KANGAROO ISLAND Education program Equipment and loan catalogue

Find out about the books, kits and equipment available to Kangaroo Island teachers.

Inspire, share and teach your class with topics including ecology and sustainable agriculture.





Overview

The Education program has a collection of books, resource kits and equipment available for teachers to borrow, spanning topics including animals, plants, soils, water, sustainability and more.

Find out more about our kits including their components, suggested activities and curriculum links in the following pages.

We will continue to update this catalogue as we add more resources and equipment. If you have any suggestions on what we can add, please contact the Environmental Education Coordinator.

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Education loan kits

The Kangaroo Island Landscape Board has a number of educational resources and kits available for teachers to borrow and incorporate in their learning schedule.

All kits are easy to use and add value to classroom experiences by providing students with interactive and varied activities.

Each kit is self explanatory and teachers do not need to have background knowledge about the subject in order to incorporate the topic.





Beach-nesting birds kit

Kit includes:

- Bringing the Coast to the Classroom Beach nesting Birds Education Kit (Hard copy) and USB
- Beach-nesting Birds Education Kit South Australia
- Birdlife Australia Beach-nesting Birds The Wing Thing Activity booklet
- · Meet your Coastal Birds, Beach-nesting Birds and Beachcombing posters
- Hooded plover and oyster catcher board games
- Shorebirds Identification booklet
- ID charts for hooded plovers, pied oystercatchers, red-capped plovers and Australian shorebirds.

Use the kit to assist in educating about:

- local coastal bird species
- ecosystems and living things
- participate in a coastal bird survey.

Additional resources available for loan:

- Birds of Kangaroo Island by Chris Baxter
- Cockatoos by Matt Cameron
- An annotated list of birds of Kangaroo Island by Chris Baxter and Mel Berris

Curriculum links

Early Years

National Quality Standards:

1.1.2 Child centered: supporting children's knowledge, strengths, ideas, culture and interests.

3.2.3 Environmentally responsible: supporting children to become environmentally responsible. **EYLF Outcomes:**

Outcome 2: children are connected with and contribute to their world. Outcome 4: children are confident and involved learners.

	Year	Content description
	F	Living things have basic needs, including food and water (ACSSU002) Explore and make observations by using the senses (ACSIS011) Share observations and ideas (ACSIS012)
Science	Years 1-4	Science involves asking questions about, and describing changes in, objects and events (ACSHE021) People use science in their daily lives, including when caring for their environment and living things (ACSHE022) Use informal measurements in the collection and recording of observations, with the as- sistance of digital technologies as appropriate (ACSIS026)
	Year 1	Living things have a variety of external features (ACSSU017) Living things live in different places where their needs are met (ACSSU211) Observable changes occur in the sky and landscape (ACSSU019)
	Year 2	Living things grow, change and have offspring similar to themselves (ACSSU030)



Beach-nesting birds kit cont.

Curriculum links cont.

Australian curriculum:		
	Year	Content description
	Year 3	Living things can be grouped on the basis of observable features and can be distinguished from non-living things (ACSSU044)
	Year 4	Living things have life cycles (ACSSU072) Living things depend on each other and the environment to survive (ACSSU073)
	Year 5	Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)
nce	Year 6	The growth and survival of living things are affected by physical conditions of their environment (ACSSU094)
Science	Years 9-10	The values and needs of contemporary society can influence the focus of scientific research (ACSHE228) Plan, select and use appropriate investigation methods, including field work and
		laboratory experimentation, to collect reliable data; assess risk and address ethical issues associated with these methods (ACSIS165) Select and use appropriate equipment, including digital technologies, to systematically
		and accurately collect and record data (ACSIS166)
	Year 9	Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems (ACSSU176)
Geography	F	The reasons why some places are special to people, and how they can be looked after (ACHGK004)
		Make observations about familiar places and pose questions about them (ACHGS001) Record geographical data and information collected by observation (ACHGS002)
	Year 1	The natural, managed and constructed features of places, their location, how they change and how they can be cared for (ACHGK005)

Birdwatching kit

Kit includes:

- birdwatching kit activity instructions, including for Birdata App and binoculars, and data sheets
- local bird field guides and booklets
- ID sheets for KI land and shorebirds
- find the bird game
- bird ID key for threatened KI birds
- binoculars with a sign in/out sheet, clipboards

Use the kit to assist in educating about:

- local bird species
- ecosystems and living things
- use in conjunction with excursion or school yard walk to identify local bird species.
- participate in the <u>Aussie Bird Count</u> to log bird sightings in school yard.

Additional resources available for loan:

- Birds of Kangaroo Island by Chris Baxter
- Cockatoos by Matt Cameron
- An annotated list of birds of Kangaroo Island by Chris Baxter and Mel Berris
- Camouflage little scarlet robin by Kathryn Lewis

Curriculum links

Early Years

National Quality Standards:

- 1.1.2 Child centered: supporting children's knowledge, strengths, ideas, culture and interests.
- 3.2.3 Environmentally responsible: supporting children to become environmentally responsible. **EYLF Outcomes:**

Outcome 2: children are connected with and contribute to their world.

