Dung Beetle Conservation

Dung Beetle Utilisation for Native Growth

Did you know we have 60 individual species of dung beetles in the UK!?

With only 150 species in the world, we hold a large number of them here!

It is thought at least 25% of them are nationally rare or threatened, with 4 species going extinct in the past 50 years.

BIAZA PROJECT DUNG 2025

How can we help?

Our first step is to perform survey's within our collections to gather more information about native dung beetle distribution!

We can then have a designated dung beetle conservation areas- have a specific pile of poo! This can be created on site creating a dung beetle habitat to allow them to feed and breed within the poo.

We could also perform preventative faecal screening- rather than treating our animals with chemicals when they're not needed. This helps to protect the dung beetles, but also other native invertebrate species and other wildlife, too!

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Our Plan for the Dung Beetle Project

1

SIMPLE SURVEYS!

Without changing habitats available, we are asking BIAZA members to complete short surveys on their sites within a certain month of the year. ProjectDUNG will provide ID sheets at a basic level. We ask collections to record on iNaturalist and post on social media with #ProjectDUNG25

2

RESEARCH POOLED TOGETHER

ProjectDUNG will then make infographics of the dung beetles on BIAZA sites to share on social media and at keeper conferences. This would give us all an idea of the general distribution of dung beetles

3

DETAILED SURVEY!

ProjectDUNG will then produce more detailed ID guides and survey methods so your BIAZA collections could survey the subspecies of dung beetles you have on site.

4

HELPING DUNG BEETLES

We will then issue some advice for worming treatments and habitat creation working collaboratively with the veterinary group.

Habitat creation can be as simple as placing a pile of dung in a disused area of the site. *For example, Reaseheath's is to the side of a wildlife area, fenced off from the public.*

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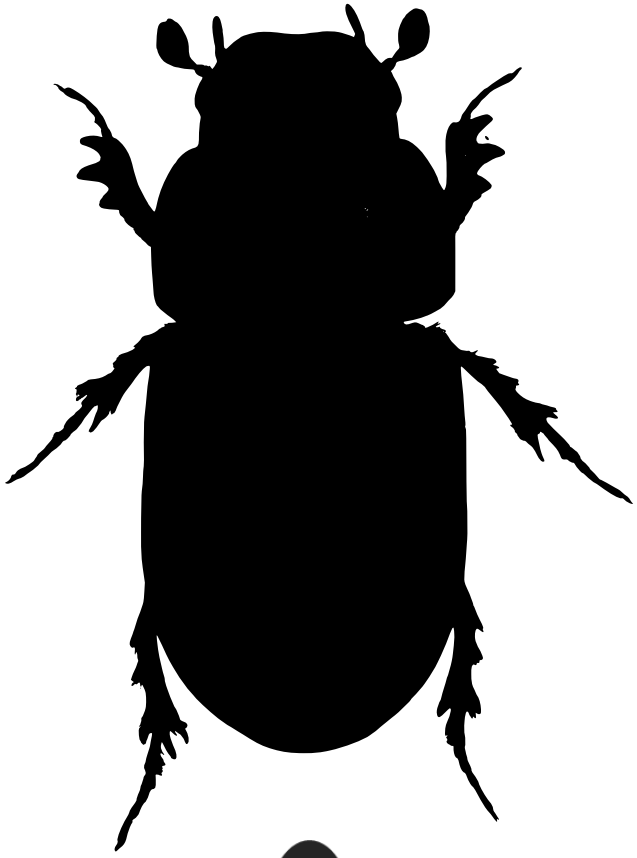
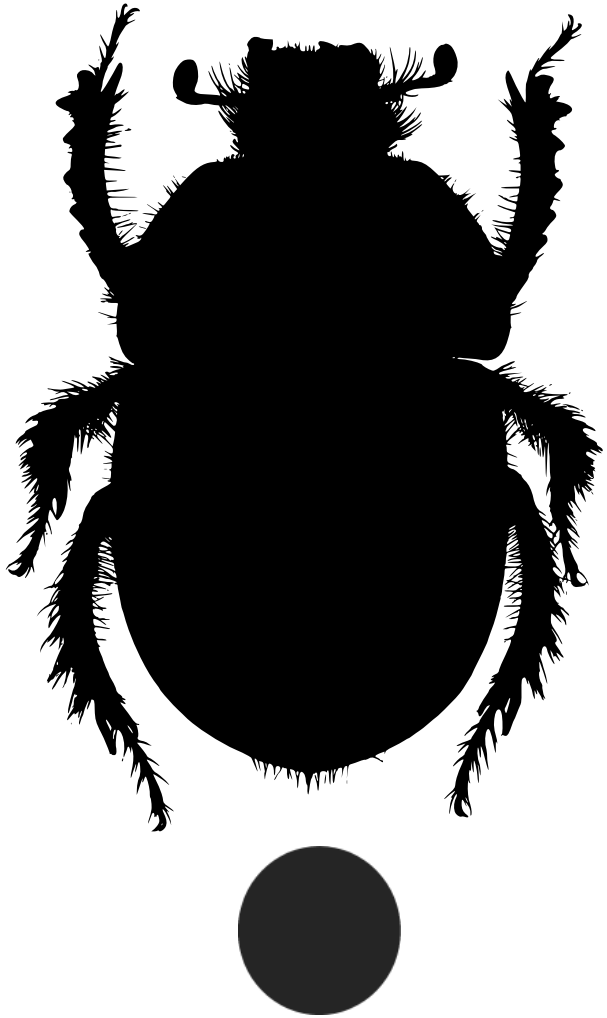


