# Variety is the Spice of Life











Chloe Bisetto, Teneal Boyle, Will Polkinghorne, Callum Weppler, Jenny Cruse

Lake Wyangan Public School



#### Creative Catchment Kids

**Creative Catchment Kids** is an initiative of the Murray Darling Association and Wirraminna Environmental Education Centre. It aims to improve engagement between the Local Land Services and school students by providing opportunities for positive and authentic ventures that encourage students to develop creative solutions to agriculture and natural resource management issues.

#### Wirraminna Environmental Education Centre

The Wirraminna Environmental Education Centre is located in Burrumbuttock, north of Albury in southern NSW. Since 1995, the centre, which is adjacent to Burrumbuttock Public School, has provided opportunities for discovery and learning about the natural environment, the ecology of the local woodlands and the beauty of native plants. **www.wirraminna.org** 

#### Murray Darling Association

The Murray Darling Association has membership of over 100 Local Government councils in the Murray-Darling Basin, as well as community groups, businesses and individuals with an interest in ensuring that the Basin continues as a valuable asset for all Australians. Since 1950, the Association has initiated various school and community education programs on managing the Basin's land and water resources. www.mda.asn.au



Enviro-Stories is an innovative literacy education program that inspires learning about natural resource and catchment management issues. Developed by PeeKdesigns, this program provides students with an opportunity to publish their own stories that have been written for other kids to support learning about their local area. www.envirostories.com.au

## Variety is the Spice of Life

Authors: Chloe Bisetto, Teneal Boyle, Will Polkinghorne, Callum Weppler, Jenny Cruse Teacher: Alison Jackson

School: Lake Wyangan Public School

#### Local Land Heroes

In 2014, students involved in the *Creative Catchment Kids* program researched and wrote stories about 'Local Land Heroes' - people, businesses or industries who contribute to productive agriculture and healthy environments along the Murray and Murrumbidgee rivers. The program was generously funded by Murray Local Land Services and Riverina Local Land Services.

Local Land Heroes acknowledges the United Nations 2014 International Year of Family Farming. www.fao.org/family-farming-2014/en/

Local Land Heroes is part of Enviro-Stories, a PeeKdesigns education program.













Design by PeeKdesigns, www.peekdesigns.com.au

Copyright 2014 Murray Darling Association, www.mda.asn.au





## Super Bugs

The Insectary (the super bug farm), is owned by Rob and Judith Weppler. The Insectary is set in a huge native garden, in sunny Lake Wyangan. Here Rob and Judith grow bugs designed to fight diseases that destroy local crops. The family has been in Lake Wyangan for seven years developing and improving the business.





Integrated Pest Management, often referred to as IPM, is about creating plans to manage pest problems on farms.

**Step 1:** Grow the bad bugs. In this case the bad bugs are Scale. The Scale is grown in a warm environment.

**Step 2:** Introduce *Aphytis*, the super bug. They feed on the Scale and lay their eggs inside the Scale. This cycle stops when there is no more Scale on the crops.









Rob and Judith sell the super bugs in cups of ten thousand to the citrus farmers. *Aphytis* only eat Scale, they are eco-friendly and cannot hurt any other plants or animals. Rob spends a lot of time on farms, monitoring the super bugs and different pests. This means he advises farmers about what they need, telling them if they need to use pesticides or release more bugs.





## **Great Grapes**

John Bisetto is a second generation grape farmer, his dad came from Italy to Lake Wyangan after the Second World War. The Bisetto farm is 2.4km long and 200m wide. He has 60 rows of grapes, which include 6 different varieties. The most popular variety is sauvignon blanc.



Farmers need to be able to do lots of jobs; a mathematician, accountant, mechanic and a people manager are just a few. John says that growing grapes is an all year job. Even in winter when the plants are asleep they still need looking after. He gives them water and fertiliser so that in the spring the vines will have lots of flowers, "because every flower is a grape".





John uses a hand logger to record the nutrients and moisture in the soil. He would like to install solar panels and automated loggers so that he can record soil conditions twenty-four hours a day on his home computer. He is beginning to install GPS tracking across the farm so that eventually he will be able to automate his machinery.





## Terrific Turf

Robert Valeri runs Lake Wyangan Turf Supplies, which is about five minutes east of Lake Wyangan Public School. Robert is the second generation to run this farm. He bought the farm in a partnership with his dad eighteen years ago. Then it was just grapes and oranges which they took out to grow turf.





Rob has two different varieties of turf, one is Matilda, the other is Kikuyu. Matilda is the most expensive at \$7 a square metre and Kikuyu is \$3.50 a metre. Matilda is more expensive for two reasons. It grows better in the shade than other varieties and this variety is patented. Turf is environmentally friendly; it cleans more pollutants and provides more oxygen than trees.





A big problem for the growing turf is the African Black Beetle, which can eat the roots. Galahs can also be a problem for the turf as galahs shred the root to get the seeds and they can ruin big patches of turf in a short time. This industry is well supported by the government which is researching new and better varieties.





## Awesome Almonds

Dean Dinacola's family has lived on the farm for three generations. His family use to farm rice and wheat but decided to diversify because water was becoming too expensive. They decided to grow almonds because it's easy to grow almonds in this climate and terrain. The farm is less than ten minutes north east of our school.





There are two types of almond trees; male trees and female trees. You need to grow male and female trees together so that they cross pollinate. If the trees don't cross pollinate then they will not produce fruit. Almond trees need to have a really cold winter to produce a good harvest. The trees are watered by underground drip irrigation. The fertilizer is applied to the trees with the water.





Dean would like to build a processing plant on the 600 acre farm, so that they could process the almonds on site instead of transporting them to South Australia. There are 65,000 almond trees on the property. All of the trees have just reached maturity at eight years. They will keep producing full yields until they are about 30 years old.





Will Polkinghorne, Teneal Boyle, Robert Valeri, Callum Weppler, Chloe Bisetto and Jenny Cruse 2014 Year 5 and 6, Lake Wyangan Public School











