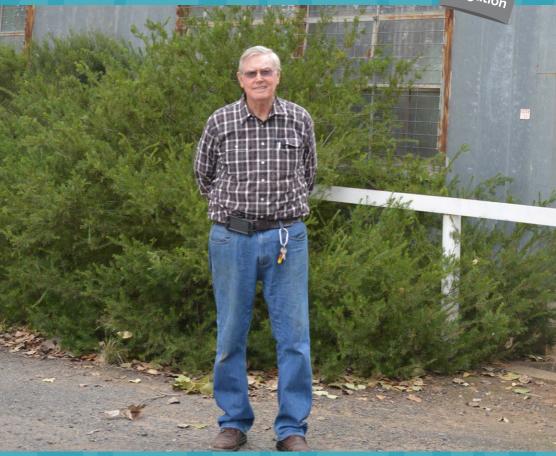
Brilliant
Researcher
Unique
Crops
Educational

Hero in our MIA

P<sub>ests</sub> in Irrigation





Aisha Tomkinson, Maddison Regterschot, Rohan Lacey, Chloe Regterschot, Laura Toscan and Justin Jenner

Darlington Point Public School



#### 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

# Bruce Hero in our MIA

Authors: Aisha Tomkinson, Maddison Regterschot, Rohan Lacey,
Chloe Regterschot, Laura Toscan and Justin Jenner
Teacher: Helen Wood and Marion Wythes
School: Darlington Point Public School

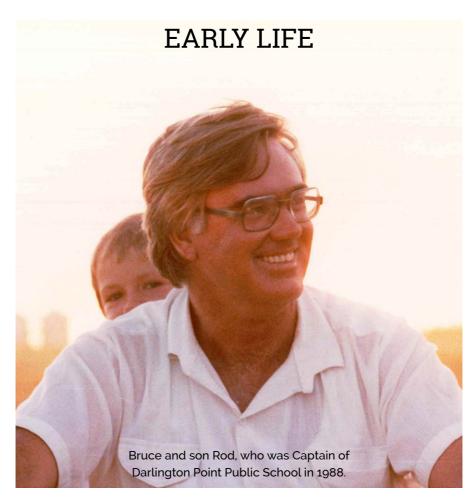
#### Local Land Heroes - Pests in Irrigation

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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Bruce Gowrie-Smith was born in Adelaide in 1940. When Bruce was young, his father moved the family to Griffith, NSW, to manage a farm that he eventually bought.

Bruce started his schooling in Griffith and then completed his education at a boarding school in Victoria. Instead of attending university, Bruce came back to work with his dad on the family farm.



Bruce developed his first farm from a virgin state in Kooba Subdivision, near Darlington Point. He later developed several other farms in the area and also advised farmers on how to lay out their properties.

Bruce was an active member of the Junior Farmer's Club. He soon became very interested in the advantages of getting good agricultural research to overcome the pest problems that can occur in a variety of crops.

## **GOMAN FOODS**

Bruce established a local business called Goman Foods in the early 1980s. It was originally a tomato factory, but as imported tomatoes became much cheaper, the focus of the business had to change. The business is now involved in the process of drying prunes. The factory is very energy efficient as it recycles hot air in the drying process.

Bruce has been involved in growing many different crops and has faced the problems and pests associated with this process. He has been involved in many research committees and research Boards.



# **TOMATOES**

Bruce grew Roma (egg) tomatoes as they were the best for processing. The tomatoes were made into sauce, paste and dried tomatoes.

If he had any "harmful insects" he would use crop dusters to spray insecticide, which is biodegradable. Insecticide is a chemical that is lethal to insects.

Bruce was in the tomato game for 20 years.



# **ONIONS**



We learnt many things about growing onions after interviewing Bruce.

There are only a few insects that can hurt onions. Jassids and thrips fly into onions which can cause disease. You treat these pests with an insecticide.

Onions can also get black mould which is treated with a fungicide.

Bruce also told us that onions can be sunburnt which causes the onion to become slimy on the outer covering.

# **CORN**

Corn grows beautifully in the Darlington Point area, producing high yields. Corn is precisely sown and can be affected by cut worm. The farmer controls this by placing a small amount of bug attracting insecticide beside each seed.

Mice can also be a major problem to the corn when it is ready to harvest.





### **WHEAT**

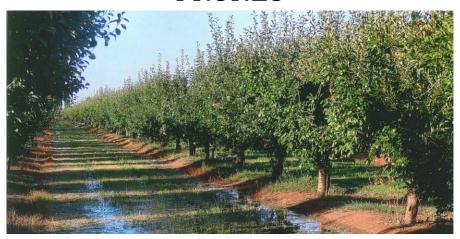




Bruce has grown many successful wheat crops that have been fairly pest and disease free. This is because there has been a lot of research to develop new and disease resistant varieties of wheat.

In one crop he did get a disease called rust at one time which is when the green part of the leaf turns yellow. This problem is treated with a foliar fungicide.

## **PRUNES**





Bruce has grown plums for ages. He doesn't get many pests in plums, but some farmers get fruit fly. They treat this by hanging traps with either pheromone or protein in them.

Plums use heaps of water per hectare every year. Bruce uses a flood system to water his orchard. He grows clover in between the rows, this acts like a wet blanket to keep the trees cool.

## COTTON



The growing of cotton in the Darlington Point area has grown over the last 10 years due to research in plant breeds. A shorter and quicker growing cotton plant has been developed and is proving very successful.

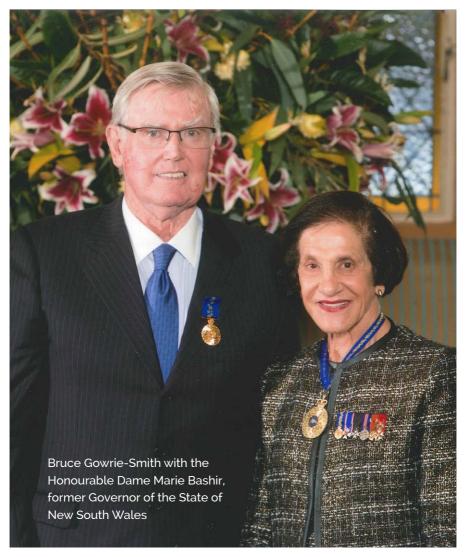
A big problem in the cotton is the white moth. The moth can destroy the crop by laying their larvae in the boll. Research has been able to develop a gene from another plant that turns moths away. Some farmers are required to plant a sacrificial crop, such as mung beans, that the moths can attack and therefore leave the cotton alone.

# **SUNFLOWERS**

Bruce grew a fantastic crop of sunflowers just west of Darlington Point along the Murrumbidgee River. The box gums provided bees for spreading the pollen. The biggest problem for a crop is the Rutherglen bug that nips the moisture from the seed that is trying to grow. To control this bug the crop is sprayed with an insecticide.



# ORDER OF AUSTRALIA MEDAL



Bruce Gowrie-Smith was awarded the Order of Australia Medal (OAM) in 2014 for his considerable contributions to agriculture in Australia. He is a passionate advocate for the need for continued research.

The Creative Catchment Kids from Darlington Point Public School would like to thank Bruce Gowrie-Smith for all of the information about the pests in the crops that he has grown and researched, and how to control pests in them. His enthusiasm and generous amount of time given for this project has been greatly appreciated.

Thank you Bruce!



Justin Jenner, Maddison Regterschot, Chloe Regterschot, Rohan Lacey, Laura Toscan, Aisha Tomkinson and Bruce Gowrie-Smith

2015 Year 5/6, Darlington Point Public School

#### **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.







