

TORMENTIL MINING-BEE *Andrena tarsata*



Tormentil Mining Bee *Andrena tarsata*,
Hurstwood (Allen Holmes)

At 6-7.5mm females of this species are small, though not as small as the “mini-miner” or “minutula group” species that are often present in the same habitat and at the same time of year (especially – in upland habitats - Impunctate Mini-miner). In contrast to the mini-miners both sexes have the lower parts of the hind leg orange (dark in mini-miners) and even when “fresh” (not worn) they can appear worn due to the dark hairs in the central part of the thorax and grey hairs around the edge. The males are one of 8 species in the *Andrena* genera to have a white plate on the face though only 3 (of the seven) others are recorded for Lancashire and all these have dark hind legs.

The species is oligolectic on species of *Potentilla* – most commonly Upright Tormentil (*Potentilla erecta*) in Lancashire, although females have been seen foraging pollen from Trailing Tormentil (*P. anglica*) at Healey Nab near Chorley (pers. obs.) and other *Potentilla* species (including cinquefoils and Silverweed) are recorded for Scotland and mainland Europe. Visits to other plants growing amongst tormentils and cinquefoils (such as bramble, heathers and other ericaceous plants) are almost certainly for nectar.

The mid-June – late August flight period corresponds to the flowering of the favoured plant species – in the field Tormentil Mining-bee has a characteristically rapid, scrabbling action as it forages from favoured plants which is also distinct from smaller *Andrena* species (this is useful, as Upright Tormentil is often visited / favoured by other related species including Black Headed Mining-bee and Impunctate Mining-bee – pers. obs.).

Although heaths, moorland and acid grassland are the usual habitats for Britain and Lancashire, quarries and brownfield sites (especially those associated with base-poor rocks / soils) are also used, being important habitats in Cornwall (Paddy Saunders, pers. comm.). Pex Hill Quarry (Cronton) is a

notable lowland record in the south of the recorded / mapped area.

Nesting occurs in light (often sandy) soils, in sparsely vegetated areas including banks and footpaths, singly or in aggregations (aggregations are rarely encountered in Britain). One female was seen to exhibit nesting behaviour (flying into a hole coated with yellow pollen) in the large eroded bank of a brook near Oswaldtwistle (pers.obs.). A small aggregation in a disused and succeeded quarry near Tockholes (a pasture with plentiful Upright Tormentil) were observed to nest in in a small eroded bank from 2014-2016 (pers.comm.).

The records show a bias towards upland areas, which is not a surprise given the associated plants. This is a species that is probably declining in Lancashire – especially in some lowland or lower altitude sites - as many of the habitats that it has been recorded in previously (Yellowhills, Witton C.P, Blackburn) simply do not support any tormentils any more due to changes in land management and/or habitat succession. The species has seemingly disappeared from certain isolated lowland sites in Cheshire (Alderley Edge – Carl Clee, pers.comm.) and in Lancashire (Fenisowles, pers. obs.), though increased recorder effort in upland areas of East Lancashire (more recently – by Allen Holmes and John Wright) has resulted in records for sites not previously recorded for the species.

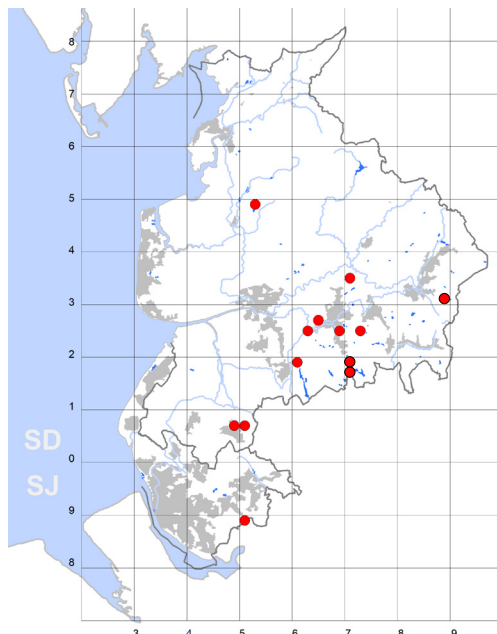


Figure B39a. Distribution of Tormentil Mining-bees *Andrena tarsata* in Lancashire and North Merseyside