

Demonstrating the benefits of dung beetles to prime lamb producers

Enhanced Producer Demonstration Site

Demonstration goal: To provide producers with a greater understanding of dung beetles and their benefits for soil health and fertility in sustainable sheep farming systems in south-west Victoria.

Site location: South-west Victoria

Producer group: South West Prime Lamb Group (SWPLG)

Group coordinator: Andrew Kennedy

SWPLG project coordinator: Kate Joseph

Agriculture Victoria coordinator: Bindi Hunter



South West Prime Lamb Group members inspecting dung beetles



Pair of Bubas bison dung beetles (male left, female right)

What are we aiming to achieve and why?

Dung beetles break down manure and transport nutrients to the subsoil, improving nutrient cycling, feeding soil biota, improving soil structure and reducing pasture spoilage. Species of dung beetles are also reported to be control agents for gastrointestinal parasites of livestock. Despite a wealth of cattle-related research into dung beetles, there is limited research on dung beetles in sheep production systems.

Method

- Monthly trapping of dung beetles with sheep dung baits on four group member properties each year. This will identify dung beetle species in the south-west that are attracted to sheep dung. It will also help to identify seasonal gaps in beetle abundance.
- Set up a trial site with replicated plots of 1) sheep dung with beetles, 2) sheep dung only, and 3) no dung or beetles. Soil test at 1–10cm, 10–30cm and 30–60cm and compare results after 12 months. This trial will be conducted with the winter active *Bubas bison* dung beetle and may be replicated with other beetles depending on availability.
- Conduct three field days covering topics such as dung beetle identification, lifecycle, benefits of dung beetles and management to increase populations.



Dung beetle trap with sheep dung attractant



Bubas bison egg buried in a dung-filled tunnel

Partners: This demonstration is conducted with Agriculture Victoria and co-funded by Meat & Livestock Australia (MLA), and is supported by the Dung Beetle Ecosystem Engineers project and Glenelg Hopkins CMA.

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More information

agriculture.vic.gov.au/agriculture/livestock/on-farm-demonstrations

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