

Lockyer Valley Regional Council Community Environmental Grant Program

Overview of completed projects 2013-2014

The Lockyer Valley Regional Council Community Environmental Grant Program 2013-2014

The Lockyer Valley Regional Council's **Community Environmental Grant Program for 2013-2014** aimed to support a healthy, sustainable and integrated natural environment within the Lockyer Valley through cooperative community projects.

The Community Environmental Grants Program provides schools and community groups with funding to undertake environmental projects involving the management, conservation and education about our natural environment.

During 2013-2014 financial year three projects were supported through council's Community Environmental Grant program.

"Introduction to permaculture"

Overview

This cooperative community project aimed to extend knowledge on improving sustainability and resilience of landholders within the Western Lockyer community.

The two day *Introduction to permaculture* course was facilitated by Tom Kendall. Tom has practical experience as a primary producer and is a permaculture trainer based on the Sunshine Coast. Over 55 people attended the course travelling from across the Lockyer Valley and further afield.

Topics covered during the course included:

- The ethics and philosophy of permaculture;
- How to effectively use biological resources in a permaculture system through efficient planning;
- Composting and effective soil management; and
- Energy cycling to achieve closed cycle systems.



Chook tractor in food forest, Tom Kendall



Food forest with Citrus, Bananas and Pumpkins, Tom Kendall

The Citizens of Lockyer and the Stockyard Community Hall association supported the project through in-kind contributions and community support.

Outcomes

Outcomes of the CEG project, *Introduction to permaculture*, have included the formation of a Lockyer Valley Permaculture group which currently has over 40 financial members and 90 on the circulating email list. The Lockyer Valley Permaculture Group has had regular meetings since December 2013. This group has established a Permaculture Lockyer Valley Facebook page which can be accessed via <https://www.facebook.com/groups/permaculturelockyervalley>



Tom Kendall sharing his experience with workshop participants

“Survey of Fungi in the Western Lockyer”

Overview

This cooperative community environmental education project aimed to improve the knowledge of fungi in the Western Lockyer area.

A professional fungi survey was undertaken by the Queensland Mycological Society, led by Dr Frances Guard and Vanessa Ryan. The survey was carried out over three days across four different vegetation communities. Local community members joined with the Queensland Mycological Society in undertaking some of the survey work.



Members of the QMS and Lockyer Valley residents undertake the fungi survey



QMS members and Lockyer Valley participants identifying collected fungi

The study of fungi is known as Mycology. While originally thought to be plants, the fungi are in a class of their own, sharing more characters with the animal kingdom than with plants. Fungi do not have chlorophyll, with which to produce their own energy, as do plants. In addition, their cell walls contain chitin, not cellulose. The 'mushroom' is actually the fruiting body of the fungus. The main part of the fungus is made up of a network of threads or hyphae that remain hidden in the soil or wood on which the mushroom appears.

Fungi play an important role in ecosystems. They decompose organic matter, breaking down leaves, logs and other organic material and recycling nutrients, making them available for other species. Many fungi are symbiotic with plants, the hyphae forming a structure with plant roots, exchanging nutrients to their mutual benefit. Many species of fungi have not been named or described and much remains to be discovered about their individual roles.

Results

Over sixty species of fungi were found during the survey period. These fungi species were found in various vegetation communities and landscapes, those being:

- pasture and open eucalypt forest community where 11 species were found
- rainforest gully remnant where 27 species were found
- Brigalow Belah vegetation community where 16 species were found
- dry vine rainforest vegetation community where 8 species were found

A formal presentation of the survey results was presented to the Lockyer Valley community at a meeting held in May 2014 where over 40 people attended.



Leucoagaricus rubrotinctus, Frances Guard

Outcomes

Outcomes of the project included an innovative, research based, educational survey of fungi with significant finds including several species of fungi that have never been described or collected before. Most of these significant finds were discovered in the Brigalow Belah vegetation community. To find out more about the fungi that were found during the survey and their connection with our local environment please refer to the Queensland Mycological Society website <http://qldfungi.org.au/>.



Hymenopellis trichofera, Vanessa Ryan

A recent publication by the Queensland Mycological Society, 'Australian Subtropical Fungi' has been donated by the Queensland Mycological Society to the Lockyer Valley Regional Council Gatton Library.

"Survey of Invertebrate Fauna in the Western Lockyer"

Overview

This cooperative community project aimed to develop and extend knowledge of invertebrate faunal biodiversity in the Western Lockyer region.

This professional survey focused on invertebrates such as dragonflies, beetles, spiders and freshwater crustaceans and was undertaken over ten days, across four properties within different vegetation

communities. The survey was led by an experienced ecologist, with support from a highly respected entomologist.

Invertebrates, animals without backbones, form the base of the food chain and the health of a natural ecosystem depends on a healthy invertebrate community. Invertebrates contribute to the aeration and drainage of soils, soil enrichment and the recycling of plant and animal material.

Results

The cooperative educational survey found over 300 species of the targeted invertebrate groups. In addition to the numerous species of moths, butterflies and dragonflies that were found, six species of cicada were found with three species found on one property, the delightful spotted katydid, a red-fingered yabby and pea mussel were also identified.



Entomologist Wes Jenkins catching butterflies during the survey

A significant find was that of the Satin Azure butterfly, *Ogyris amaryllis*. With this butterfly not being seen for many years there were fears that the butterfly was locally extinct. This survey has facilitated the finding of this special butterfly and provides greater insight into which subspecies may be represented in this area of the Lockyer Valley. For more information about the importance of invertebrates and some of the invertebrates found during this survey please refer to the attached PDF document, 'additional educational information relating to the Invertebrate Survey of the Western Lockyer region', or visit the Butterfly and Other Invertebrates Club website <http://www.boic.org.au/>.

Outcomes

This CEG project begins to fill the gap in knowledge of invertebrates within the Lockyer Valley. Considering the short survey timeframes and difficult seasonal conditions, the 300 species identified indicate a depth of invertebrates yet to be discovered. The re-discovery of the Satin Azure Butterfly is major re-discovery for the Lockyer Valley.



Ogyris amaryllis, Satin Azure Butterfly,
photo by Wes Jenkins

The Citizens of the Lockyer, <https://www.facebook.com/LockyerCitizens>, compiled a final report for this project which can be accessed via the attached pdf document, 'Invertebrate survey final report by CotL May 2014'.