

## **Brisbane Ranges Landcare Group**

# Newsletter

Chair: James Bufton 5284-1344

Treasurer: Chris Winfield 5369-4214

Secretary: Allan Bartholomew

5369-4197

Visit our new website for latest news: http://brlg.org.au

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Next meeting: Soil Erosion:
Speaker Richard (Zeke) Hartland
Thursday, 19th February, 2015 @ 1930h (7.30 p.m.)
Balliang Hall, Balliang-Bacchus Marsh Road





Studies suggest that 15% of the world is affected by soil degradation (excluding the polar regions): 56% of this degradation is due to soil erosion. Some of the most vulnerable soils in Victoria are in the BRLG area. We are delighted to present a talk by one of Victoria's most experienced soil conservationists who has been actively working in our area for many years. Zeke is an expert in soil conservation. He worked for the original Victorian Government Soil Conservation Authority from 1969 until its demise in the mid 1980s, but continued the same line of work through various name changes at the State Departments of Conservation until 1995. Zeke has a whole career's worth of experience in the practical management of soils!

Zeke continues his interest in soils, especially at White Elephant Reserve in the Rowsley Valley, which has, he says, "the most erodible soils in Victoria" as pictured above (right) near Parwan. Zeke is pictured above (left) with a group of students from Bacchus Marsh early in February while working at this site. Zeke comments: "Students from Bacchus Marsh Grammar come up every year. They check various factors that are associated with erosion: the water salinity, the depth to the water table, rainfall, soil types and structures. They learn about land management, especially erosion control and rehabilitation of eroded areas."

Zeke's talk will focus on the White Elephant Reserve in the Rowsley Valley. Erosion at this site is particularly severe with some gullies eroded to depths of 9-10 metres. Tunnels get up to two metres wide, but then generally cave in and become gullies.

Fixing erosion is not easy! The usual object of remediation is to slow the water flow: Halving the water flow can reduce erosion by up to 32 times! Revegetation and earthworks can help with this. Hear more from our expert at our next meeting!

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#### Little River Project finalizing

Good news: thanks to our members bargaining skills and hard work, not all available funds have been expended. We have a substantial balance remaining which we are keen to distribute to projects with meet the project aims. Remember this funding gives preference to new projects, especially those not eligible for funding from other sources. Projects may cover, for example, fencing of remnant or new vegetation, reveg. or small scale soil erosion remediation.

## **Anzac Day community event**

Plans are afoot for a community activity including a dawn commemoration, followed by community get together with a special family focus. Keep 25th April free!

#### **Bunny Baiters**

Michelle Kerr, Peter Anning, James Bufton, Chris Winfield and Neil Day joined in the annual Maude LG baiting program. Each of these members is eligible for up to \$100 of support from the BRLG vermin control subsidy. The group organizes the delivery of poisoned carrots, which require no special licence or permit to use. Why not join next year's campaign or, if your bunnies are breeding now, buy bait direct for your farm supplier. Also there are other forms of control you can discuss with Landcare.

## Some background on Soil Erosion

Erosion is a big issue. It affects a large variety of places such as coastal areas, and farms. In fact, studies suggest that around 15% of the world's non-polar regions are affected by land degradation, and soil erosion is estimated to hold at least 56% of the blame.

#### **Sheet Erosion**



Sheet erosion occurs when a flat sheet of water flows smoothly over a surface, removing a large but thin layer of top soil which can sometimes be so thin that it can go unnoticed. There are some strategies to combat this form of erosion, such as planting vegetation to areas at risk, such as slopes, to help enrich the soil and increase the amount of water it can absorb.

#### **Rill Erosion**



This is often seen after Sheet Erosion, and occurs where rapidly flowing streams of water begin to concentrate and form channels in the ground. The channels can often reach 30 centimetres deep and are more commonly found on farms. If left untreated, Rill Erosion can eventually turn into Gully Erosion. A few strategies have been set in motion to combat Rill Erosion, such as: planting vegetation to help enrich the soil, and to encourage the absorption of greater amounts of water.

## **Gully Erosion**



Gully erosion can often start of as Rill Erosion, which over time deepens as more and more water pushes away topsoil. It can start from small things such as rabbit burrows or potholes that are opened up and eroded over time. Areas affected by the erosion can cause problems to the environment around them, such as rivers, which become muddied by the large

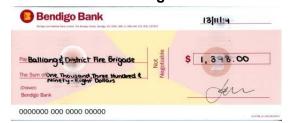
This newsletter was produced with the generous financial support of the Port Phillip and Westernport Catchment Management Authority amounts of soil being deposited from the gullies. By planting 'thirsty' crops to soak up excess water in the soil, the development of Gully erosion can be slowed down and even stopped in some areas. Building dams to hold or divert water and prevent it from flowing to the area is another way to help prevent Gully Erosion.

#### **Tunnel Erosion.**



Tunnel Erosion occurs when water flows under the soil's surface (e.g. around a dead tree and its roots, or through rabbit holes) and carves out an underground tunnel. These tunnels can sometimes be hard to spot as a thin layer of soil remains on the surface. These 'roofs' can easily collapse under the weight of livestock and farming machinery. When these cavities collapse, they can develop into potholes or gullies. Planting vegetation is a great way to absorb the excess water in the soil and prevent Tunnel Erosion from developing. In areas greatly affected by Tunnel Erosion sometimes earthworks are required to fill the holes with fresh soil. (source: http://soildegradation.weebly.com/

## **Donation from Bendigo Bank**



A wildfire can be defined as burning bush land always located on the join between

two maps several pages apart in the map book!! At least that is the excuse traditionally offered for delays in getting to incidents by our intrepid CFA volunteers. Well, from now on that particular issue is not going to be a problem thanks to the installation of two Hema satellite navigators with specialized off-road maps in both our local tankers. These units make it a lot easier to locate incidents and this means our community is better protected by our local brigade.

Andrew Prime, brigade secretary, praised the support offered from the Lara branch of the Bendigo Bank. "Damien Foster and Jade Oscar from the local Bendigo Bank have generously supported our brigade on several occasions. Their latest donation will improve efficiency and add greatly to safety. Not only will response times improve in unfamiliar areas, but detailed off-road mapping showing potential escape routes may be a life saver for firefighters in rough terrain such as the Brisbane ranges."

How about joining in with great community organizations like the Bendigo Bank and getting involved with the CFA? More volunteers are needed to help protect our precious bushland and valuable residential and farm property. To enquire about joining contact Andrew on 5369 461.

#### **Landcare Network updates**

BRLG participates in two networks that link and coordinate local landcare groups: Geelong Landcare Network and Moorabool Landcare Network. We are delighted that the Geelong facilitator, Elissa Ashton-Smith continues working three days per week, and Max Coster continues as facilitator for Moorabool. The Presidents of the networks are Anthony Dufty for Moorabool and Maxine Campbell for Geelong.

The facilitators play a major role in keeping our group up to speed on a huge range of Landcare matters. They play a major part in many of our meetings and are always available to help behind the scenes as well.

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