Outcome 4: children are confident and involved learners.

Australian curriculum:

	Year	Content description
	F	Living things have basic needs, including food and water (ACSSU002)
	Year 1	Living things have a variety of external features (ACSSU017)
		Living things live in different places where their needs are met (ACSSU211)
	Year 2	Living things grow, change and have offspring similar to themselves (ACSSU030)
	Year 3	Living things can be grouped on the basis of observable features and can be
Ce		distinguished from non-living things. (ACSSU044)
Science	Year 4	Living things have life cycles (ACSSU072)
		Living things depend on each other and the environment to survive (ACSSU073)
Sc	Year 5	Living things have structural features and adaptations that help them to survive in their
		environment (ACSSU043)
	Year 6	The growth and survival of living things are affected by physical conditions of their
		environment (ACSSU094)
	Year 9	Ecosystems consist of communities of interdependent organisms and abiotic components
		of the environment; matter and energy flow through these systems (ACSSU176)

Year levels: Early years, F-9





Soil kit

Kit includes:

- soil activity instructions
- soil testing kits
- lime soil calculator
- soil pH scale
- plastic and metal trowels
- lunch boxes, paper towel and zip-lock bags
- colander, sieve and spray bottles
- printed resources.

Use the kit to assist in educating about:

- the importance of soil and soil quality
- food production and plot to plate
- sustainable farming and agriculture.



Year levels: F-10





Curriculum links

Early Years

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Outcome 2: children are connected with and contribute to their world.

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	Year	Content description
tech	Years F-2	Explore how plants and animals are grown for food, clothing and shelter and how food is selected and prepared for healthy eating (ACTDEK003)
જ	Years 3-4	Investigate food and fibre production and food technologies used in modern and tradi- tional societies (ACTDEK012)
Design	Years 9-10	Investigate and make judgements on the ethical and sustainable production and market- ing of food and fibre (ACTDEK044)
aphy	Year 9	Challenges to food production, including land and water degradation, shortage of fresh water, competing land uses, and climate change, for Australia and other areas of the world (ACHGK063)
Geography	Year 10	Human-induced environmental changes that challenge sustainability (ACHGK070)

Water bugs kit (aquatic macroinvertebrates)

Year levels: F-9

Kit includes:

- water bug activity instructions, macroinvertebrate ID charts, playing cards and data sheets
- aquatic macroinvertebrates
- aqua net, two-way bug viewers and mega magnifying viewer
- clip-board, plastic larval sorting trays, ice-cube trays, pipettes, trays, spoons and paper towel.

Use the kit to assist in educating about:

- KI food web, food chains and life cycles
- features of living things
- water quality and waterbugs as bioindicators
- ecosystems
- adaptable resource for all years learning about natural environments, food webs, water and water quality or native species
- conduct a <u>Waterbug Blitz</u> survey.

Additional resources available for loan:

- Freshwater Invertebrates by Ralph Miller
- Critters Catalogue a guide to the aquatic invertebrates of SA inland Waters

Curriculum links

Early Years

National Quality Standards:

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EYLF Outcomes:

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	Year	Content description	
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	Year 1	Living things have a variety of external features (ACSSU017)	
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	Year 2	Living things grow, change and have offspring similar to themselves (ACSSU030)	
	Year 3	Living things can be grouped on the basis of observable features and can be	
		distinguished from non-living things. (ACSSU044)	
Ð	Year 4	Living things have life cycles (ACSSU072)	
C		Living things depend on each other and the environment to survive (ACSSU073)	
Science	Year 5	Living things have structural features and adaptations that help them to survive in their	
U U		environment (ACSSU043)	
01	Year 6	The growth and survival of living things are affected by physical conditions of their	
		environment (ACSSU094)	
	Year 7	Classification helps organise the diverse group of organisms (ACSSU111)	
-		Interactions between organisms, including the effects of human activities can be	
		represented by food chains and food webs (ACSSU112)	
	Year 9	Ecosystems consist of communities of interdependent organisms and abiotic components	
		of the environment; matter and energy flow through these systems (ACSSU176)	



Equipment

The Education program contains equipment available for loan to support your lessons.

Equipment can be picked up from the Kangaroo Island Landscape Board office.

To borrow the equipment contact your local Environmental Education Coordinator.

See a selection of the equipment we have available on the following pages.







Classroom clipboards (x20)



Scope



Telescope



Magnifying viewers, jars, glasses



PPE gloves: 25 S, 25 L



PPE hi vis vest: 10 each S, M, L, XL

Books

The Education program library contains field guides, reference and story books on a wide range of topics.

