check the Thomson collection preserved in the Zoological Museum in Lund (ZML).

In his main collection (the "Berlin collection") one specimen is found mounted on a contemporary, very thin pin and glued to a small, triangular cardboard. The pin has a small, square label with "Tbg 4/81" in ink (probably not Thomson's writing), meaning Trelleborg April 1881. The specimen was correctly identified. Thomson's rectification of the original text suggests that "Lomma" was an error. It further indicates that two Trelleborg-specimens collected 1868-69 were present. If collected earlier Thomson would have added the find in the supplement to "Skandinaviens Coleoptera" (Thomson 1867). If collected later there would have been an addition of text, not a rectification in Thomson (1870). Thus, it seems as the specimen collected in 1881 represents a further, later find,

adding to the original of which there is no trace.

G.F. Möller was a close friend of Thomson, and some of his Coleoptera may be found in the Thomson collection, though the main part is currently preserved in Gothenburg (NMG). A check in the main NMG collection for Möller-specimens of *A. fucicola* proved negative, however, and the two original specimens thus seem to be lost.

Another specimen of somewhat dubious origin seems to be younger. It is preserved in collectio Stig Lundberg (Luleå) and lacks date and collector, but states on a handwritten label (unknown author) "Kullen Schweden". It was correctly identified by P. Rossköthen as stated by a second label. It is mounted on a more modern cardboard which indicates a later origin, possibly around the turn of the century. The specimen was originally received from Germany. The handwriting indicates a German collector, but could possibly be of later origin.

Together these specimens indicate that the southern coasts of Sweden held a population of *A. fucicola* during the latter part of the 19th century, a situation which reminds closely of that of the synoecous species *Actidium coarctatum* (cfr. above). The question of when and why the population(s) went extinct can only be guessed at. A major cause could be the reduced population size at this very northern limit of distribution, which probably would make it sensitive to dramatic changes of climate and extreme weather situations. Another factor of local importance could be man's use of seaweed as fertilizer on arable land. Similar trends can be traced in other areas of its northern distribution.

In Great Britain *A. fucicola* apparently went extinct in the 1930s (Hyman & Parsons 1994), and there does not seem to be any modern records from the shores of northwestern Germany (Meybohm in litt.). Declining trends in other beetle families (e.g. *Cicindela maritima* Dej. and *Phylan gibbus* (F.)) are known from the same coastal areas of southern Sweden. Since sandy sea shores, at least locally, has been relatively unaffected by disturbances this parallel decline is puzzling, and calls for further investigation.

New records

Ptenidium turgidum Thomson — *Nä. Sörön, Örebro 14.6 1998 1 specimen and 12.7 1998 (NJ) 1 specimen in "window trap at lime tree" (*Tilia* sp.); Trystorp 31.8 1998 (NJ) 1 specimen; Laxå, Poppelåsbrännan 3.7 1999 (NJ) 1 specimen in "windowtrap at dead, standing spruce" (*Picea abies*). Although local in appearance this is probably the least rare and most widely distributed species of the subgenus *Matthewsium* Flach in the western Palearctic region.

Ptenidium fuscicorne Erichson — *Ha. Fjärås (IBE in NMG) 3 specs.

Oligella nana (A. Strand) — *Sm. Långemåla, Gillberga 3.9 1987 (BE) 1 specimen by sifting an old carcass of roe deer located in a small gravel-pit in open pine forest. Although pine forests on poor soils may not be the typical habitat for *O. nana*, eastern Småland shows large variations regarding the forest structure and tree species composition, including broad-leaved and coniferous forests of various ages. This is the fourth known locality in the world. The new find evidently points towards a wider but largely unknown distribution in northern Europe, possibly also including adjacent parts of Central Europe. This is supported by the fact that the dispersal capacity of *O. nana* has to be relatively high due to its ephemeral, spatially unpredictable reproduction sites (carcasses, dung, compost heaps).

Ptilium affine Erichson — *Sk. Genarp, Häckebergasjön 23.2.2000 (BE) 4 specs sifted from leaf litter at a semi-shady lakeshore with older deciduous trees and of long continuity. *Vg. Göteborg, Rya skog 30.10 1971 (HW, GA in NMG) 1 specimen.

Usually *P. affine* is found in moist and rather shady sites with deciduous trees, especially in leaf litter in swamps and fens, often along the edges of smaller ponds and water holes in or close to the wood. According to Dr. G. Andersson (pers. comm.) the Gothenburg specimen was most probably collected by sifting leaf litter around a pond in an alder swamp (*Alnus glutinosa*) 500 m NNW Rya Nabbe. The field vegetation consisted of *Carex riparia*, *Solanum dulcamara*, *Iris* sp., *Peucedanum* sp. and others.

