

## Violet Oil Beetle (*Meloe violaceus*)

**Areas and status:** Distributed throughout western England, Scotland and Wales, more frequently recorded in upland areas of Britain. Declined in recent decades.

**Woodland type:** Lowland Broadleaved Woodland, Wood-pasture and Parkland (as well as scrubby moorland edges)

**Preferred habitat niches:** Glades, rides edges, wood-pasture, parkland, disturbed ground and open areas. The violet oil beetle has a complex life history; it is a nest parasite of solitary mining bees. Oil beetles are found on sunny, wildflower-rich sites that are capable of supporting good populations of the mining bees required by the beetle. Bare ground can be a useful feature for bee nesting sites, and grass tussocks are utilised by adult beetles for shelter during colder weather. Lesser Celandine (*Ranunculus ficaria*) and Dandelion (*Taraxacum officinale* agg.) are thought to be preferred adult food plants, and are used by the larvae to gain access to bees. Adults also feed on soft grasses and Cleavers (*Galium aparine*).



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### Potential habitat management issues associated with decline:

- Changes in woodland management leading to loss of suitable grasslands within and close to woodlands: these grasslands need to be herb-rich (to provide a succession of nectar sources from spring-early summer for the mining bee hosts) and also to have some patches of tall vegetation and tussocks of grass (to provide shelter for the adult beetles).
- Changes in woodland management leading to loss of suitable nesting sites for solitary bees (resulting in declines in solitary bee populations).
- Habitat fragmentation leading to isolation of populations. Loss of herb-rich grasslands (both upland and lowland) and heathlands due to agricultural intensification, changes in land use/land management, etc.
- Loss of grazing and scrub control in open areas such as glades, floodplain meadows and wood-edges, leading to loss of species-rich grassland with bare ground and ultimately, to succession of these habitats to bracken, scrub and young woodland.

Potential habitat management solutions:	
Prescription	Comment
Grazing	Maintain grasslands and other open habitats by light grazing during summer, autumn and winter. If this does not produce the desired sward structure and species diversity increase grazing levels from late autumn through to late winter.
Rides, Glades,	Ensure high levels of sunshine. Manage as 3 zone, but cut flower-rich areas and patches of tall grassland/grass tussocks on 3-5yr rotation. Set cutting blades as low as possible (<100mm) to create short sward and some soil disturbance.
Disturbed ground, Open areas	In late spring, scarify patches of dry soil in sunny situations; create areas of bare earth (500x500mm to 1x1m) for solitary bee nest sites.
Connectivity	Manage woodland on landscape-scale. Work with neighbouring landowners to protect and maintain nearby hedgerows, trackways, field corners, grasslands, copses, disused railway lines, abandoned quarries, etc.

