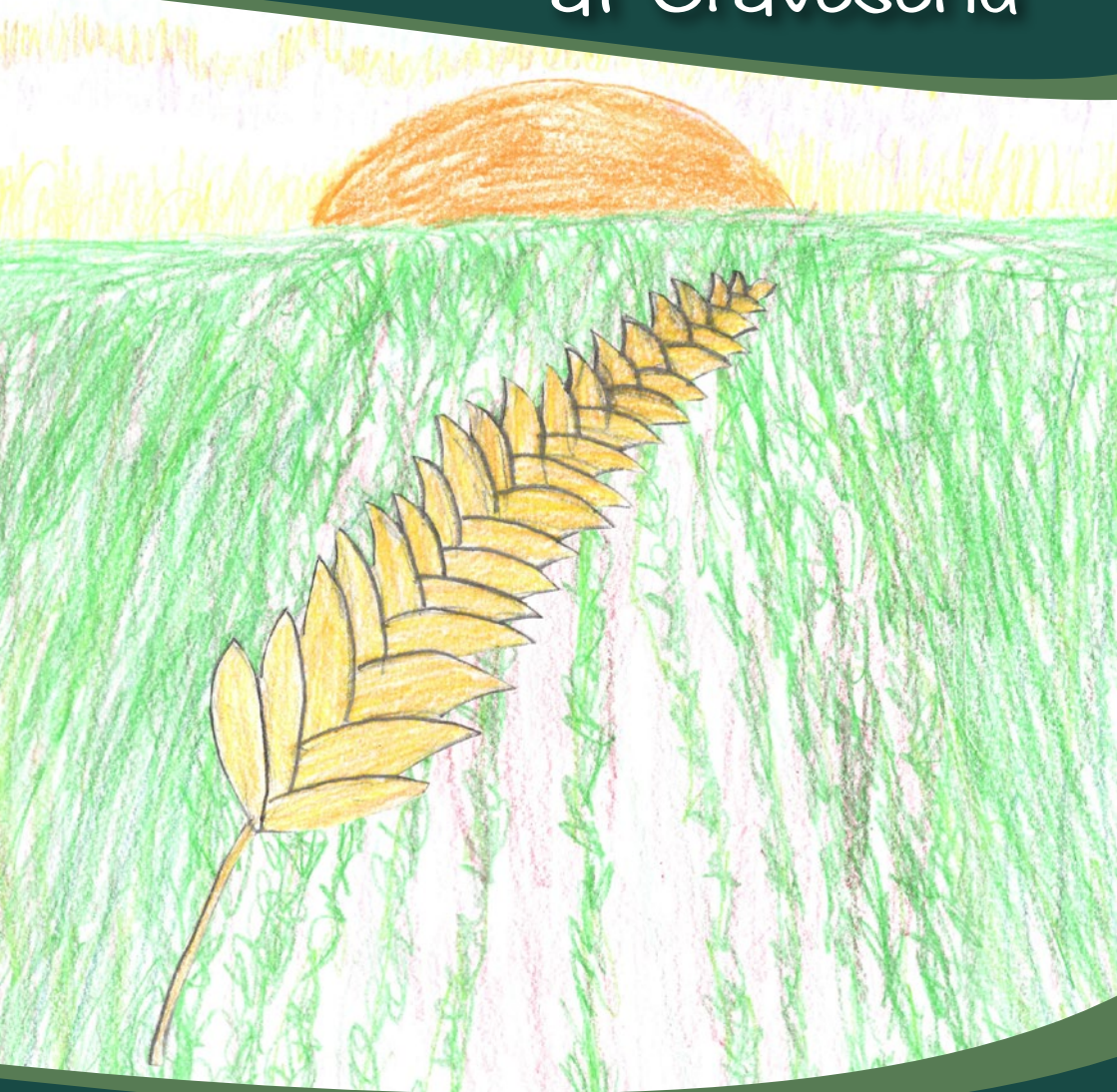


Growing Wheat at Gravesend



Poppy Barwick, Sarah Barwick
and Alexandra Warby
Gravesend Public School





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

Cotton Research and Development Corporation

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www.crdc.com.au

Growing Wheat at Gravesend

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School: Gravesend Public School

This book has been published as part of the 2020 Healthy Plants, Healthy Me Enviro-Stories program. Students used their imagination to write and illustrate stories that highlight the importance of plants for the planet, our biodiversity and our bodies. This program was supported by the Cotton Research and Development Corporation and CSIRO.

