

LIFE ON THE LAND

MAKING MONEY FROM MANURE

Dr Bernard Doube believes dung beetles have the potential to significantly increase agricultural production in the Hills.

Attention all farmers! Do you want to increase your pasture production by 30% without lifting a finger?

Then what about also using less fertiliser and at the same time improving your soil structure? It's so easy ... and all it takes is one easy payment. No, this is not an advertisement for a dodgy product "as seen on TV".

It's an introduction to dung beetles.

These South African and southern European imports are being increasingly accepted by farmers as a valuable tool to lift the productivity and profitability of their grazing enterprises.

Long-term research has shown a significant increase in pasture growth following the introduction of the beetles, according to Bridgewater dung beetle expert Dr Bernard Doube. With the ability to bury a cow pat and replace it with soil from 40-60cm below the surface, dung beetles are rapidly become a farmer's friend.

The work of the beetles not only removes the pile of dung (which can remain for months) allowing pasture to grow in that spot, but it also brings fresh soil to the surface, aerates the ground and significantly increases nutrient availability.

The resulting 'cleaning' of paddocks improves the quality of water runoff and can mean farmers need not apply as much fertiliser.

Dr Doube, who for 30 years was the principal research scientist with the CSIRO, says the \$700 initial outlay for a self-replacing colony of 1000 winter active beetles, or up to 5000 of three summer active species, will allow farmers to 'clean up' after about 50 cattle.

He said once the colony had been firmly established (2-3 years) landholders would notice almost all the dung being buried. The introduction of more colonies would speed up the process.

"We've been doing field studies on a property near Meadows at which we introduced a beetles nine

DUNG BEETLES IN ACTION

A fresh pile of dung in the shape of Australia, right, has a handful of dung beetles added to it. The same pile two weeks later. Note the yellow clay soil brought to the surface from a depth to 40-60cm as the beetles buried the dung.



years ago and the results for this year show a 30% pasture growth advantage," he said.

"In some circumstances the advantages can be greater."

The beetles use the fresh dung as part of their reproductive cycle and will fly at night to follow the cattle – even if they are shifted more than a kilometre away.

Dr Doube, who runs Dung Beetles Solutions Australia – one of only about three similar companies in the nation – says it is not only graziers which can benefit. He is currently doing trials with the grape and cherry industries.

The preliminary grape results show the introduction of both dung and beetles can drought proof vineyards and there are early indications that productivity can be increased.

Dr Doube has also developed an education kit being trialled in school vegetable gardens to teach students biological sustainable agriculture.