 **Landcare Broken Hill Inc**

***Greening the Hill Mk.2***

ABC Radio interview No.7 – 11 June 2019

**Bees, Flowers & Biodiversity**

Landcare’s Greening the Hill Mk.2 initiative is all about greening both **public places** – parks, reserves, the Regen Belt, naturestrips on streets etc – and **private places** – everyone’s own patch, their own gardens.

We intend to help people green their surrounds better.

We will introduce people to the best ways by which they can help Landcare Broken Hill and the custodian of our public places in this City – Broken Hill City Council – to assist in greening public places and at the same time they’ll pick up many tips for their own gardens.

I was looking at a Diggers Club magazine this week and reading about their **insect houses** and their **bee houses.** These are not the bee hive boxes that you see scattered around forested areas by professional apiarists, set up to collect honey, rather these are like miniature cubby houses to be erected in gardens, but not for the kids but for bees and insects. Made out of recycled materials, like cardboard cylinders packed together, or pine cones, dried plants and branches – all assembled to create a dry and attractive place for insects to make their homes.

Why should we care about bees and other insects? **POLLINATION** Bees and many other insects are called **pollinators.**

Without pollinators humankind would starve, because so much of our food is dependent on pollination in order to produce fruit, or seeds, and thereby reproduce. For any plant that flowers, pollinating insects play a crucial/vital role.

1/3 of the world’s food production by calories and 2/3 of the world’s food diversity are dependent on pollinators like bees

Globally honey bees and other pollinators are in rapid decline.

A 2017 German report on a 27 year study found that in 63 locations flying insects had decreased by 76% and in the middle of summer when it was most severe, decline was 82%

In the same year, 2017, in the USA a systematic study found in North America that 1,437 species of native bees (out of 4,337) were declining and about 25% were at risk of extinction.

There’s been no nationwide Australian study of the status of our bees. The Australian Native Bee Book, by T.Heard (2016) tells us Australia has 1,660 species of bees.

The reasons for this decline worldwide include pollutants, pesticides, parasites, viruses, diseases and malnutrition. Many of these causes are thought to be connected to climate change.

Australia is lucky – hugely fortunate – not to have any cases of **CCD – Colony Collapse Disorder** – and no reported occurrence of the deadly **VARROA destructor mite** that spreads viruses between bees. If our biosecurity safeguards failed, it would be a disaster for Australian bees and our national food production

ABC Rural report 29 June 2018:

***The potentially devastating varroa mite, which could wipe out the Australian beekeeping industry, has been detected in Victoria.***

*A bee colony infested with the varroa mite was detected on Wednesday at the Port of Melbourne on a ship from the United States.*

*A colony was found in a wooden crate and tests revealed some bees were infested with varroa mite,*

This bee colony was destroyed on board the ship by Australian Biosecurity.

Gross value of Australian honey bee industry is $101 million pa but far more significant, economic value of Australian insect pollinators is estimated to be about **$28.4 billion**. This figure is the economic value that pollinators contribute to 53 agricultural crops in Australia – like almonds, apples, avocados, berries and vegetables.

True economic value is far more – as no study yet of the economic value of the role pollinators play in **grazing livestock industries**, such as through pollination of clovers.

Then there is the **environmental value of pollination**. When our droughts are really severe, there are massively less flowering trees and plants. Think of last Spring around Broken Hill – it was awful to see so few flowering plants everywhere. It then becomes a viscous cycle: less flowering plants = less bees and other pollinators = less pollination = less fertile seed = less reproduction = degrading vegetation cover = worsening arid conditions

The German study concluded that “***We need to do less of the things that we know have a negative impact, such as the use of pesticides, and prevent the disappearance of farmland full of flowers***”

Back to Broken Hill and Landcare’s ***Greening the Hill Mk.2 -*** the clear message is to take steps to attract bees and other pollinators into gardens and into the bush. When we grow a vegetable garden, we should plant in the same garden plenty of flowering plants that attract bees. The most clever gardeners get the balance right, ensuring that their gardens provide incentives for bees to visit.

And for those who want to keep bees, how about building or buying an insect house or a bee house, to provide these creatures a place to stay. Commercial farmers who are dependent on bees know the sense of this approach – only yesterday I was speaking to an almond farmer who confirmed they have bee hives throughout the almond orchard, explaining it was a necessity.

So for all of us interested in biodiversity, who want to strengthen the resilience of our bush, we must look kindly on flowering natives and encourage bees and other pollinating insects to stay around.

I’m indebted to the **Wheen Bee Foundation** for much of my information today. This Foundation is a not-for-profit organisation that promotes awareness of the importance of bees for food security, and raises funds for research that addresses the national and global threats to bees. [www.wheenbeefoundation.org.au](http://www.wheenbeefoundation.org.au)

 **Next public meeting to discuss *GREENING THE HILL MK.2* projects**

**Centre for Community, 200 Beryl Street, 7.00pm Thursday 27 June**

Want to express interest? Want to become a Landcare Broken Hill member? **LandcareBrokenHill@gmail.com**