The flatworm *Caenoplana bicolor* (Graff, 1899) (Platyhelminthes, Geoplanidae) at Evesham, Worcestershire

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Introduction

The account of British land planarians or flatworms in Ball & Reynoldson (1981) was limited to a brief review towards the end of that work; it cited five introduced species. Twenty four years later the number of introduced species in Britain had doubled to ten (Jones, 2005). This note deals with a species that has occurred apparently rarely in Britain since 2005 but can now be confirmed for Worcestershire.

Discussion

A flatworm found in an Evesham suburban garden (52°06'N 1°56'W VC37 SP04 54 m a.s.l.) on 25 September 2019 was recognised as *Caenoplana bicolor* (Graff, 1899). This is a distinctive grey flatworm in this case reaching 40 mm in length with a yellow dorsal stripe within which run two parallel thin red lines (01, 02).

According to Jones (2005) *Caenoplana* spp. are snail predators. The Evesham example was found curled on bare soil in the shade of an outbuilding.

Caenoplana bicolor was evidently first found in Britain at Southampton during 2013 and is a native of Australia (Sluys, 2016) likely to be spreading geographically and to be under-recorded; there is a recent record

(https://www.inaturalist.org/observations/32259716) in Slough, Buckinghamshire on 7 September 2019. *Caenoplana bicolor* was first found in Spain in a plant nursery near Girona in the autumn of 2012 (Alvarez-Presas, Mateos, Tud, Jones & Riutort, 2014) and in Greece on Crete during October 2018 (Vardinoyannis & Alexandrakis, 2019). The ability of flatworms to colonise islands was confirmed by Breugelmans, Cardona, Artois, Jordaens & Backeljau (2012) who cited *Caenoplana coerulea* Moseley, 1877 on Menorca. Because planarians are predators of molluscs and annelid worms which are represented by endemic species on oceanic islands their presence has negative potential impacts on island systems and is causing concern amongst ecologists. Regrettably the transcontinental dissipation of flatworms is a further example of globalised faunistic homogenisation ultimately rooted in human activity and humanly-induced climatic signatures.



Fig. 01. Caenoplana bicolor, Evesham, Worcestershire, 25 September 2019. The reddish head rests against the coiled body.



Fig. 02. Head of *Caenoplana bicolor*, Evesham, Worcestershire, 25 September, 2019. The colour of the dorsal midline is apparent on the near side of the head; the black dots represent the eye scatter.

Most authors now agree that a key method of flatworm dispersal is through the horticultural trade, and since some species can reproduce by fission (the physical fragmentation of an individual) any form of control would be difficult to conceive. There is no evidence that the Evesham example was introduced directly to the find site but there is abundant evidence of horticultural plantings in the general area.

Readers of this note may find their awareness of flatworms somewhat heightened and note that the group contains some highly distinctive species, most notably in Britain the 'moon-headed' *Bipalium kewense* Moseley, 1878 (Geoplanidae, Bipaliinae). I first encountered this species in a heated greenhouse in Lancashire during September, 1966; it was first observed in Britain at Kew in 1878. Twenty years later I received a letter from Dr Ian Wallace, then Keeper of invertebrate zoology at Liverpool Museum describing the occurrence of a second unknown species of flatworm in the same complex of heated greenhouses. This became, during 1986, the first and perhaps only British record of the colourful Blue Flatworm *Caenoplana coerulea* Moseley, 1877, like *C. bicolor* also a native of Australia.

Caenoplana bicolor is sometimes referred to as the Southampton Flatworm. If binomial names can be subject to suppression, then why not also inappropriate vernacular names? The Camberwell Beauty Nymphalis antiope (L., 1758) for example, has a geographical range rather larger than its vernacular name might imply.

Conclusion

The Australian flatworm *Caenoplana bicolor* is recorded for the first time from Worcestershire, apparently as the most north-westerly British record. It is probably more widespread in the garden context than records imply.

References

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A flatworm probably *Caenoplana bicolor* found in Redditch.

The Worcestershire Biological Records Centre (WBRC) was sent pictures of a flatworm found in a Redditch garden at the beginning of October 2019 (01, 02) and described as about six inches long and covered with sticky mucus (woodlice stuck to it!). The pictures were seen by several Worcestershire naturalists without anyone reaching a definite conclusion on its identification. On receipt of the note above from Paul Whitehead, re-examining the pictures, and showing them to Paul it seems likely that the Redditch flatworm is the same species *Caenoplana bicolor*, an Australian flatworm with few records in Britain.



01. Caenoplana bicolor, an Australian flatworm found in Redditch.



02. Caenoplana bicolor, an Australian flatworm found in Redditch.