

PHILOSCIA AFFINIS* VERHOEFF, 1908 (ISOPODA: PHILOSCIIDAE) NEW TO IRELAND*Roy Anderson**

1 Belvoirview Park, Belfast BT8 7BL, Northern Ireland (UK).

E-mail: roy.anderson@ntlworld.com

Segers *et al.* (2018) reported the first confirmed finds of *Philoscia affinis* Verhoeff for the UK, in Greater London and West Sussex. Since then the species has been confirmed from near Oban, western Scotland and from Slapton Ley, South Devon (Gregory, 2018).

Steve Gregory contacted me in February 2018 to suggest that I look for *P. affinis* in Ireland. My searches got off to a slow start and it wasn't until I was asked to survey some rich fen sites in Co. Down in September that progress was made. Males in a collection taken from fen margins and planted oak woodland at Turmennan (J48525004) east Co. Down on 12 September were all of the *P. affinis* type with a hooked outstanding spine at the base of the merus of the seventh pereopod. Both males and females showed pigmentation typical of *P. affinis* with mottled brownish shades predominating especially on the head and with a lack of brighter, reddish stripes on the pereion. However, within a 400m radius of Turmennan, away from the fen margins, specimens were found with a colour pattern more typical of the *muscorum* type including dark heads and brighter pereion margins but which nevertheless had distinct spines on the merus of males.

In addition, specimens of *Philoscia* were collected during October and November from several sites in and around Belfast and produced some interesting results. Collections from the site of a megalithic monument, the Giant's Ring (J32686778), in artificially maintained grassland, the Harbour Estate in Belfast (J37357822) among wooden planks on basaltic infill, and Morelands Meadow, a grazed fenny meadow beside the River Lagan west of Belfast (J33786986), were examined. The specimens from these sites possessed typical *P. muscorum* colouration with uniformly dark heads and splashes of reddish on the pereion margins. However, males at all three sites had curved spines on the merus of the last pereopod. At first I thought that these must be *P. affinis* but in discussion with Steve Gregory and a German specialist Jörg Spelda of the Zoologische Staatssammlung München, it transpired that although the literature suggests that the meral spine in *P. muscorum* is depressed into the body of the merus the distinction may be more due to orientation of the spine than any other factor.

The difference in orientation of the meral spine became obvious when comparing specimens of *P. affinis* with *P. muscorum* in my possession. Thus, males in the sample of *P. affinis* from Turmennan Fen had a meral spine which jutted out conspicuously from the merus *when viewed from the side of the animal*. But males from the other three sites plus the area away from the edge of Turmennan Fen with typical *muscorum* coloured individuals showed no such outstanding spines when viewed from the side. My initial confusion arose from viewing these specimens *from below* when the meral spines could be clearly seen but were projecting inwards towards the mid-line of the animal. These are almost invisible from side view in *P. muscorum*. Their presence nevertheless led me to initially misinterpret the situation, not being aware that the mere possession of open meral spines is inconclusive. The last (7th) pereopod in specimens being examined should always be viewed from the side to see the diagnostic spines, rather than from below (which I did) as the latter viewpoint will reveal inward jutting spines in specimens of *P. muscorum* that may cause confusion.

Further sites for *P. affinis* have now come to light. The first of these, visited on 23 November, is McArt's Fort (J32487958) a Stone Age mounded fort on Cave Hill which overlooks the city and stands

at about 1200 feet in altitude. This is significant because of the altitude and the rather peaty upland heath in which it is situated. The population here showed typical *P. affinis* colouration i.e. pale mottling in shades mainly of brown, which correlated with a meral hook in males which could clearly be seen on the seventh pereopod viewed from the side. A second fen site, Corbally Ponds Fen SAC (J451386) in Co Down, has since been visited and found to have a population of *Philoscia affinis*. This fen is rather more alkaline than Turmennan and has a large population of the endangered Desmoulin's whorl snail *Vertigo moulinsiana* (Dupuy). While surveying for Desmoulin's snail, individuals of *P. affinis* were found at the roots of vegetation and moss along the full length of a 600 m transect on the fen, varying in abundance from occasional to frequent (17 October, 11 December 2018).

DISCUSSION

It is clear that the form of the meral spine is indeed a reliable feature which can distinguish between *Philoscia affinis* and *P. muscorum*. But it should be remembered that the orientation of the spine is important and differs between the species. The way that specimens are viewed therefore becomes critical for identification.

The three sites from which *P. affinis* is so far known in Ireland comprise undisturbed wetland habitat ranging from montane heath to lowland transition fen. It appears to be absent from more disturbed or 'managed' grassland sites and has not so far been found in ancient woodland. Though probably a natural part of the Irish fauna it is too early to define its exact habitat requirements.

REFERENCES

- Gregory (2018) Additional UK records of *Philoscia affinis*. *British Myriapod & Isopod Group Newsletter* **36**, p3 (unpublished).
- Segers, S., Boeraeve, P. & De Smedt, P. (2018) *Philoscia affinis* Verhoeff, 1908 new to the UK (Isopoda: Philosciidae). *Bulletin of the British Myriapod and Isopod Group* **30**: 21-25.