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ISBN: 978-0-6450381-4-9

Enviro-Stories is a Peekdesigns initiative, www.peekdesigns.com.au.

Barwick, P., Barwick, S. and Warby, A. 2020. *Growing Wheat at Gravesend*. Cotton Research and Development Corporation, NSW.





LOCATION

Gravesend is a small town located in northern NSW; between Moree and Inverell. Our company, Springwood Partnership, owns properties situated on the eastern side of Gravesend. We grow approximately 2800 hectares of wheat. The best crop of wheat we have grown was 5 tonnes to the hectare.

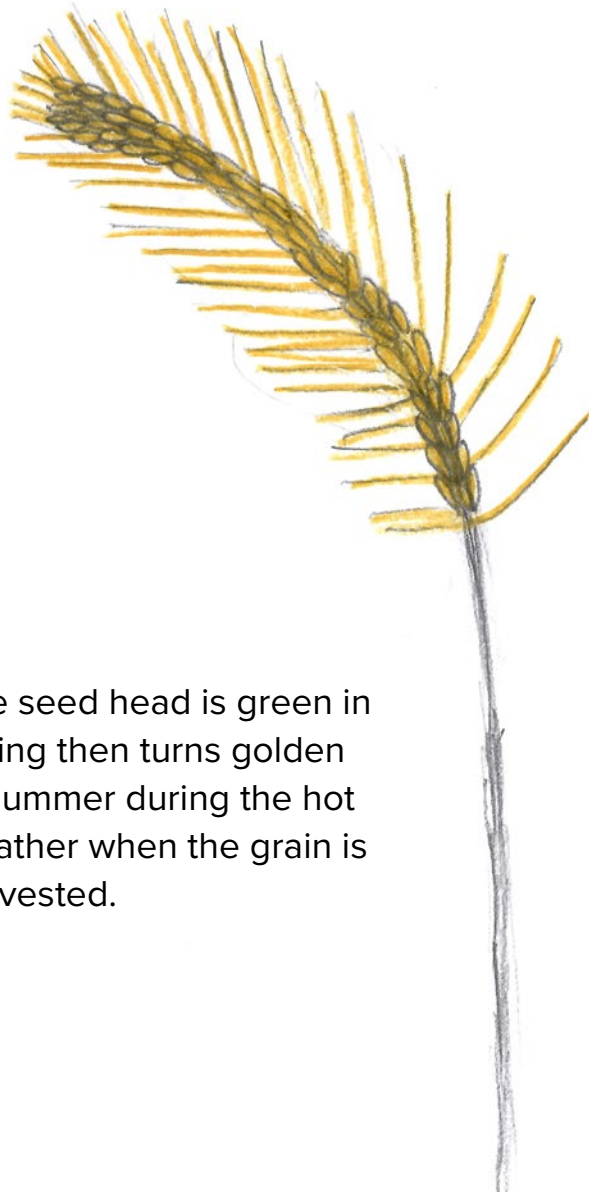


WHAT IS WHEAT?

Wheat is a kind of grass. It belongs to the same family as oats, barley and sugar cane.



The seed head is green in spring then turns golden in summer during the hot weather when the grain is harvested.





PLANTING WHEAT

Wheat is usually planted into stubble. Stubble holds lots of moisture and becomes a mulch for wheat. To plant wheat, you use a piece of machinery called a planter, which is pulled by a tractor. After planting, you can spray on fertiliser to help the wheat grow.

WHEAT CYCLE

The wheat seed grows roots and then a shoot appears. The shoot grows leaves and then tillering begins.

After tillering, a flag leaf appears. We found a wheat head by slitting the flag leaf with our fingernails. The wheat head will flower and grow grain.



