

SNAPSHOT OF INVERTEBRATE LIFE IN ASHENGROUND AND BOLNORE WOODS



Pic.1. *Criorhina ranunculi* hoverfly covered in pollen (Fekete, 2019)



Pic.2. *Criorhina ranunculi* on Sallow (Fekete, 2019)

This early spring species is an excellent bumblebee-mimic (see images below), which frequently visits willow, blackthorn and wild cherry. *Criorhina ranunculi* is mainly a southern species where they breed in rotting (mainly oak or birch) tree trunks. This insect tends to stay up high in a canopy, therefore not often can be seen. As it is evident from the photos, hoverflies also excellent and very important pollinator species alongside bees.



Pic.3. *Bombus pratorum* worker on Yellow archangel (Fekete, 2018)



Pic.4. Queen *Bombus lapidarius* on Dandelion (Fekete, 2019)

Early bumblebee (*B. pratorum*) is one of the earliest bumblebees to emerge in the spring. This species is widespread and common throughout Britain, due to its wide range of diet of pollen and nectar. Red-tailed bumblebee (*B. lapidarius*) is also a common species which can be found in many habitats, e.g. woodlands, gardens, flower-rich grasslands.



Pic.5. *Bombus hypnorum* worker on Sallow (Fekete, 2019)



Pic.6. *Bombus pascuorum* worker on gorse (Fekete, 2018)

There are 27 bumblebee species currently on the British list with several species showing considerable declines and range contractions. The Tree bumblebee (*B. hypnorum*) is a recent colonist of the British Isles having been first recorded in Wiltshire in 2001. True to its name, this bumblebee has an aerial nesting preference, often occupying bird nests, cavities. Predominantly a woodland species, but can be found in gardens too especially where brambles and cotoneaster are in abundance. Common carder bee (*B. pascuorum*) can utilise many habitats, nests can be found in dense tussocky grass and under hedges.



Pic.7. Male *Andrena apicata* (Fekete, 2019)



Pic.8. Male *Andrena apicata* (Fekete, 2019)

The largest group of mining bees, *Andrena* is represented by 67 species in Britain. The Large Sallow Mining bee (*Andrena apicata*) is a nationally scarce (Nb) solitary mining bee and it is strongly associated with its food plant, the willow (mainly Goat or Grey willow). The species is never numerous, therefore, I was very delighted to have found this species around the Pond Meadow. Nesting occurs in lighter soil in loose aggregations.



Pic.9. Pollen-laden female *Lasioglossum* spp. (Fekete, 2019)

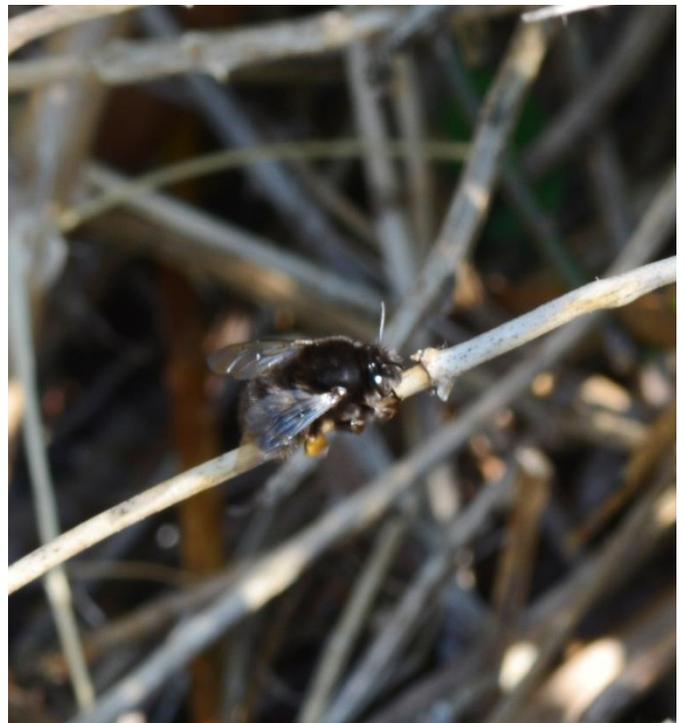


Pic.10. Female *Lasioglossum* is excavating nest (Fekete, 2019)

These tiny, solitary mining bees can be easily overlooked in the field. *Lasioglossum* is the world's largest bee genus (1,700 species worldwide) with 34 different species described in Britain and identification of individual species sometimes can be challenging.



