British Dung Beetles

Dung is a nutritious and valuable resource for many invertebrates. There are approximately 60 Scarab beetles that feed on dung in Britain. They are found in many habitats and at all times of the year. The one thing they all need though, is a ready supply of good quality poo.

Dung beetles are grouped according to how they use poo. The most well known are the Rollers (Telecoprids). These make a dung ball and roll it away. Rollers are tropical species, there are none in Britain. We have Tunnellers (Paracoprids) and Dwellers (Endocoprids). Tunnellers dig, burying the dung below ground, where they lay eggs and larvae develop. Dwellers generally spend their entire life in the poo, although the larvae of some species are found just under the soil surface.

There are many other ways dung beetles can avoid resource competition. These clever strategies include:

• Using poo from different animals
• Feeding at separate times of the day
• Living in areas with different soils
• Being in sunny or shaded habitats
• Using dung of a different age

Dung beetles help us by providing a range of ecosystem services. These include:

• Dung disposal
• Fertilizing the soil by burying dung
• Acting as a food source for birds, bats, badgers and some other mammals
• Reducing dung breeding flies by transporting mites that eat fly eggs
• Enhancing soil structure by digging through and turning over soils
• Reduce greenhouse gases by removing poo
• Improve ground drainage by digging tunnels
British dung beetles are in decline and a few species are already thought to be extinct. There are a number of reasons why this is happening:

• Over wintering livestock in barns not fields
• Short term rotation grazing when fields are left for long periods without animals
• Converting permanent pasture to other uses
• Ploughing, re-seeding and chemically fertilizing pasture
• Blanket use of veterinary wormers, especially avermectins. The chemicals remain active in poo and also kill the dung fauna
• People removing dung through sweeping or poo-picking animal pasture, particularly horse paddocks
• Imported animal breeds often have runnier poo, dung beetles can drown in it

The good news is there are many ways to help conserve British dung beetles:

• Only worm an animal if it needs it, use a fecal egg count to find this out
• Keep a few sheep, cows etc. out during winter
• Keep native breeds whenever possible – their poo tends to be less sloppy
• Reduce poo-picking and sweeping to remove dung
• Avoid converting permanent pasture to other land use types
• Have a “beetle belt” – an area with dung that beetles can use to hop from one patch of grazing to the next
• Take good quality photos of the dung beetles you find and submit them via iRecord (www.brc.ac.uk/irecord)
• Highlight the dung beetles plight and pass the message on!

Dung beetle UK Mapping Project (DUMP)
DUMP is hosted by the Oxford University Museum of Natural History. The Dung beetle Detectives Roadshow is our touring educational stand, set up with an Outreach Grant from The British Ecological Society.
To learn more about our work, please visit our website or follow us on twitter.

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