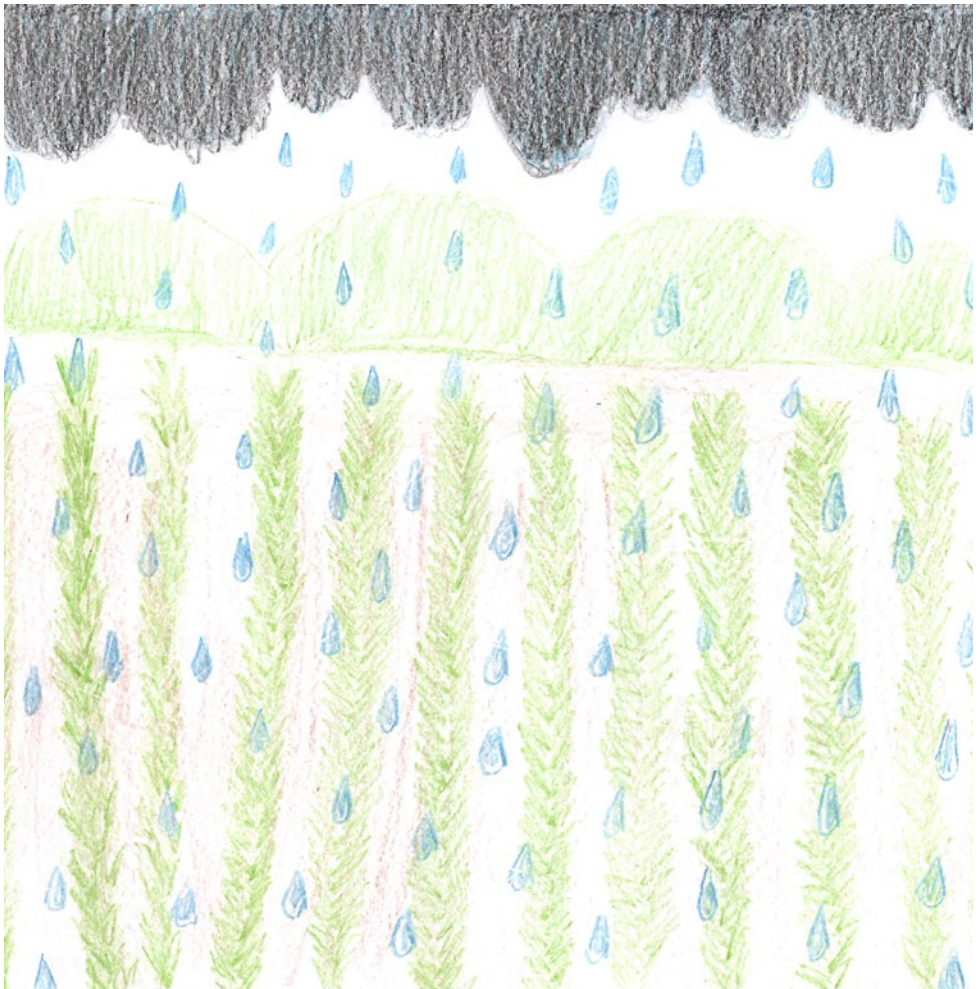
AGRONOMY

An agronomist from Warialda, Dave Landers, comes out and checks the crop every fortnight. Firstly, he checks the soil to make sure there is enough moisture to plant the wheat. While the crop is growing, he checks for diseases, weeds and insects.



WEATHER

Rainfall is extremely important to grow a wheat crop. The amount of rain needed to grow a good crop of wheat is at least 350—400mm a year. Because 2018 and 2019 were serious drought years, we could not grow a wheat crop successfully.

