

***Euzetes globulus* (Nicolet, 1855) (Acari, Oribatida, Ceratozetidae), a beetle mite from an owl pellet on Bredon Hill summit grassland.**

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Introduction

The distribution of certain groups of invertebrates remains difficult to rationalise either because the species are seldom observed, hard to see, or for a variety of reasons, difficult to position within species boundaries. Oribatid beetle mites, or moss mites, are a case in point. A typical example of this group is the suborbicular *Euzetes nitens* (Johnston, 1853) which has a highly iridescent black exoskeleton persistent enough to survive as a Bronze Age fossil under the alluvium of the River Avon at Pensham, Worcestershire (Whitehead, 2006). Its somewhat duller congener *Euzetes globulus* (Nicolet, 1855) is evidently less well-known in Britain.

Discussion

In Worcestershire *E. nitens* is likely to be widespread and has been found in numbers in damp moss in sheltered open woodlands. It sometimes occurs in aggregations when ground-water fills mossy hollows in riparian woodlands. It occurs also in moist hay meadows and urban allotments on retentive sediments and is probably reasonably eurytopic given available moisture.

On 24 February 2019 on the hillcrest of Bredon Hill at Kemerton (52°05'N 2°06'W SO9540 275 m O.D.) I collected a few pellets voided by a Tawny owl *Strix aluco* L., 1758. The prevailing habitat was tussocky 'conservation' grassland in a generally farmed arable landscape with scattered plantation blocks. One of the pellets contained a dead example of the beetle mite *E. globulus* (01) which must have entered the pellet from the unmanaged grassland after it was voided. The grassland is developed over thermally fragmented Oolitic Limestone admixed with coversand (Whitehead, 2016). It may be therefore that *E. globulus* is more dry-tolerant than *E. nitens*.

In continental Europe *E. globulus* apparently favours wooded environments (Bernini, Avanzati, Baratti & Migliorini, 1995; Huhta, Siira-Pietikäinen & Penttinen, 2012)

It seems impossible to make any further regional assessment of *E. globulus* at the present time although having seen millions of invertebrates I can recall no previous example. Where it is cited in lists (e.g. Davis, 1973) it may be present in low numbers.

Nomenclature

Euzetes globulus was described by Nicolet (1855) as from near Paris under the name *Oribata globula* and was figured and keyed as such by Murray (1876). At that time *E. globulus* was unknown in Britain.

I compared the ventral chaetotaxy of the Kemerton example with the details provided by Fredes & Martinez (2011) and assume that the identification is accurate.

Addendum

Examination of two other Tawny Owl pellets confirmed their total content as three earwigs *Forficula auricularia* L., 1758; one ground beetle *Harpalus affinis* (Schrank, 1781), one silphid beetle *Phosphuga atrata* (L., 1758) and two dung beetles *Geotrupes spiniger* (Marsham, 1802). Vertebrates consumed comprised three Field Voles *Microtus agrestis* (L., 1761) of which two were immature.

0.5 mm



01. *Euzetes globulus* (Nicolet, 1855) dorsal aspect. From a Tawny Owl pellet, Bredon Hill, Kemerton, Worcestershire, 24 February 2019.

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Image

- 01.** *Euzetes globulus* (Nicolet, 1855) dorsal aspect. From a Tawny Owl pellet, Bredon Hill, Kemerton, Worcestershire, 24 February 2019.