

# Aporrectodea longa Earthworm Project

## NEWSLETTER

Project website:

<http://northeast.landcarevic.net.au/kiewa>

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### Earthworm Identification Workshops

Workshops were held at Oxley, Kergunyah, Bullioh and Greta, with over 50 people attending.



**Earthworm Identification Workshop at Oxley**

Participants had an opportunity to identify a range of earthworm species commonly found in our area. The take-home message: "Know what species you have, and at what depth they operate in the soil profile". The ideal situation is to have a range of species that operate at different depths in the soil. The importance of earthworm friendly management practices was also stressed.



**Earthworm Identification workshop at Kergunyah**

As part of the project, a simple four-page earthworm identification guide was developed. If you were unable to attend the workshop, you can obtain a copy of the ID guide at our Project website. <http://northeast.landcarevic.net.au/kiewa>

Click on "Projects", "Earthworm Project", "Earthworm Resources" "Earthworm ID guide" Additional photos from the Oxley and Kergunyah workshops are also available in the "Photo album".

Project Officer: Belinda Pearce  
Phone: 02 6027 5294  
email: [opundo1@optusnet.com.au](mailto:opundo1@optusnet.com.au)

### Earthworm Project in the News.

Our project has received considerable media attention in the past couple of months: You can catch up with news items at:

Prime 7 News  
"Giant wrigglers"



<http://au.yahoo.com/v1/video/-/watch/26413849/giant-wrigglers/>

Weekly Times:

"Harnessing worm power"



[http://www.weeklytimesnow.com.au/article/2011/08/24/371641\\_on-farm.html](http://www.weeklytimesnow.com.au/article/2011/08/24/371641_on-farm.html)

Articles have also appeared in the: *Corryong Courier*, and the *Grassland Society of Southern Australia* magazine

These articles are available on the project webpage. Click on "Media Coverage".

### Sampling of earthworm nursery sites

In September this year, with the assistance of Dr Bernard Doube, we sampled seven of the nursery sites. At each site, three sample pits were dug (30 x 30cm wide), and soil was extracted at 10cm intervals to a depth of 40cm. This resulted in 12 sample results for each site.



**Taking samples at Running Ck.**

**Brian Lane on the shovel**



**Bernard Doube at Tawonga with sample containers. Twelve samples (from three pits) were assessed at each site.**

The next step was to sort through each sample, and extract worms and cocoons. This was a big task, which was helped along by volunteers.



**Volunteers sort through soil samples at Tallangatta South extracting earthworms and cocoons.**



**All hands on deck at Bruarong as we search through each sample.**



**Harry & Sue Ryder hard at work sorting through soil samples at Tawonga.**

The worms and cocoons from each sample were counted, weighed and identified. This important task went to Bernard Doube.



**Bernard counts, weighs and identifies the worms & cocoons found in each sample**

Soil pH, texture and colour was also assessed at each site. (Top 10cm layer).



**Chips & Bernard working through samples at Lucyvale**

## And the results....

Not what we had hoped for! None of the nursery sites were teeming with *Aporrectodea longa*. Each site had substantial differences in earthworm species and abundance, which is of considerable interest, given that each site followed the same procedure. Seven introduced species were found. The most abundant species was the Red worm (*L. rubellus*), 174 adults and 1848 juveniles, followed by the orange-saddle worm (*M.dubius*), 60 adults and 107 juveniles. We found 38 *A.longa* adults and 64 juveniles at five sites. Two sites didn't have any of our target species.

### Number of *A.longa* found during sub-sampling.

Site	Area	Adults	Juveniles
1	Oxley	4	12
2	Luycvale	9	6
3	Tallangatta Sth	7	10
4	Bruarong	0	0
5	Glen Ck	0	0
6	Tawonga	1	1
7	Kergunyah	17	35
<b>Total</b>		<b>38</b>	<b>64</b>

## And now for the good news,

Sampling undertaken at Kergunyah and Tawonga in the paddocks surrounding the nursery sites has found large numbers of *A.longa*, with 12 adult worms found under a dung pad, 37 metres from the nursery site. One adult and one juvenile were also found an amazing 142 metres from the site. This is quite an extraordinary result, and goes against conventional wisdom relating to how far earthworms can move in one year. It is possible, that given the very wet conditions, the worms may have gone overland. This however is pure speculation. It is very pleasing to know that they have survived and are breeding successfully. It is just not where we wanted them to! Full details of sampling results are on the project website.

## Where to from here?

The project has come to an official end, but we are still keen to trial a number of other confined breeding methods (eg fabric bags in the soil), to enable harvesting and distribution to other Landholders. The potential of these worms is huge, so we are keen to keep trying. As the old adage goes, *if at first you don't succeed, try, try again!* In the meantime, we hope to monitor the movement of *A.longa* in the paddocks. This will also give us some worms to use for future trials. Stay tuned!

Thank-you to everyone for your support.

Bye for now, Belinda



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