

# Brunswick Valley Landcare, Byron Creek Catchment Landcare and SoilCare present

# Soil Biology: 'Managing Biological Farming Systems' Dung beetles, earthworms and more! with Dr Bernard Doube



WHEN: Tuesday, 23 October (see workshop schedule for times)

WHERE: Morning session - RSL Hall, Station Street, Bangalow and farm walk

Afternoon session -TAFE Wollongbar, Bruxner Hwy and Sneaths Rd and farm walk

#### **Bookings Required**

SoilCare: Bonnie... Phone - 02 6628 1788 Email - <u>info@soilcare.org</u>
Brunswick Valley Landcare: Wendy... 02 6626 7028 (Wed & Thurs) Email:

Wendy.Gibney@byron.nsw.gov.au

You can book for the full day, morning only or afternoon only. If you book by email please indicate your preference. If you book afternoon only please let us know if you will arrive in time for lunch.



**Dr Bernard Doube** was a Principal Research Scientist with CSIRO for 29 years and has had extensive research experience with dung beetles in South Africa and Australia. Bernard is also an international expert on earthworms and the biological basis of soil health and co-edited the books "Soil Biota: Management in Sustainable Farming Systems" and "Biological Indicators of Soil Health".

Bernard is now Principal of Dung Beetle Solutions Australia, which collaborates with water authorities, federal agencies, universities and other organisations to research the influence of dung beetles on water quality, grazing systems and carbon sequestration in southern Australia.



Bernard releasing dung beetles

A series of demonstration plots are being set up on the farm walk sites that will show the impact of deep tunneling dung beetles on soil properties. We'll measure soil compaction, water infiltration and excavate the site to see where the beetles have travelled. The Wollongbar site will be an orchard.



Adult dung beetles emerging from capsules

This workshop is made possible by funding provided by a foundation through Landcare Australia Limited







## 'Soil Biology: Managing Biological Farming Systems'

## **Workshop Schedule**

8.30 AM - Coffee/tea RSL Hall, Station Street, Bangalow

9.00 AM - Presentation: Dung beetles in pastures

- BBC Film Unit 'Naomi's nightmares" dung beetles!! yuk!!
- What limits plant growth? How dung beetles and earthworms can help
- Environmental and production benefits
- Establishment and Monitoring
- New species for your farm and identifying what you have now

10.20 AM Farm walk on biological farming beef grazing property

12.30 PM Lunch – TAFE Wollongbar, Sneaths Rd., Wollongbar

1.10 PM – Presentation: Functional interactions between soil biology, organic matter and plants

- Soil biology and soil structure
- Soil biology and water relations
- Soil biology and soil carbon
- Soil biology and nutrient cycling
- Indicators of soil health
- Introducing dung beetles in horticulture vineyards

3.00 PM - Farm Walk

Maps:

RSL Bangalow <a href="http://www.soilcare.org/RSL%20Bangalow.pdf">http://www.soilcare.org/RSL%20Bangalow.pdf</a>

TAFE Wollongbar http://northcoast.tafensw.edu.au/campuses/Pages/WollongbarCampusLocationMap.aspx

**More about Bernard...** Bernard is also a farmer in the Adelaide Hills where he tends his vineyard. Bernard has found success in restructuring vineyard soils with deep burrowing dung beetles.

You Tube video: **Dung Beetles for Agriculture, the Environment and Addressing Global Warming!** <a href="http://www.youtube.com/watch?v=mqU5ULMvlaE&feature=player\_detailpage">http://www.youtube.com/watch?v=mqU5ULMvlaE&feature=player\_detailpage</a>

Dung Beetle Solutions Australia supplies starter colonies of dung beetles to producers.

Website <a href="http://www.dungbeetlesolutions.com.au/">http://www.dungbeetlesolutions.com.au/</a>
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