Pic.11. Worker *Bombus lucorum/terrestris/cryptarum* (Fekete, 2019)



Pic.12. Female *Anthophora plumipes* (Fekete, 2019)

Hairy-footed flower bee (*Anthophora plumipes*) is a common southern species, which regularly nests in walls, in wood and hollow stems. These bees prefer to forage on Lungwort, Primroses and Ground-ivy.

Bombus cryptarum is a species that has only recently been separated from *B. lucorum* by DNA analysis, it is impossible to distinguish between the two species only by taking photographs. Slight clue could be the yellow collar which does not extend further down that the wing cases.



Pic.13. *Nomada fucata* at mining bee nest entrance (Fekete, 2019)



Pic.14. Male *Nomada flavoguttata* (Fekete, 2019)

Another fascinating and beautiful insect group is the *Nomada*. These relatively hairless bees are cleptoparasites of mining bees (mainly *Andrena* species). This means that the female sneaks into the mining bee's nest, lay an egg onto the wall of an unsealed nest cell. Later on the *Nomada* larva proceeds to destroy the host egg and continue to feed on the food store until it hatches. There are 34 different species can be found in Britain.



Pic. 15. Poss. Female *Sphecodes gibbus* (Fekete, 2019)



Pic.16. Poss. Female *Sphecodes monilicornis*

Another cleptoparasitic group is the *Sphecodes* with 17 different species in Britain. These bees are usually have black and red abdomen and fairly hairless. They differ from *Nomada* in their tactic - they enter the host nest, open up a cell and destroy the egg while replacing it with their own egg, finally resealing it. Finding cleptoparasitic bees are generally a good sign, meaning that it is a healthy population of true, working solitary bees that can sustain parasitism and can still thrive regardless.



Pic.17. Male *Osmia caerulescens* (Fekete, 2019)



Pic.18. Male *Andrena* species on Field maple (Fekete, 2019)

One of the 12 known British Mason bees, (*Osmia caerulescens*) is a striking bee with metallic green or blue colouring mainly seen on the abdomen of males. Female bees of this species typically chew up plant material to create mastic and seal their nest cells. This bee is rarely common anywhere and usually nests in hollow stems of plants, e.g. brambles.



Pic.19. Female *Andrena fulva* (Fekete, 2018)



Pic. 20. Female *Andrena flavipes* (Fekete, 2018)

The female of Tawny Mining bee (*Andrena fulva*) is one of the most recognisable mining bees with its dense orange-furred abdomen and thorax. This bee has a habit of nesting in large aggregations along footpaths, hillsides, field margins, just as Yello-legged Mining bee (*Andrena flavipes*).



Pic. 21. Female *Andrena dorsata* on gorse (K.Fekete, 2018)



Pic.22. Female *Andrena nigroaenea* (Fekete, 2018)

Short-fringed Mining bee (*Andrena dorsata*) is also a southern species which has two generations; one in the spring and one in the summer. The Buff-tailed Mining bee (*Andrena nigroaenea*) is one of our commonest mining bees that likes to forage on gorse, willows, blackthorn and hawthorn.



Pic.23. Female *Andrena haemorrhoa* (Fekete, 2018)



Pic. 24. Male *Andrena chrysoceles* (Fekete, 2018)

The female Orange-tailed Mining bee (*Andrena haemorrhoa*) is also characteristic and easily recognisable with the bright orange hairs at the tip of its abdomen. It is also a common species which likes to forage on gorse, maple and willows. The Hawthorn Mining bee (*Andrena chrysoceles*) is a solitary mining bee found mainly in Southern Britain. Males can be recognised by their pale yellow faces with two black spots. This bee is more tolerant of clay soils than other bees (Falk,2015).

References

- Falk, S.** (2015) *Field Guide to the Bees of Great Britain and Ireland*. British Wildlife Field Guide, 1st. Ed. Pub. British Wildlife Publishing. pp.432
- Else, R.G., and Edwards, M.,** (2018) *Handbook of the Bees of The British Isles*, The Ray Society, Pub. The Natural History Book Service Limited, Devon, UK, 2018