In Fennoscandia *P. affine* was previously

only known from the Baltic island of Öland in Sweden. The Gothenburg record is the northernmost in Europe. Both finds could be the result of a rather late immigration since the species occurs in the northeastern parts of Zealand (Denmark) and both collecting sites have been heavily sampled for decades without prior findings. On the other hand the habitat quality and the temporal stability at both sites speaks against a recent introduction and suggests that the species was simply overlooked. *P. affine* is primarily a Central European species. The North European populations are small and fragmented, which is the reason why the species has been included in the Red List of Swedish species (category NT = Near Threat; Gärdenfors (2000)) as well as in the Red Lists of some other European countries.

A further Fennoscandian record from Perniö in southwestern Finland was recently reported by Kangas (1987). However, the single specimen proved to be the common *Ptilium exaratum* (Allibert), and Rutanen (1996) confirmed that *P. affine* should be deleted from the Finnish list of Coleoptera (Silfverberg 1992).

Ptilium caesum Erichson — **Öl.** Råpplinge, Vitlerskärren 19.5 1972 (BE) 2 specs; 15.5 1987 (BE) 1 specimen. Taken at the edge of an open alvar fen with alder (*Alnus glutinosa*) along with numerous specimens of *P. affine*. Rare. Included as "VU" (= vulnerable) on the Swedish Red List (Gärdenfors 2000).

Baranowskiella ehnstromi Sörensson — ***Sk.** Höör, Fogdaröd 18.10.2000 (BE) 13 specs, 26.10 2000 (BE) 43 specs. Found on the bracket fungus *Phellinus conchatus* (Pers.) growing in abundance 1-2 m above ground on an elderly *Salix caprea* located in a south-faced wood margin (Fig. 2). Many specimens were also found on a large piece of *Phellinus conchatus* growing on a fallen, dead branch.

The new locality of this hemiboreal species is in the transition zone between the hemiboreal and the nemoral region in the very south of northern Europe. It is of great zoogeographical interest, since it indicates possible occurrences further into the nemoral region in northern Europe. Because of its elusive life style and special ecological demands *B. ehnstromi* was previously overlooked. Search on *Phellinus conchatus*



Fig. 2. The habitat of *Baranowskiella ehnstromi* Sörensson in the bracket fungus *Phellinus conchatus* on branches of *Salix caprea* at Höör, Skåne. Photo: B. Ericson.

Fig. 2. Sälgtickor (*Phellinus conchatus*) med fjädervingen *Baranowskiella ehnstromi* Sörensson på grenar av sälg som växte i en åkerkant vid Höör i centrala Skåne.

on *Salix* spp. in western, central and eastern Europe may therefore produce additional records. *Baranowskiella ehnstromi* represents an exotic element in the European beetle fauna. It is of great interest to uncover its real geographic distribution in this part of the world. For details on morphology etc., see Sörensson (1997).

Ptiliola brevicollis (Matthews) — ***Sk.** Höör, Fogdaröd 18.10 2000 (BE) 48 specs. This rare ptiliid species occurred abundantly in fermenting garden compost at the outskirts of a small village in central Skåne. Groves of deciduous and mixed trees are found in the surroundings which mainly consist of pastures and cultivated land. ***Ha.** Särö 1 specimen (NMG). The specimen originates from the Westring (1797-1882) collection and was taken at "Särö sub foliis" without stating the exact date or collector. It was identified as "*Trichopteryx punctatissima* nov. s. *Mhm in litteris*" according to an old label in ink attached to the pin. ***Up.** Storröret 30.10 1993 (ÅL) 8 specs (4 specs in coll. Sörensson) sifted from mouldy, "hot" grass cut in a village area. The compost was made during early summer, and included grass and moss. Another common species was *Baeocrara japonica* (Matthews).

Ptiliolum caledonicum (Sharp) — *Bl. Johannishus 9.6-17.8 1997 (RP) 2 specs in window trap; *Ån. Locksta, Vändåtberget 24.5-5.8 1992 (RP) 1 specimen in window trap by a *Populus tremula* tree; *Vb. Sundö, Åtmyrlidens B.-F. 28.6-24.7 1984 (RP) 1 specimen in trap on *Betula sp.*

Ptiliolum schwarzi (Flach) — *Hs. Edsbyn, Grytaberget 25.6-24.7 1992 (BH) 2 specs in window trap in an old mixed, rather undisturbed forest.

Ptiliolum spencei (Allibert) — *Vr. Ö. Fågelvik, Göstahult 16.12 1967 (BE) 23 specs in old, rotten hay.

Ptinella johnsoni Rutanen — *Ån. Torrböle, Långrumpskogen 30.6-28.7 1992 (RP) 2 specs in window trap set up by an aspen tree (*Populus tremula*).

