

Community Participation

NSWLP-011-011



Determining what Dung Beetles species are established in Australia

The issue

Australia has approximately 475 species of Dung Beetles that have adapted to deal with native marsupial dung. Most of these species largely ignore cattle dung. Historical accumulations of cattle dung were a common breeding ground for nuisance pests such as bush flies. So, in 1966 the CSIRO began importing 43 species of dung beetles over 25 years. These species were adapted to livestock dung, and were found in South Africa, France, Spain and Turkey under similar climatic conditions. Today, 25 species have successfully established themselves in Australia. However, the distribution of different species and seasonal gaps are historically unknown.

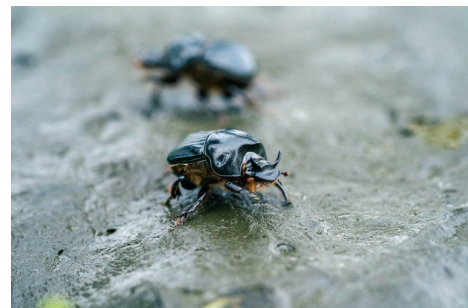
The solution

The Dung Beetle Ecosystem Engineers group (DBEE) was established in 2019. Charles Sturt University leads the project, with CSIRO, University of Western Australia, University of New England, Mingenew-Irwin Group, Warren Catchment Council, Dung Beetle Solutions International, and LandCare Research NZ. They aim to:

1. understand the distribution of dung beetle species previously introduced to Australia, and predict their ultimate spread and economic impact.
2. evaluate new species of dung beetle for importation and release into Australia
3. develop a database of information on dung beetles in Australasia.
4. work with farming and land management groups to help detect dung beetles and modify agricultural practices to enhance the success of dung beetles.

The impact

Workshops were held across the South West Slopes to help landholders recognise and better understand dung beetle species in their paddocks. Workshop participants were given strategies and land management practices to help encourage local dung beetle populations to flourish. The Dung Beetle Ecosystem Engineers Group is establishing a network of enthusiastic landholders across the Murrumbidgee Region to help with the establishment of Dung Beetle nurseries on farms. These nurseries will facilitate the development of populations of newly introduced dung beetle species to fill the traditional seasonal gaps of existing species.



- 475 native dung beetle species largely ignore cattle dung
- 25 introduced species have previously successfully established
- DBEE established to monitor existing populations and introduce new species to fill seasonal gaps



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