# THE NORTHERN TABLELANDS DUNG BEETLE EXPRESS

NEWSLETTER

WINTER 2004

## THAT'S BLACK GOLD, TEXAS T ....

Well Toowoomba T, well no T at all really I just have a thing about the Beverley Hillbillies. In my defense though it did feel like we struck gold when we harvested 6,638 *Onitis caffer* near Toowoomba on our first attempt. Two of us went to the site expecting to come away with a thousand or so beetles. The grand total at the end of the harvesting season was 15,169 beetles (but who's counting). Previous attempts by other projects yielded between 800 and 3,000 beetles.

We are uncertain as to the reason for this windfall but suspect it may be due to construction work and the subsequent de-stocking which led to a decrease in available habitat. Whatever the cause, the winners have been the recipients of colonies of these beetles. Noted beetle expert, John Feehan OAM from Soilcam has described the result as "the most significant environmental contribution in recent years". High praise indeed.

The project would not normally take this many beetles from a single site, however, urban sprawl is taking its toll and the site will likely be fully developed for housing in the next few years. Better the beetles are relocated than that they are sprayed to death by over zealous gardeners mistaking them for lawn scarabs!

The beetles have since been released at sites as far away as Kingaroy (a gesture of thanks to the QLD Project who allowed us to harvest on their site) down to Quirindi (a colony sold to recover some costs associated with the harvests). In all 18 colonies were released. We thank the property owners for allowing us to trap on their land.

*O. caffer* was released in the Toowoomba area some 20 years ago and has spread rather slowly. This is likely due to the fact that they have a gestation period of 11 months and so only one generation is produced each year.

This species has several very special attributes which will make them useful additions to our existing beetle populations. *O. caffer* has an activity period from the end of March through to mid winter, buries dung an incredible one metre into the soil and has a pad buried in 12 hours or so.

The logical assumption would be that their presence would impact negatively on other species, however, this doesn't seem to be the case as we recovered several other species while trapping. *O. caffer* has a very short flight period just on dusk and this likely allows other species to claim pads later in the night or during the day.

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**Thanks and praise are due to the harvest team so here we go. Thanks to Jane Boyd who shrugged off her training and quickly realised that sticking pins in beetles after posing them in unusual ways was not required on this job. To Vic Johnston (Chairman) who drove the team to new excesses (scotch and lots of it) particularly after his departure saw the reduced team trying to pick up the "one more trap or ten" that he had insisted on setting the day before. Also to Brenda Shepherd — you earnt your wings especially when your other team mates came down with the dreaded stomach flu — not a pretty sight!**

**Big thanks to the Project Officer (me) for ..... well, everything really. Locating cheap accommodation and meals in a lovely rural setting (complete with mice, a shower scene right out of Psycho and a cook who resembled Norman Bates), insisting that trowelling for beetles was a sure-fire cure for stomach flu and generally being a tolerant team leader. It is regrettable that this year's team has taken its lead from last years and decided to become unavailable—they tell me this situation is permanent.**

**The project is still looking for harvest sites for next year. We need access to at least 200 litres of fresh dung, an accessible site and a guarantee that no harmful parasiticides have been used in the months preceding the harvest.**

**Our current site's owners are happy to let us harvest so that others can enjoy the benefits of dung beetles for a longer period. We can, however, offer to provide a colony of beetle which you don't have in exchange for harvesting on your property. If you can help or would like further details please contact the project officer.**

**The project officer, in conjunction with the Northern New England Rural Lands Protection Board, is currently compiling a register of people and organisations who are interested in purchasing dung beetle colonies. Again, if you or your group are interested contact the project officer or the administrative staff at the board office.**

## BUT SERIOUSLY FOLKS

**The release of the 18 *Onitis caffer* colonies is very good news but it will require that those in areas where the beetles were released give a bit more thought to parasiticide use.**

**The usual recommendation is that parasiticide use should be avoided during periods of peak beetle activity. This is generally between mid spring and autumn. *O. caffer* becomes active in mid to late autumn and works until mid winter. Now, before you throw up your hands and decided it's all too hard, there are some pretty easy solutions.**

