

DUNG BEETLES

Underground army, enriching soils:

Dung Beetles are fascinating creatures, working tirelessly to bury dung around the country often going unnoticed. As soon as you begin to understand the importance of these little creatures as one of nature's greatest recyclers you will never look at a pile of dung the same.

You will be wondering if there are dung beetles living under it, what type, how many? This fact sheet has been designed to accompany the short film titled: **Dung Beetles - Underground army: Enriching Soils**, to provide some background to the dung beetle programs that have occurred within NE Victoria and to explain how you can become involved with dung beetles.



View the films at:

northeast.landcarevic.net.au/rlf/projects/landcare-short-films

DON'T KILL YOUR DUNG BEETLES

The use of some chemicals to control livestock parasites may directly affect your dung beetles. Before you drench take a moment to think about if you actually need to? Can you drench during a period where beetles are not active? Think about the drench you use, and realise that the dung beetles working to bury the dung on your property, improving the soil and water quality around your property may be severely impacted by your decisions.

A fact sheet outlining some of the groups of chemicals and their effects on dung beetles can be found here:

northeast.landcarevic.net.au/dungbeetle/parasiticides



HOW DO I KNOW IF I HAVE DUNG BEETLES ON MY PROPERTY?



The Dung Beetle Resource Package and film *Dung Beetles - Underground army: Enriching Soils* is a great starting point as it explains the signs of dung beetle activity and gives a step by step guide to establishing a dung beetle project. There are dung beetle identification sheets and lots of information about all things dung beetle.

It is important to realise different dung beetles are active at different times of the year, and during different times of the day.

FOR MORE INFORMATION



National Dung Beetle website: dungbeetle.com.au

Do it with Dung - from the Mountains to the Murray - This project ran in 2009-2010 and involved dung beetle releases and monitoring across NE Victoria and Corowa shire in NSW:

northeast.landcarevic.net.au/kiewa/projects/do-it-with-dung-from-the-mountains-to-the-murray

Contact your local landcare group or better beef group and see if you can get a dung beetle program going in your area. Landcare group information is available on the Victorian Landcare Gateway:

northeast.landcarevic.net.au/

Better beef Group information: depi.vic.gov.au/agriculture-and-food/livestock/beef-and-sheep-networks/betterbeef-network/betterbeef-network-groups

Resources used to compile this fact sheet: Primefacts 442 Dung Beetles - working for you NSW Department of Primary Industries (2007)
Lucyvale Better Beef Group's Dung Beetle Resource Package (2008)

SOME BENEFITS OF DUNG BEETLES:



- Improved soil fertility
- Improved soil structure
- Improved soil biology
- Increased availability of grazing area
- Increased pasture productivity
- Improved water quality
- Improved water infiltration
- Reduced pest species and diseases associated with pest species

THE ORIGINAL DUNG BEETLE PROJECT

From 1968 to 1984 the CSIRO introduced dung beetle species from Africa and Europe in an attempt to improve dung burial and so reduce fly numbers. Over 16 years more than 50 dung beetle species were introduced and of these 23 species have established. In the mid 1980's the project's funding was terminated and the closing of this project marked an end of a nation-wide coordinated approach to dung beetle introductions and releases.



DUNG BEETLES IN NORTH EAST VICTORIA

In the summer of 2004-05, beef farmers from Lucyvale , Victoria witnessed cattle dung that usually littered paddocks for months was alive with activity, dung pads literally moving before their eyes and disappearing within days. And so the Lucyvale Dung Beetle project was born, a three year project funded through the National Landcare Program which saw the introduction of seven species of dung beetle, monthly monitoring and numerous soil health, water quality and beetle field days. One of the results of this project is the Dung Beetle Resource Package, a valuable resource full of information about beetle benefits, how to guide, species maps and a summary of projects. View the resource guide online here: northeast.landcarevic.net.au/dungbeetle/projects/do-it-with-dung/dung-beetle-resource-package

In addition to the original program, further funding was obtained in 2009/10 for a larger scale program involving over 100 monitoring sites across NE Victoria and Corowa shire. Sites were monitored fortnightly by volunteers over a 14 month period. The project also released over 200,000 dung beetles across the North East.



Why do we need dung beetles?

Australia's native dung beetles have evolved with native animals, who's dung is quite different to introduced livestock. The majority of native beetles are not able to process introduced species dung so before the introduction of dung beetles in the 1970's there were millions of dung piles sitting on the surface of the soil, encouraging flies and other parasites. The idea of sitting outside enjoying a BBQ before the introduction of dung beetles was nonexistent as the flies were menacing.

Dung beetles not only improve our ability to enjoy an outside dinner, but they increase the productivity of your land by improving soil health and increasing the availability of your pasture. The beetles' tunnels result in greater water retention and less run-off and they improve root penetration and soil aeration. Dung which sits on the surface can reduce the availability of your pasture as grass surrounding dung is often rank and unusable by livestock.

One cow produces approximately 18 kilograms of dung per day...

for a herd of 100 cows this equates to 1800kgs per day, 12600 kgs per week and 655,200 kgs per year.

Imagine the landscape without dung beetles!

One of the great benefits of Dung Beetles includes reduced pest species and diseases associated with livestock.

