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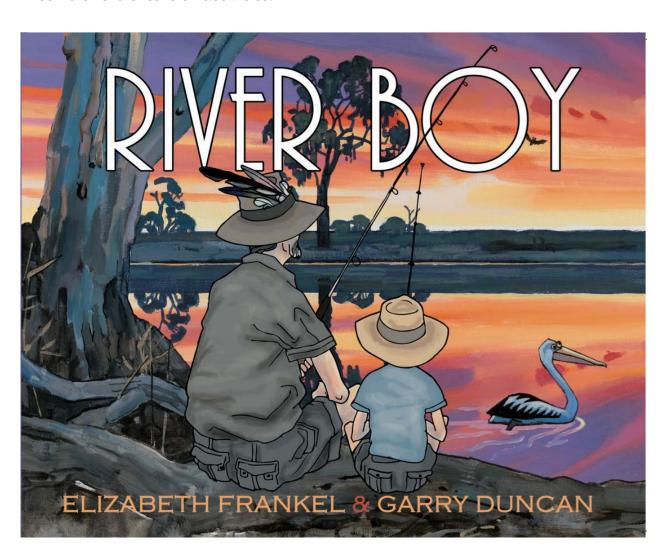


River Boy Teacher Resource Pack

A grandfather and his young grandson embark on an adventure of exploration and discovery of the lower reaches of the Murray River. River Boy focuses on the current circumstance of environmental decline surrounding the Murray River and along their adventure explores the changes the grandfather has seen in the river since he was a young boy.

A gentle, sentimental story that highlights the many uses of the river, the beauty of its natural environment and everything that depends on it. It is aimed at early years and junior primary children.

This resource offers several activities your class could undertake to raise awareness and develop knowledge about taking care of the river. Once your class has explored the wonderful story, lead them in some of the extension activities.





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Classroom Activities

Birds

"The next morning we wake to the sound of laughing kookaburras, from high up in the River Red Gums."

Birds feature on most pages.

- how many birds can you identify?
- sort them into different groups e.g. water birds, night birds etc
- · select a bird and prepare a fact sheet about the bird
- make an ID chart and tick them off when you have seen them in your area
- which bird is on which page?

Australian ringneck parrot	Pelican	Regent parrot	Galah	Whistling kite
White-faced heron Intermediate egret		Australian magpie	Laughing kookaburra	Australian white ibis
Straw-necked ibis	Tawny frogmouth	Masked lapwing	Superb fairy-wren	Sacred kingfisher
Black swan	Purple swamp hen	Australian wood duck	Australian pacific duck	Eurasian coot
Southern boobook	Australian darter	Nankeen night heron	Yellow billed spoonbill	Little corella
Little pied cormorant	Silver gull	Royal spoonbills	Black-winged stilt	Red-capped plover

Resources on NRM Education website

Colouring sheets for birds

Bird ID charts:

- Birds of a grey box woodland identification chart
- Bushland birds of the Adelaide Hills identification chart
- Birds of the Barossa Valley identification chart
- Birds of the Fleurieu Peninsula identification chart
- Common urban birds identification chart
- Wetland birds of SA identification chart

Australian pelican Photo courtesy of Martin Stokes.

Bird tracks: understanding SA birds, their food and habitat information pack

This resource has been designed to help students and school communities begin to understand the life and needs of birds they see around them, and, in fact live with day to day.



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Locks, weirs and barrages

"We go through a lock."

Why were locks, weirs and barrages built on the Murray? What would the river be like in different seasons without them?

How do boats travel past locks and weirs?

- www.murrayriver.com.au/about-the-murray/locks-weirs-dams-barrages/
- www.mdba.gov.au/what-we-do/managing-rivers/river-murray-system/weirs-and-locks
- www.rmboa.org.au/river_levels.html

Paddleboats

"Grandpa tells me that people built the locks about one hundred years ago, to hold the water back, allowing the big paddleboats to cruise the river all year round."

What are the names of some of the paddleboats that used to be on the Murray and what did they carry?

www.psmarion.com/

Fish

"We sit in the reeds and do some fishing."

Carp, golden perch and catfish are mentioned in the story. Do you know which are native and which are introduced? What are the guidelines for fishing?

As well as stopping water flowing, the locks and weirs also stop fish moving up and down the river. What might be the issues for native fish? Find out about fishways.