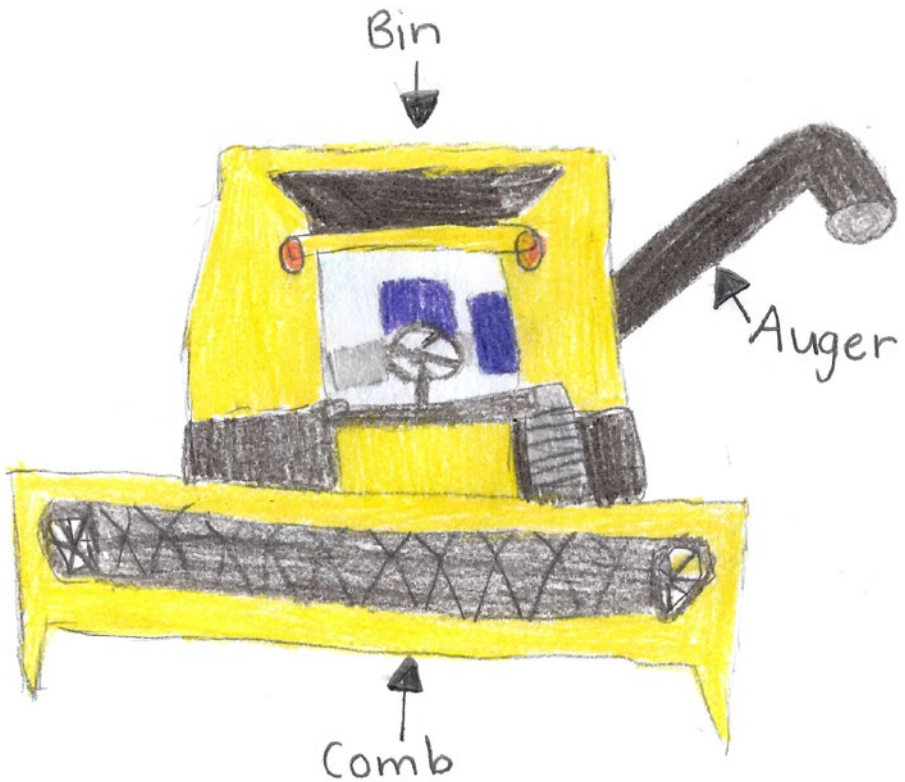




THE SUNSHINE HARVESTER

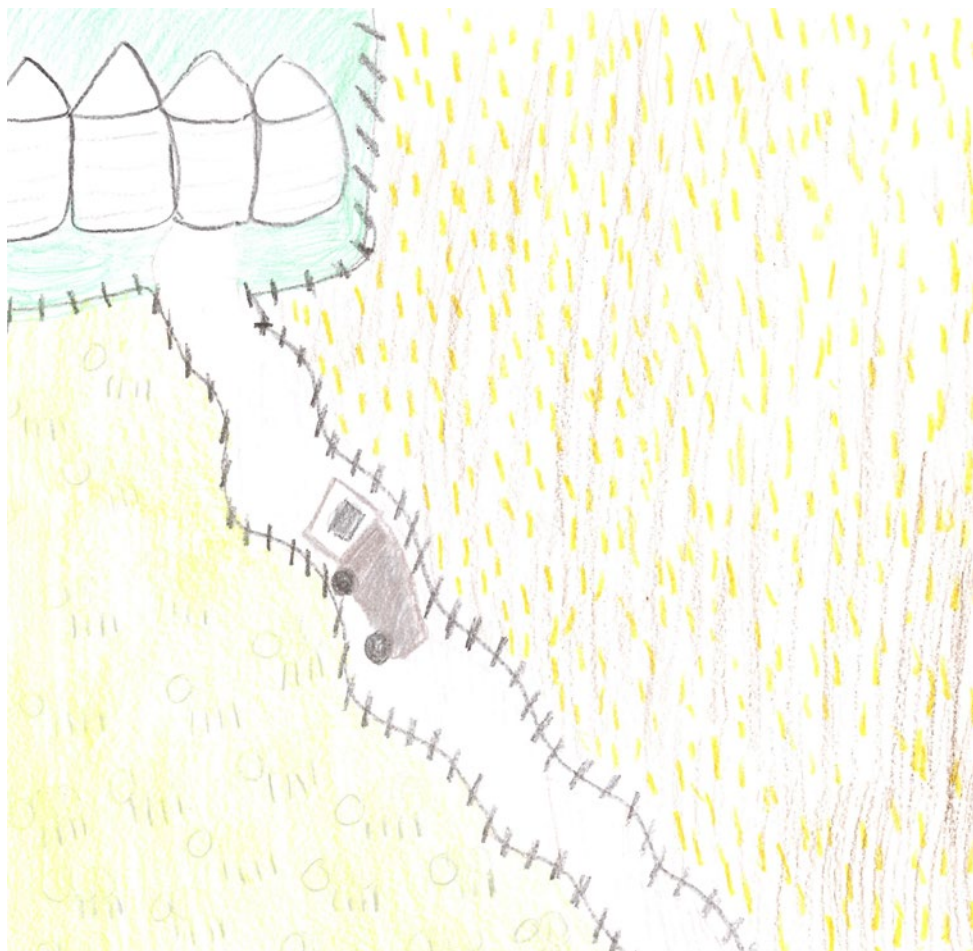
Hugh Victor McKay manufactured the Sunshine Harvester in 1935 in Sunshine, Victoria. This machine was designed to cut the heads from the ripe crop with a knife at the base of the cone rather than beat them off.