Ptinella denticollis (Fairmaire & Laboulbène) — *Sk. Hallands Väderö 19.6 1994 1 specimen (AD). The specimen was found under bark on dead branches of an old oak at Tånge kärr in Norre skog, together with four specimens of *P. aptera* Guer.-Men. The species was later recovered in numbers from the same type of habitat in the vicinity: 11.4 1995 5 specs (PC; 2 specs in coll. Sörensson), 1.5 1995 1 specimen (PC), 26.6 1995 12 specs (PC, 6 specs in coll. Sörensson), 28.6 1995 2 specs (PC), 10.9 1995 2 specs (PC). These are the first finds in southern Sweden. It was previously known from Up, Vs, Ly and LU in the central and northern parts.

In northern Europe a rare or very rare species, usually associated with older trees, possibly confined to areas of long forest continuity. Recent Danish (Hansen & Mahler 1985) and South European finds, and the present finds indicate preference for oak (*Quercus* spp.) as the "host" tree. However, in the northern boreal region of Fennoscandia, where oak does not occur or is of minor importance, *P. denticollis* favours other tree species (e.g. *Betula sp.*, *Populus tremula*). In Britain it has been recorded from *Salix sp.*, *Populus sp.* and *Sorbus aucuparia*, besides *Quercus sp.* (Hyman & Parson, 1994). *P. denticollis*, thus, seems to tolerate somewhat drier habitats as compared to other species of *Ptinella*. It was absent in samples taken from hollow beeches and rotting beech wood in the sur-

roundings of the *P. denticollis* site in Hallands Väderö. The beech habitats are in general somewhat cooler and moister and seem to attract only *P. aptera* (Guer.-Men.).

Ptinella microscopica (Gillmeister) — Up. Nora, Tinäs-området 19.6 1976 (BE) 35 specs along with numerous *P. tenella* (Erichson) in mycuous wood and bark of a sun-exposed piece of birch wood.

Ptinella tenella (Erichson) — *Bl. Johannishus 9.6-17.8 1997 (RP) 1 specimen in window trap.

Pteryx splendens A. Strand — *Gä. Kakängssundet 26.6-27.8 1994 (RP) 1 specimen in trap by a log of *Quercus robur*.

Acrotrichis sericans (Heer) — *Ås. Fjälltuna, Björnlandet 19.8 1984 (RP) 1 specimen.

Acrotrichis sylvatica Rosskothén — *Bo. Säve 13.9 1954 leg. I. Andreasson 1 specimen (NMG).

Acrotrichis parva Rosskothén — *Hs. Edsbyn, Grytaberget 25.6-24.7 1992 (BH) 2 specs in window trap in an old mixed, rather undisturbed forest.

Acrotrichis volans (Motschulsky) — *Sm. Härlunda, Stensjönäs 17.8 1971 (BE) 9 specs sifted from rotten fish at the border of the old mixed forest Siggaboda (beech and spruce) in south Småland. This is a noteworthy extension southwards of the distribution in northern Europe of this boreoalpine-Siberian species.

Acrotrichis sjobergi Sundt — *To. Jukkasjärvi, Kurravaara 28.6 1998 (BE) 5 females sifted from rotten fish in a spruce stand in rather open, mesophile mixed forest (*Picea abies*, *Pinus silvestris*, *Populus tremula*, *Betula sp.*) on the mountain of Kurravaara. It is the northernmost find in Europe of this Siberian taiga species.

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Sammanfattning

Actidium coarctatum (Haliday) och *Actinopteryx fucicola* (Allibert) är två sydliga fjädervingar (Col. Ptiliidae), knutna till tångvallar på havsstränder, som dött ut från Östersjöbäcken och Brittiska öarna. *A. coarctatum* sågs senast 1933 i Lübeck-bukten, och *A. fucicola* troligen i slutet av 1800-talet vid Kullen i Skåne. Båda arterna finns belagda från Danmark och Sverige genom gammalt museimaterial. Ett gammalt fynd av *Actidium coarctatum* från en trädgård i Köpenhamn har senare betraktats som tillfälligt, och arten har därför strukits i nyare kataloger. Fyndet är dock säkerligen riktigt och arten bör därför återupptas i den danska listan. Från Sverige föreligger 9 respektive 2 exemplar av arterna, samtliga förmodligen insamlade i Skåne under senare hälften av 1800-talet. Orsakerna till utdöendena är okända, men den ungefärliga samtidigheten över en större region talar för att det sannolikt rör sig om klimatiskt betingade, storskaliga processer.

Thomsons typmaterial av *Ptilium elongatum* Thomson (= *A. coarctatum*) från Sk. Råby är sannolikt försvunnet. Fynd av 22 andra arter fjädervingar presenteras, bl.a. 24 nya landskapsfynd. Intressanta förskjutningar i utbredningsbilden rör särskilt *Oligella nana* (A. Strand), *Ptilium affine* Erichson, *Baranowskiella ehnstromi* Sörensson, *Ptinella denticollis* (Fairmare & Laboulbène) och *Acrotichis volans* (Motschulsky).