



Biological Control of Pastoral Dung in New Zealand

Final Progress Report: March 2014 to June 2014

This is the final progress report as part of the current Ministry of Primary Industry's Sustainable Farming Fund (MPI SFF) project for the Biological Control of Pastoral Dung in New Zealand (09-079).

The Dung Beetle Release Strategy Group (DBRSG) set a challenging target of getting approval for the importation of dung beetles. In February 2011, half way through our planned three year project, we were celebrating our success having just been granted permission my ERMA to import 11 dung beetle species. What we didn't realise at the time was that enormous obstacles still stood in our way, and that the project would stretch on for another 3 years. Over this time we have brought a lot of information together and put it up on our website www.dungbeetle.org.nz

During the final four months of this project the DBRSG ran an extremely well received workshop in Warkworth, hosted by Dean and Marjorie Blythen, and attended by over 60 farmers. Presentations by Dr Shaun Forgie included:

- On-farm benefits from a NZ perspective with reference to two recent farm trials on surface runoff and nematode survival following dung beetle activity,
- Managing dung beetles including establishing populations on your farm, and reference to drenches as an integrated method of internal parasite control,
- Dung beetle availability and costs.



While not directly part of the SFF project, an enormous amount of time has gone into establishing a company that will continue the programme after the conclusion of the current SFF project. A new company has been established, Dung Beetle Innovations Ltd, that will continue the mass rearing, distribution, monitoring, and research of dung beetles. The company has a number of private investors who wish to see the fulfilment of the DBRSG's vision - To rebalance New Zealand's pastoral farming systems.

The Dung Beetle Release Strategy Group now looks back over the past 5 years with a sense of pride for what we have been able to achieve. The following timeline documents our journey.

Andrew Barber
Project Manager

John Pearce
Project Chairman



Dung Beetle Project Timeline

Ministry for Primary Industries
Manatū Ahu Matua



2009

Research into risks / costs / benefits of introducing dung beetles as part of industry stakeholder, public, and iwi consultation.

2010

Application by the Dung Beetle Release Strategy Group to release 11 species of dung beetles lodged with ERMA (now the EPA).

ERMA held a public hearing for debate about benefits and potential issues.

2011

ERMA gives approval for release.

The first three species are imported into containment.

Three species released from containment into enclosed rearing facilities.

2012

Two more species imported into containment.

Stakeholder Technical Advisory Group (TAG) established to advise DBRSG.

Trials conducted by Landcare Research.

2013

The Institute of Environmental Science and Research conducted a thorough human health risk assessment.

The TAG recommends that dung beetle releases can proceed.

The first release of 500 dung beetles occurs in September 2013 in Gore.

First North Island release in Wairarapa, October 2013.

2014

A total of 74 dung beetle releases have taken place across 7 regions from Northland to Southland.

350 + landowners are on a release priority list.

Dung Beetle Innovations Ltd is established, with the mission "To rebalance New Zealand's pastoral farming systems; through the sale, management and research of dung beetles".

ENVIRONMENTAL RISK MANAGEMENT AUTHORITY DECISION

2 February 2011

Application code:	ERMA200599
Application category:	Import for Release or Release from Containment any New Organism under section 14(1) of the Hazardous Substances and New Organisms (HSNO) Act 1996
Purpose:	To import and release up to 11 species of dung beetles to overcome the many adverse effects caused by annual dung in New Zealand pastures
Applicant:	Dung Beetle Strategy Release Group
Date application received:	13 September 2010
Date public submission period:	22 September - 4 November 2010
Hearing date:	8 December 2010
Consideration date:	8 December 2010
Considered by:	A Committee of the Authority ("the Committee")

1. Summary of decision

- 1.1.1 The role of the Environmental Risk Management Authority (the Authority) is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms.
- 1.1.2 The application was considered in accordance with the relevant provisions of the Hazardous Substances and New Organisms Act 1996 (the Act) and the HSNO (Methodology) Order 1998 (the Methodology). Unless otherwise specified, references to sections in this decision refer to sections of the Act, and references to clauses refer to clauses of the Methodology.
- 1.1.3 The Committee was satisfied that the organisms met the minimum standards set out in section 36.
- 1.1.4 On taking into account all the effects of the organisms, the inseparable organisms and the matters in section 37, the Committee agreed under clause 26 that the positive effects outweighed the adverse effects of the organisms.
- 1.1.5 The Committee decided to approve the application in full, without controls.