• www.mdba.gov.au/what-we-do/managing-rivers/river-murray-system/weirs-and-locks

NRM Education has:

- Native fish kit with games and activities
- Fantastic fabric fish and frogs. This wonderful set of life-size and life-like fabric fish is available to borrow for up to a week at a time. The set includes Murray Cod, Golden Perch, Carp, Silver Perch, Catfish and 3 x Purple Spotted Gudgeon, as well as yabbies and southern bell frogs. Perfect to hang in the classroom if you are learning about the river or fish!





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Aboriginal aspect

"Aboriginal people have lived along the Murray for forty thousand years."

Find out about how they lived at www.murrayriver.com.au/about-the-murray/murray-river-aboriginals/

In the Dreaming, Ngurunderi travelled down the Murray River in a bark canoe, in search of his two wives who had run away from him. At that time the river was only a small stream, below the junction with the Darling River. A giant cod fish (Ponde) swam ahead of the Ngurunderi, widening the river with sweeps of its tail.

• www.murrayriver.com.au/about-the-murray/ponde-dreamtime/

Aboriginal communities living along the rivers of south-eastern Australia cut the bark from trees to build canoes. This practice was particularly prevalent along the River Murray and its tributaries and has left an abundance of what we now call 'canoe trees'.

- www.slsa.sa.gov.au/murray/content/didyouknow/canoeTrees.htm
- www.abc.net.au/local/stories/2013/04/19/3740664.htm

Yabbies and macroinvertebrates

"Grandpa shows me how to catch some yabbies."

Yabbies are one of many macroinvertebrates found in fresh water.

The NRM Education Critters Galore Teacher Resource Pack actively engages students in learning about aquatic macroinvertebrates, their habits, features and reliance on healthy waterways. Water samples containing live specimens are collected to familiarise students with macroinvertebrates they are likely to find and techniques for sorting and identifying them. This session closely relates to water quality monitoring by providing an introduction to one area of biological monitoring.

- Critters Galore resource package early years
- Critters Galore resource package primary years
- Critters Galore resource package middle years
- Macroinvertebrate Guide Chart (best for early years)
- Macroinvertebrate ID Chart (best for primary years)

The NRM Education Waterwatch program offers free in-class education and training sessions that teach students how to monitor and protect a water site in their local area. It helps teachers plan their involvement in water education and contains information for further investigation into water issues.

- Waterwatch Monitoring Teacher Resource Pack
- Waterwatch monitoring sheet template



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Water use

"We notice some of the big old gum trees on the edge of the river have died."

NRM Education water resources help students learn about our most precious natural resource - water. Find out where water comes from, how it is used and how to conserve it. Investigate water quality and health, and discover the effects of pollution, environmental changes and human impact on our waterways and what can be done to make a difference. Resources include both classroom and practical field activities.

- How much River Murray water do you use? early to primary years
- <u>River Murray Story resource package</u> early to primary years
- Gutter Guardians stormwater resource package primary to middle years
- Saline Solutions River Murray resource package middle to senior years
- How much water is available for human use?
- Water actions saving water at your school
- Water use problems and solutions

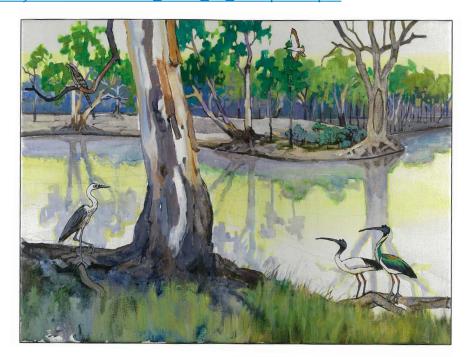


Wetlands and floodplains

"Grandpa says that the river needs regular small floods to wet the floodplain and help keep the river, and everything else that depends on it, healthy."

Why are wetlands and floodplains important?

- www.savethemurray.com/media/fact sheet 18 wetlands.pdf
- www.savethemurray.com/media/fact sheet 19 floodplains.pdf





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Recreation activities

"We cruise past a busy river town. There are houseboats, speedboats, and jet-skis, and the bank is lined with holiday shacks."

What recreational activities do you do on the River Murray?

What are the environmental impacts associated with these activities?

Organised tours and boat trips	Canoeing and kayaking	Speed boating	Jet skis	Caravanning
Camping	Photography	Sailing	Swimming	Horse riding
Orienteering and geocaching	Bushwalking	Four-wheel-driving	Motorbikes	House boating
Site seeing	Yabbying and fishing	Bird watching	Water-skiing	Cycling

Sustainable recreation guidelines:

www.murrayriver.com.au/pdf/Sustainable-Recreation-Guide-2008.pdf

Bats

"All around us we can hear the sounds of insects, bats and birds of the night."