3-13 mm

DWELLER BEETLES

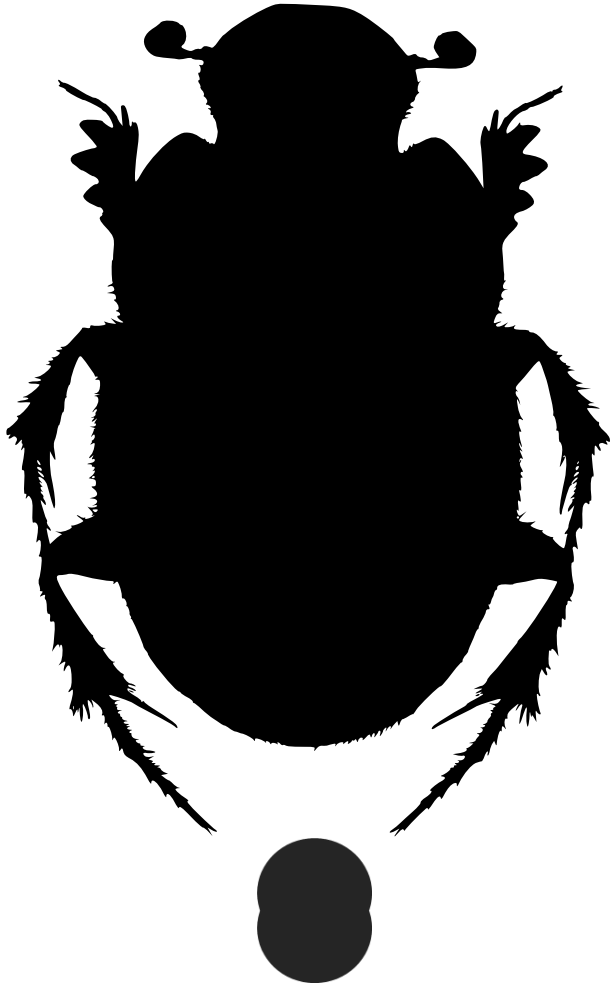
48 species



4-11 mm

DOR BEETLES

6 species



8-26 mm

TUNNELER BEETLES

8 species

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BIAZA Spotted on Site

iNaturalist

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Project DUNG
Informational Guide

INTRODUCTION FROM THE TEAM

Thank you for getting involved with BIAZA's Project DUNG 2025. This is a guide to how to look for dung beetles and how to record your findings to contribute to the spotted on site project.

Dung beetles are declining in the UK mainly due to habitat loss, reduced grazing livestock, pesticide and veterinary drug use (especially wormers), and changes in farming practices. These factors reduce the availability and quality of dung, which is essential for their survival. They play a crucial role in ecosystem health. They aid nutrient cycling, improve soil quality, and help control parasites by breaking down animal waste.

Monitoring their populations provides insight into habitat quality and biodiversity. Dung beetles are also sensitive to environmental changes, making them effective indicators of land management impacts. Through Dung beetle surveys and monitoring we hope to help and guide BIAZA collections to improving practices to enable these mini ecosystem engineers. Dung beetles as the name suggests are found in or around dung piles and keepers may come across them in their day to day cleaning of enclosures. To help find dung beetles some simple equipment can help make the task simpler.

EQUIPMENT LIST

- **Glove-s** to maintain cleanliness and biosecurity.
- **Tray-** a tray helps provide a workspace in the field to search for beetles.
- **Pots-** small pots are helpful for putting dung beetles in.
- **Spoon/digging implement** – a spoon or other items can help break up dung.
- **Note pad/Phone/camera** – to record results.
- **ID guide** – attached to this information guide is a basic ID guide for the groups of dung beetles found in the UK.
- **Hand lens or magnifying glass**- to aid with identifying smaller features

When working with dung we advise wearing gloves and washing hands and equipment after use.

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Project DUNG
How to Guide...

WHAT TO LOOK FOR...

- **Piles of soil around dung piles** – this is a possible sign of Dor Beetles (*Geotrupes*) and Tunnelers (*Onothophagus*) as they create tunnels under the pile to bury dung in the soil for their larvae to feed on. This leaved piles of soil around the dung from their tunnels.
- **Holes in the dung** – these can be signs of beetles having burrowed into dung or signs of larvae feeding on the dung itself as seen below in this Bison dung.

- **Larvae in the dung** - Dwellers (*Aphodius*) primarily lay their eggs on and or in the dung and the larvae feed on the dung within the piles. These beetles will mainly be found in the dung upon searching through it as seen below.

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Project DUNG How to Guide...

WHERE TO START...

Below is a step by step guide of how to find Dung beetles.

- The first step of surveying for dung beetles is to look for some dung. The best stuff is from hoof stock, including equid and bovid species that haven't recently undergone worming or other parasites treatments.
- Once you have chosen your dung, take some and place it into your tray or an area of ground to examine it. Whilst looking through the dung look out for holes and tunnels in the dung and underneath it as these could be signs of beetle activity.

- Gently break up the dung looking for beetles inside either by hand or using a spoon or similar implement looking for beetles and holes that they could have made.

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Project DUNG How to Guide...

WHERE TO START...

- Once you find a beetle place it gently into a sample pot to identify.

- Identify the beetles using the Project DUNG identification guide. *Don't worry- if you can't identify your beetles, the iNaturalist app can help!*

- Once completed upload the sighting to the iNaturalist app under the spotted on sight campaign to contribute your records

iNaturalist

Once you have completed your survey replace any soil, dung and beetles to their original location to limit disturbance.

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