Bernie Star A local environmental star

P_{ests} in Irrigation





Cilla Bellato, James Buchanan, Paige Goudie and Laura Mannes

St. Peter's Primary School, Coleambally



Creative Catchment Kids

Creative Catchment Kids is an initiative of Wirraminna Environmental Education Centre. It aims to improve engagement between our funding partners 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.

www.wirraminna.org/creative-catchment-kids/

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

Enviro-Stories

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

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Local Land Heroes - Pests in Irrigation

In 2015, students involved in the Creative Catchment Kids program researched and wrote stories about their 'Local Land Heroes' who are involved in pest management in and around the Murrumbidgee Irrigation Area. These heroes are local individuals, couples, a business or industries that have made a difference in their local community by contributing to the management of pest animals and plants. The program was generously funded by Riverina Local Land Services.

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



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Bernie Star was born in Sutherland, Sydney. He grew up in a lot of places but mainly on a farm just out of Walla Walla. As Bernie's family moved a lot, he attended 13 different schools altogether. He went to university to study agricultural economics. He now lives on a property near Coleambally with his wife and four children. Bernie works at Coleambally Irrigation Cooperative Limited (CICL). He is a Licensing and Environmental Compliance Officer. In this role he monitors the environment to ensure the irrigation area is sustainable in the future. He is a land holder, growing rice, wheat, barley and cattle. He is also president of the Coleambally Landcare group, and is on the advisory board for Riverina Local Land Services.



Bernie told us that rabbits are a big problem in our area, particularly in areas with sand hills.

Rabbits are controlled by disease, poisoning, warren destruction, exclusion, shooting or a combination of these methods. An 80% level of control sounds great, but the other 20% only need 1 year to breed back to their previous numbers. A level of at least 90% to 95% control is needed to have a long-term effect.





Warrens are counted, plotted and mapped using GPS. A control program is then introduced. The warrens are checked after the control program has a chance to work.

There are two rabbit viruses that have been introduced to Australian rabbits; myxomatosis and rabbits calicivirus disease (RCD). The most commonly used poison for rabbit control is 1080, but pindone in sensitive areas near human populations.



There are three main methods of harbour destruction: warren ripping, blasting and fumigating.

Warren ripping involves using machinery with teeth that rip in and destroy the warren.

Blasting involves blocking the rabbit holes then blasting air that destroys their habitat and may kill the rabbits.

Fumigating is blocking the rabbit holes then spraying toxic gases that will kill rabbits quickly, however, this can be harmful to humans. The African box-thorn is native to South Africa. It was introduced in the mid 1800's as a garden or hedge plant. Bernie explained to us that the fruits are usually eaten by a fox or a bird. The seeds are then spread by the animals pooping them out as they travel around the landscape. Another way is when a strong wind blows the seeds off the bush and then carries it along until it drops.





Bernie invited us to attend a boxthorn field day hosted by CICL. While we were there, we watched a demonstration which showed how they are working to eliminate the boxthorn problem. We saw a telehandler with a chemical coated diamond blade mulcher attached. It was used to cut, spray and mulch the plant.



Boxthorn has been affecting native plants and animals for over 150 years. It has been taking up valuable land for years. It has also been hurting animals and denying them access to water. It has provided a nice breeding place for pests like rabbits, foxes, fruit flies and houseflies, with its long spikes warding off other animals. The European fox was introduced into Australia in the 1870s for recreational hunting purposes. Foxes are now found all over Australia. They are predators which can cause serious economic damage for our farmers. In the Coleambally region, foxes prey on farm livestock like lambs and calves. Bernie told us that lamb production can be down by up to 20% due to foxes killing lambs, which means local farmers lose lots of money. Unfortunately, foxes cannot control rabbit and mice numbers. This is because they breed faster than the foxes can eat them. There are various methods for controlling fox numbers.

Cage traps are most successful in towns and around houses where foxes are stealing pet food or poultry and where landholders object to poisons and shooting.



Bernie is involved with **fox baiting programs**. The poison 1080 is used for fox baiting and its use is regulated.

The aim of Bernie's program is to have a large group of land managers working together to reduce the impact of the fox over as much of the landscape as possible in autumn and spring. This period of time, breeding season, is the most critical for the survival of offspring of sheep, goats or threatened species.





Mr. Bernie Star, Paige Goudie, Cilla Bellato, Laura Mannes and James Buchanan.

2015 Year 6, St. Peter's Primary School, Coleambally

CONGRATULATIONS

Wirraminna Environmental Education Centre and the Creative Catchment Kids Program won the 2015 NSW Junior Landcare Team Award and will be competing in the 2016 National Landcare Awards.