The Mid Murray LAP has a number of bat resources and supports a community bat monitoring project, which allows the public to borrow bat detecting equipment. The data is then analysed by trained staff at the LAP and feedback provided on detected species. Please contact the LAP if you would like more information or to borrow equipment.

Email midlap@internode.on.net or phone 08 8564 6044 or 0427 590 344

- How bat friendly is your property?
- Bats of SA's Murray Region
- Bat Poster
- Bat Box Template
- Making Friends With Backyard Bats

Coorong, Lower Lakes and Murray Mouth

"The next day we come down the river to a big lake."

Before the Murray flows out to sea it enters Lake Alexandrina, Lake Albert and some water may end up in The Coorong. What do you know about this final stretch of the journey?

- www.savethemurray.com/media/fact_sheet_4_coorong_llmm.pdf
- Map of the Murray Darling Basin murraydarlingwetlands.com.au/wetlands/md-map.asp

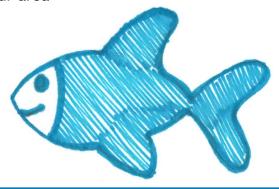


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Outside activities

- Visit a local wetland, such as Laratinga (Mount Barker), Banrock Station (near Kingston-on-Murray), or Swanport (Murray Bridge)
- Watch a boat pass through a lock
- Check out a fishway at a weir
- Check out the fur seals that hang around the barrages
- Visit the Mannum Dock Museum to find out more about the river history
- Listen to the frogs, can you identify them from their calls get involved in monitoring frogs.
- Look for turtles. If you see any add them to the Turtle app http://turtlesat.org.au
- Monitor a local area for water quality
- Visit the McCormick Centre for the Environment in Renmark to see exhibits and learn about the local environment: www.austlandscapetrust.org.au/projects/riverland/mccormick-centre.aspx
- Go to a spot near the river and sit quietly for 5 minutes:
 - listen to the sounds of the river
 - identify birds
 - think about how aboriginal people used the river
 - make a sketch of the river
 - write a poem about the river
 - imagine what the river will be like in 10 years' time
- Try to catch a fish or some yabbies
- Go for a cruise on a paddle boat:
 - at Renmark: P.S. Industry (1911 built Goolwa)
 - at Mannum: P.S. Marion (1897 built Milang)
 - at Murray Bridge: Proud Mary (1982 built Berri) or Captain Proud (1977 built Port Adelaide)
 - at Goolwa: P.S. Oscar W (1908 built Echuca)
- Find out what local foods are produced using irrigation in your area





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Resources

The following websites contain information, resources, activities and interactive games associated with the River Murray and its issues:

Save Water: www.savewater.com.au/

Useful and practical advice for Australians on how to save water and why.

MurrayCare: http://murraycare.org/

School and teacher resources on the River Murray.

Murray Darling Basin Authority: www.mdba.gov.au/
Fantastic website with a Basin Kids page and lots more!

Save the Murray: www.savethemurray.com.au/

Clean up and protect the River Murray and its surrounds.

Natural Resources, SA Murray-Darling Basin: www.naturalresources.sa.gov.au/samurraydarlingbasin Information about managing natural resources in the SA Murray-Darling Basin region.

School camps with a River Murray theme include:

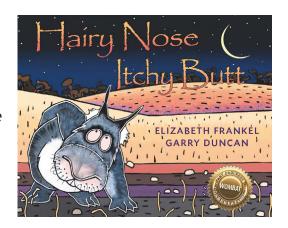
- Camp Illawonga at Swan Reach: www.illawongacamp.com.au
- Ankara at Walkers Flat: www.ankaracamp.org.au
- Riverlinx, run by Kingston-on-Murray Primary School: www.komps.sa.edu.au/?page_id=666

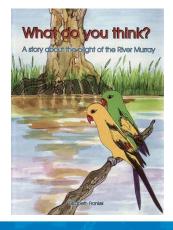
Other books by Elizabeth Frankel

Hairy Nose Itchy Butt

Ever had an itch you couldn't scratch? The Hairy-nosed wombat has one, and somebody has chopped down his scratching tree. Join our marsupial hero on an itchity, scratchity adventure as he tries to find the perfect place to scratch his butt.