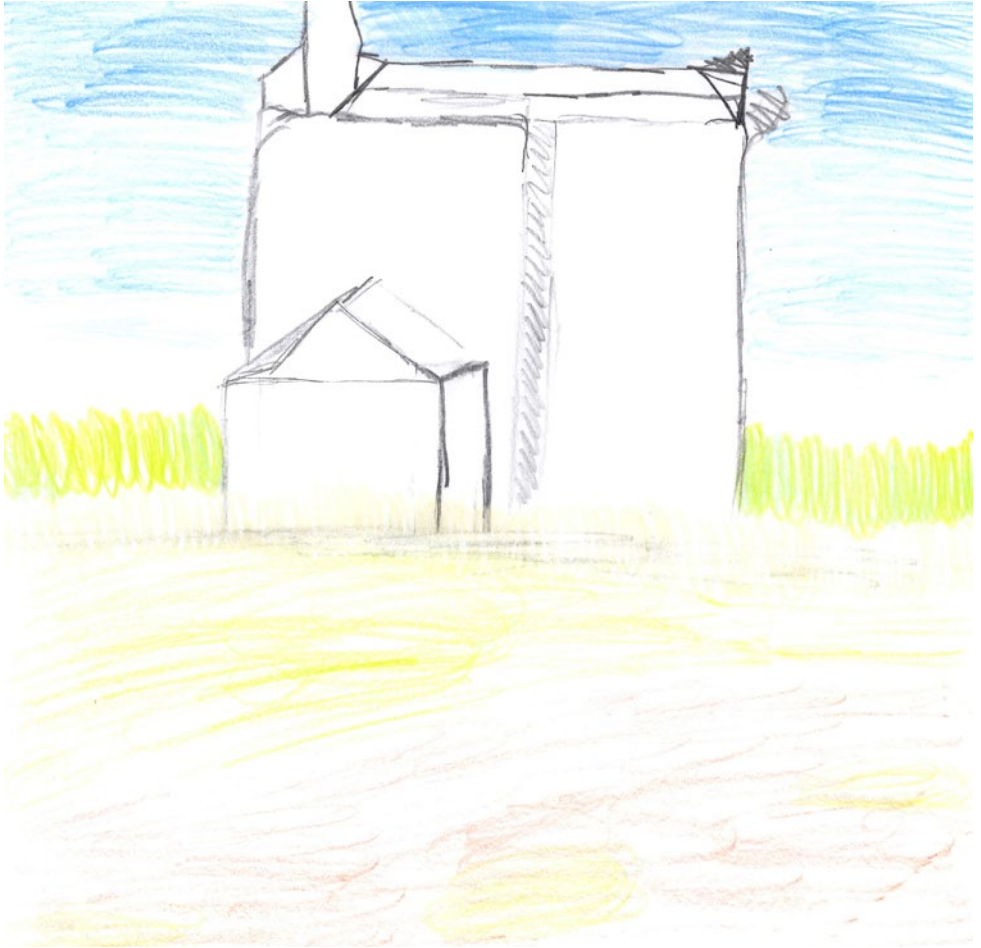
HARVESTING

Harvesting begins about late October when the wheat is ripe. A header has a comb at the front that cuts the wheat head off and it goes into the bin at the back. The auger puts the wheat seed into a chaser bin or truck.



TRANSPORTING

Once the wheat is harvested, it is transported to our silos by trucks. Some of this wheat will be trucked to Manildra Grain in Moree to be turned into flour and the rest will be sold on farm to Riverina Stock Feeds.



GRAVESEND SILOS

The Gravesend Silos were built in 1934. In the 1953 harvest, 7,000 tonnes of wheat were delivered to the silos in tipper trucks as well as 15,000 bags (1,200 tonnes).

The silos closed in 2006 because a lot of farmers were starting to store their wheat on their farms.

WHEAT IS HEALTHY

Wheat has carbohydrates and protein.

Carbohydrates provide our bodies with the energy we need to live well.

Daily protein intake plays a role in keeping our cells in good shape. Protein also builds our bones, muscles and skin.



WHEAT PRODUCTS

Wheat is turned into flour at flour mills. Flour is used to make products such as bread, donuts, pasta, biscuits, cupcakes, muffins, sourdough, tarts, glue and corn starch.

Wheat is also used to make stock feed.





MAKING BREAD

The ingredients for making bread are quite simple:

- 600 grams of wholemeal flour
- 390 millilitres of lukewarm water
- 2 teaspoons of yeast.

Once we mixed the dry ingredients together, we added the water. Then we kneaded the dough for 10 minutes.



We let the dough rise for 40 minutes before kneading it again for another 5 minutes, to release the gas. The dough was set aside to rise for another 40 minutes before we cooked it for 15 minutes at 200°C.

It was extremely delicious!

WHEAT FUN FACTS

1. The first wheat grown in Australia was at the Botanic Gardens in Sydney in 1788.
2. If you had a sandwich for every meal, it would take seventeen years to eat the bread produced from one tonne of wheat.





Alexandra Warby, Poppy Barwick and Sarah Barwick
Gravesend Public School, Year 5 2020



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