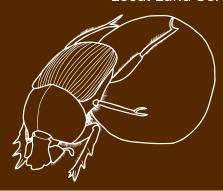
Dung beetles

Keeping our paddocks and livestock healthy



The dung beetle, as its name suggests, is a beetle that is one of natures best processors of animal waste products.

Dung beetles play a very important role turning animal dung into nutrients for plants. Whilst they feed on dung, a dung beetle will dig the remaining faeces into the ground.

Microscopic organisms in the ground break-down the buried faeces, making the nutrients available for plants. Burying the faeces also reduces the breeding sites for some fly pests and other parasites.

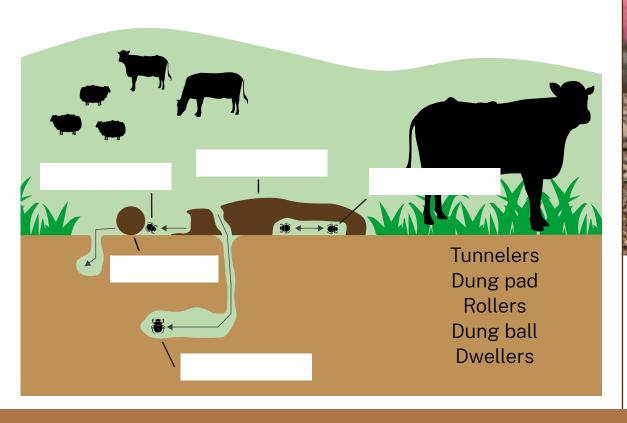
Australia has several native and introduced dung beetle species. Let's find out what dung beetles are living near you!

Nesting strategy

Dung beetles belong to one of three functional groups depending on nesting strategy.

- Tunnelers land on a dung pad and simply dig down into the pad, burying a portion of the dung
- 2. Dwellers are content with staying on top of the dung pad to lay their eggs and raise the young.
- 3. Rollers form a bit of dung into a ball, roll it away and bury it. The balls they make are either used by the female to lay her eggs in (called a brood ball) or as food for the adults to eat.

Match the labels to their correct location on the diagram.

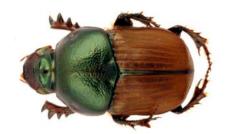






What's my name?

Use your **Dung Beetle Identification Guide** to help name these dung beetles. Write down any physical features, such as colour, shape or pattern, that help you identify them.



What are the identifying features?

This dung beetle's name is:



What are the identifying features?

This dung beetle's name is:



What are the identifying features?

This dung beetle's name is:



What are the identifying features?

This dung beetle's name is:



What are the identifying features?

This dung beetle's name is:

DUNG BEETLE IDENTIFICATION CHART

mm 1 2 3 4

WHAT COLOUR IS YOUR BEETLE?







Black (Section A)

Brown (Section B)

Two-toned (Section C)

WHAT IS THE LENGTH OF YOUR BEETLE?

Measure from tip of the head to the end of abdomen (in mm)

SECTION A. BLACK BEETLES

LENGTH: 20 - 25mm

FEATURE: Blue/purple sheen on the underside

= Geotrupes spiniger (Blue dung beetle)

.....



Bluish sheen on the underside

protruding shoulder horn

LENGTH: 13 - 20mm

FEATURE: Shiny black. Protruding shoulder horn and 2

horns on head

2 horns on head

= Bubas bison (male)

FEATURE: Two parallel ridges on head instead of horns.

Protruding shoulder horn not present

= Bubas bison (female)





Male Side view

Female 2 ridges on head

LENGTH: 10 - 13mm

FEATURE: Matt black, when viewed from the side there is a distinct shoulder ridge – horns are not present

= Onthophagus binodis (Humpbacked dung beetle)





Male

Female

LENGTH: 7 - 12mm

FEATURE: Shiny black with coppery green sheen. A slight groove runs down the middle of the midsection.

Males have upright horns

= Onthophagus australis (native species)





Groove on midsection

Male has upright horns

LENGTH: 8 - 10mm

FEATURE: Shiny black. Major males have long curved horns that sweep back over the thorax. Minor males have shorter horns and females have no horns but have a similar body shape

long curved horns

= **Onthophagus taurus** (Bullhorned dung beetle)





Major male

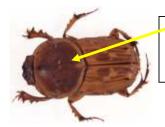
Female

SECTION B. BROWN BEETLES

LENGTH: 8 - 12mm

FEATURE: No speckling on the midsection

= Euoniticellus fulvus



No speckling or patterns on the midsection

LENGTH: 8 - 12mm

FEATURE: Dark speckling on the midsection and wing covers = *Euoniticellus pallipes*



Dark speckling on the midsection and wing covers

LENGTH: 7 - 9mm

FEATURE: Diamond pattern on the midsection. The male has a curved blunt horn on the head

= Euoniticellus intermedius



Diamond pattern on midsection

SECTION C. TWO-TONED (view in bright light)

LENGTH: 20 - 25mm

FEATURE: Male has a double spur on back legs

= Onitis aygulus





Double spur on back leg

LENGTH: 13 - 20mm

FEATURE: Male has a single spur on back legs

= Onitis alexis (Bronze dung beetle)





Single spur on back leg

OTHER BEETLES COMMONLY FOUND IN DUNG



7-9mm Aphodius fimetarius



4-6mm Aphdodius Iividus



11-14mm Heteronychus arator African Black Beetle (pest)

References & Images:

Doube, B., Dalton G., 2003, *Identifying dung beetles on the Fleurieu Peninsula*, Fleurieu Beef Group Dung Beetles for Landcare Farming, 2008, *Dung Beetle Dictionary*, Landcare Australia Tyndale-Biscoe, 1990, *Common dung beetles in pastures of south-eastern Australia*, CSIRO Australia