This story is a great example of how human and other impacts can affect the habitat of one of our native animals.





What do you think?

A story about the plight of the River Murray. It is aimed at preschool and junior primary children, and tells the story of a pair of Regent Parrots who realize that the River Red Gums look sick, and they embark on a search to discover why.



ZABETH FRANKEL & GARRY DUNCAN

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Curriculum links

	Year	Content Description				
	F	Living things have basic needs, including food and water (ACSSU002)				
	1	Living things live in different places where their needs are met (ACSSU211)				
	1	Observable changes occur in the sky and landscape (ACSSU019)				
Science	2	Earth's resources, including water, are used in a variety of ways (ACSSU032)				
	4	Living things, including plants and animals, depend on each other and the environment to survive (ACSSU073)				
	4	Earth's surface changes over time as a result of natural processes and human activity (ACSSU075)				
	in their	y activities also use Science as a Human Endeavour in all year levels (recognising that people use science daily lives, including when caring for their environment and living things). River Boy activities also use Inquiry Skills in all year levels, including Questioning & Predicting, and Communicating.				
	F	The places people live in and belong to, their familiar features and why they are important to people (ACHGK002)				
	F	The Countries/Places that Aboriginal and Torres Strait Islander Peoples belong to in the local area and why they are important to them (ACHGK003)				
	F	The reasons why some places are special to people, and how they can be looked after (ACHGK004)				
Geography	1	The natural, managed and constructed features of places, their location, how they change and how they can be cared for (ACHGK005)				
	1	The ways the activities located in a place create its distinctive features (ACHGK007)				
	2	The ways in which Aboriginal and Torres Strait Islander Peoples maintain special connections to particular Country/Place (ACHGK011)				
	2	The connections of people in Australia to other places in Australia, the countries of the Asia region, and across the world (ACHGK012)				
	3	The representation of Australia as states and territories, and Australia's major natural and human features (ACHGK014)				
	3	The many Countries/Places of Aboriginal and Torres Strait Islander Peoples throughout Australia (ACHGK015)				
	3	The similarities and differences in individuals' and groups' feelings and perceptions about places, and how they influence views about the protection of these places (ACHGK018)				
	4	The importance of environments to animals and people, and different views on how they can be protected (ACHGK022)				
	4	The custodial responsibility Aboriginal and Torres Strait Islander Peoples have for Country/Place, and how this influences their past and present views about the use of resources (ACHGK023)				
	4	The natural resources provided by the environment, and different views on how they could be used sustainably (ACHGK024)				
	5	The influence of people, including Aboriginal and Torres Strait Islander Peoples, on the environmental characteristics of Australian places (ACHGK027)				
	5	The influence of the environment on the human characteristics of a place (ACHGK028)				
	5	The influence people have on the human characteristics of places and the management of spaces within them (ACHGK029)				
	stories a	y activities also use Geographical Inquiry and Skills, including Observing, Planning & Questioning (using bout a place to stimulate questions about what it is like and why), and Reflecting & Responding (designing that people could take to protect and improve places that people perceive as important).				



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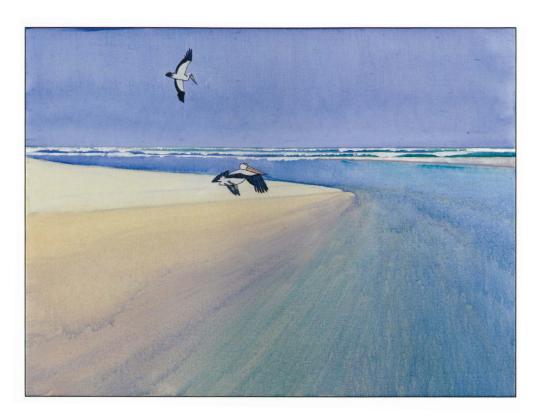


Notes about curriculum links:

Note 1: the curriculum links listed here are the ones most closely related to the activities, but the list is not exhaustive and there may be links to other learning areas, strands and year levels which are also fulfilled by these activity ideas.

Note 2: links can be made to other subject areas including English (Literature and context, Responding to literature, Examining literature), Civics and Citizenship (Citizenship, diversity and identity) and Health and Physical Education (Contributing to healthy and active communities). Refer to ACARA.

Note 3: For Cross-curriculum priorities and General capabilities, check the Content Descriptions at ACARA.



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