**Firstly, ascertain whether your livestock really need treatment, many potential problem parasites can be fought off with extra nutrition. The need to treat for worms can be visually assessed or you can use faecal egg counts. If you decide there is a need to treat consider using products which do not have an impact on dung beetles (excellent information on this is available in a leaflet entitled "Consider your Dung Beetles When using Parasiticides" - get one from Agforce (QLD) or the Project Officer). If you have no option but to use a product which may impact negatively on the beetle population there are some precautions you can take.**

**Do you need to do the whole herd? If not, try and move the treated cattle to an area away from the beetle release site. The method of administration may lessen the detrimental effects of some chemicals ie generally ear tags allow a lower dose of chemical to be absorbed than dips.**

## WHERE'S THE GONG, RED? Or please don't give up your day job!

**In the last edition we called for all budding scribes to send in their limericks and we should have known better! While we don't claim to be experts on what constitutes a good limerick we do know a bad one when we see it. Blatant attempts to win by flattering the Project Officer have failed parlously (money works better). Blackmail has also not swayed our judges (one judge would like a copy of THAT photo for her mum). It is probably timely to remind some readers that this is a family newsletter - very rude words, funny as they may be, can't be published.**

**However, most limericks received didn't fit into the above categories they were merely awful. We do thank you for submitting them - perhaps next time you might like to read the entries. We have your addresses and will call on you shortly.**

**The winning entry from Susan Johnstone gave the judges the most laughs (I think this was only due to the rude word that was deemed to be not too rude, but I'm not the judge). While I doubt that any publisher will be beating their way to your door anytime soon you have won a scratch lottery ticket and, as promised, publication in this newsletter.**

*I once knew of a creature from Ballandean*
*Who was the fussiest dung beetle we'd ever seen*
*'cos he got in a flap*
*Said, "Enough of this crap! -*
*From now on, I'm eating lettuce and mung beans!"*

**Consolation pens are on their way to Eleanor Passmore and Judith Jurgensen whose efforts were actually pretty good. Brenda Shepherd's limerick, which kick started the whole competition, earns her the privilege of judging any future competitions.**

## FOREIGN AFFAIRS

**While it is widely acknowledged that Australia needs more introduced dung beetles to fill gaps in activity not much hope has been held that this would eventuate. Well, due to the persistence of our Chairman, Vic Johnston, the possibility is a little bit closer.**

**A meeting was held in Sydney recently to discuss the need for further introductions and ways in which this might be achieved. The feeling of the meeting was that while it won't happen overnight, it is achievable.**

**The meeting was hosted by Landcare Australia Limited with attendees being Brian Scarsbrick and Jenny Quealy (Landcare), John Feehan (Soilcam), Dr. Jane Wright and Dr. Keith Wardhaugh (CSIRO), Dr. Penny Edwards (QLD Dung Beetle Project) Vic Johnston and Pam Wilson (Northern Tablelands Dung Beetle Express).**

**Anyone got a spare million or two? It really is project worth considering.**

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## OUT AND ABOUT WITH US

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| 17th - 19th June | See us at the Primex Field Days |
| 20th June | Information Day at Ewingar Hall |

**With the winter slow-down upon us field days are on hold until next Spring. Why not plan ahead and book your day for next season? Or perhaps your group might prefer an information session? If so, contact the Project Officer now.**

## GOODNESS, GRACIOUS – GREAT BALLS OF DUNG!

Did you know that every hour in Australia over 12 million dung pads are produced. This dung covers a whopping 20,000 square kilometers of grazing land. And to think all this started from the introduction of five cows and two bulls in 1788. (Kruszelnicki undated).

The first of Australia's introduced dung beetle species were released in 1967, so it's no wonder that at the moment they are still playing "catch up" in many areas.

When dung pads are buried, organic matter and nutrients are returned to the soil. A study by Yokoyama (et al 1991) showed that dung beetle activity frees organic Nitrogen through a process known as mineralisation making it available to plants and microorganisms. Dung beetles also make Carbon available to microrganisms as the fibrous part of the dung is buried in dung beetle tunnels and the anaerobic conditions increase decomposition. This is extremely beneficial to the overall health of the soil.

Our dung beetle population is in its fledging stage and we need to be very vigilant in order to assist their spread and establishment. We can't control climatic conditions such as drought but we can reduce predators such as feral pigs and foxes and we can be selective with chemical use.