

"Do it with Dung"

FROM THE MOUNTAINS
TO THE MURRAY

NEWSLETTER

Issue 4: June/July 2009

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Bubas bison releases

In the past six weeks over 100,000 winter-active *Bubas bison* beetles have been released across the North East Catchment and Corowa shire. Releases have focused on properties with little or no dung beetle activity.

These areas have included:

- Benambra
- Berrigama
- Bruarong
- Bullioh
- Cheshunt
- Corowa area (NSW)
- Corryong
- Cudgewa
- Eskdale
- Granya
- Greta
- Hansonville
- King Valley
- Mitta Mitta
- Moyhu
- Mudgegonga
- Mulwala (NSW)
- Omeo area
- Rennie (NSW)
- Rosewhite
- Running Creek
- Savernake (NSW)
- Smoko
- Springhurst
- Talgarno
- Tallangatta South
- Tawonga
- Thuloglong
- Tooma
- Yackandandah
- Wahgunyah
- Whitfield



5/6/09

Delwyn & Andrew Clifton releasing a colony of *Bubas bison* on their property near Corowa

A very big thank-you to everyone that helped distribute the beetles. It was a fantastic effort!

Trapping results indicate high levels of *Bubas bison* activity on some properties in the region:

| | | | | |
|----------|------|--------------------|------|---------|
| Site 2 | 20/5 | Corowa area | 39 | beetles |
| Site 13: | 26/5 | Byawatha | 197 | |
| Site 17 | 24/5 | Springhurst area | 162 | |
| Site 19 | 13/5 | Chiltern Valley | 144 | |
| Site 42 | 1/5 | Tallangatta Valley | ~350 | |
| Site 49 | 5/5 | Wooragee | 25 | |
| Site 65 | 8/5 | Oxley | 45 | |
| Site 71 | 27/5 | Meadow Ck | 126 | |
| Site 72 | 27/5 | Meadow Ck | 135 | |
| Site 85 | 11/5 | Bowmans Forest | 45 | |
| Site 97 | 14/5 | Dederang | 33 | |

Bubas bison: Major and minor males

When examining *Bubas bison* beetles, a number of monitors have noticed that some beetles have very small horns on their heads. These are examples of "minor" males. Minor males do not have the distinctive horn on the mid-section. Females have no horns on their head or mid-section.



Left: *Bubas bison* major male (large horns on head)
Centre: *Bubas bison* minor male (small horns on head)
Right: *Bubas bison* female (no horns)

Do dung beetles grow?

There is often considerable size variation between beetles of the same species. It is tempting to conclude that smaller specimens are young or "baby" beetles. This is not the case, as once the larva pupates into the beetle stage there is no further change to size or shape. They do not grow. Newly emerged beetles are however immature and undergo a maturation and feeding period before commencing breeding.

Three species found working in sheep dung

One of the project aims is to gain a better understanding of dung beetle activity in sheep dung. A field inspection of a sheep property in early June revealed three different species operating.



The most abundant species was a small (5-7mm) black native beetle. Soil casts were evident around most dung pads. The other species found were: *Bubas bison* and *Onthophagus pentacanthus* (native).

Pictured: Dung beetle activity in sheep dung - Hollowed out dung pellet and soil casts - June 2009

Onitis caffer tent trials

Ten tents have been set up across the region to trial the species *Onitis caffer* (winter-rainfall strain). This species is active from autumn to mid/early winter and it is thought that it may become active again in spring. Given that there is very little dung beetle activity in spring, this species may assist in filling the "Spring Gap".

O. caffer builds brood "sausages" containing between one and four eggs. Females can lay up to two eggs per day. These are buried up to one metre below the dung pad. It takes about 10 to 12 months for the egg to develop into an adult, although in some cases larval development is slowed and can last two or even three years.



Inside one of the *Onitis caffer* tents: 24/6/09.

Beetles are fed dung and their activity period monitored

It is hoped that this species will be active in spring.

Beetle information Source: DBLF, 2008, *Dung Beetle Dictionary*
Tyndale-Biscoe M, 2001, *Common Dung Beetles of SE Australia*

eFarmer Update

Internet Explorer 8 issues:

There have been some issues between the new version of Internet Explorer (ver.8) and eFarmer. To remedy the problem:

- Go to the **Tools** menu in Internet Explorer
- Click on **Compatibility View Settings**
- Type in the eFarmer address:
<http://efarmer.spatialvision.com.au>
- Click the **Add** button

eFarmer contact list:

Suzanne is compiling an eFarmer contact list. If you would like to be included on the list, could you please give Suzanne your details. This will enable you to stay up to date with all the latest eFarmer developments.

Refresher sessions & Program help

Need some extra help with learning eFarmer? Refresher sessions can be arranged.

Suzanne is always more than happy to help with any questions or difficulties you may have using the program. Suzanne's contact details are:

Phone: 02 6024 9104

Mobile: 0409 225 605

Email: suzanne.johnstone@necma.vic.gov.au

Monitoring Results – keep them coming!

Thank-you to all of the monitors who have sent in sample specimens and monitoring results. Though it may be disappointing to have empty traps, it is very important to keep monitoring and to send in your "nil" results as these results help identify areas in need of beetles. For those that have *B.bison*, your results provide an indication of species abundance and activity period.

At the end of the November a project report will be compiled and distributed to all monitors. The report will include maps with:

- monitoring sites
- monitoring site results by species
- 2009 release sites by species
- previous release sites by species
- species seasonal activity graphs

Your results will assist in creating a comprehensive picture of dung beetle activity across the region.

Your observations are also important. The traps are not a perfect measure of dung beetle activity. A number of monitors have had empty traps but have observed dung beetle activity in the field.

Look for soil casts around dung pads and holes under dung pads. Are there significant difference in hole sizes? If so, this would indicate more than one species is operating. Are you able to capture a specimen? Your observations are important.

If you need help with any aspect of the monitoring, please contact Belinda on 02 60275294 or by email: abanas@bigpond.com

Upcoming monitoring weeks

Weeks commencing:

Sunday 28th June

Sunday 12th July

Sunday 26th July

Monitoring weeks commence on the second and fourth Sunday of each month.

Reminder: Steering Committee Meeting

The next meeting will be held on: **Friday 3rd July**
10.00am – 11.30am (followed by lunch)
North East CMA Office, Footmark Court Wodonga
For catering purposes could you please RSVP to Belinda by Wednesday 1st July



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