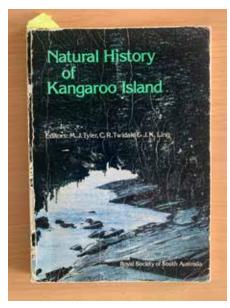
Books can be picked up from the Kangaroo Island Landscape Board office.

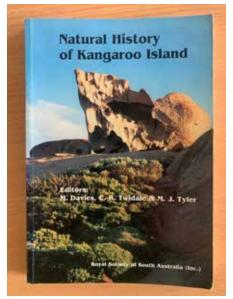
To borrow a book or enquire about subjects contact your local Environmental Education Coordinator.

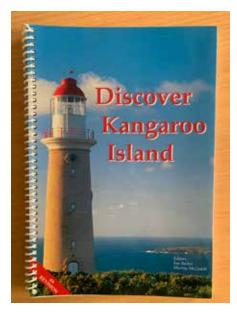
See a selection of the books we have available on the following pages.

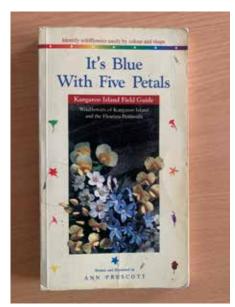


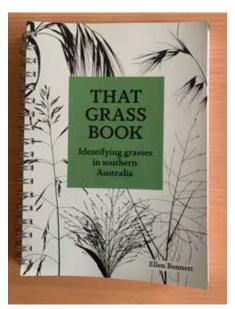


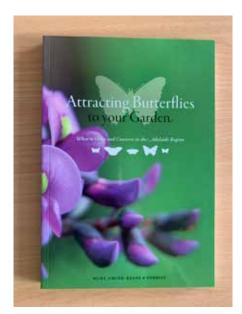




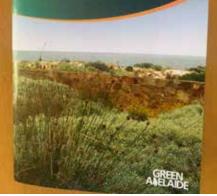






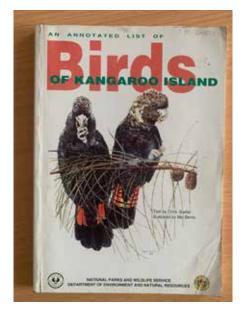


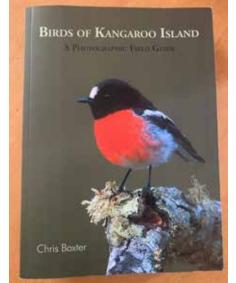
Coastal gardens

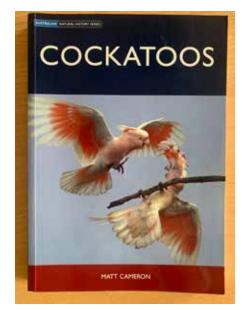


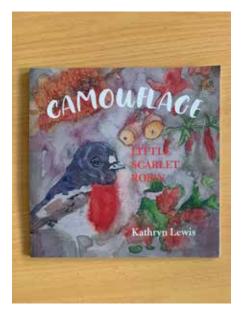


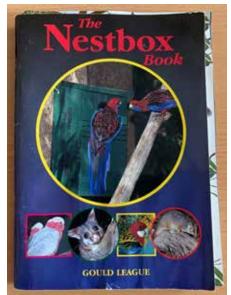


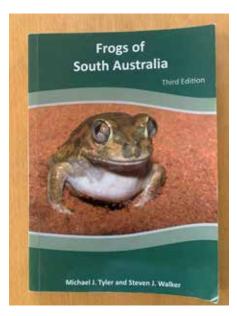


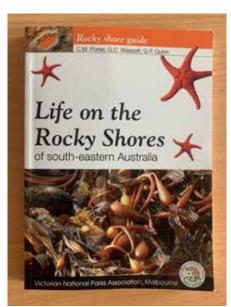




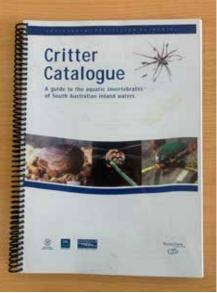












Resources

The Education program library contains resources on a wide range of topics.

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To borrow a resource or enquire about subjects contact your local Environmental Education Coordinator.

See a selection of the resources we have available on the following pages.





Specimens in resin





Resin butterfly, moth comparison

Insect leg types in resin







Grasshopper life cycle in resin

Frog development in resin

Butterfly life cycle in resin

Further curriculum links

Find out how the Kangaroo Island Landscape Board's Education program as a whole links to cross curriculum priorities.





Education program Curriculum links

The Education program provides opportunities to address the following cross-curriculum priorities.

Sustainability

The Education program supports the concept of Education for Sustainability (EFS). Education for Sustainability develops the knowledge, skills, values and world views necessary for people to act in ways that contribute to more sustainable patterns of living.

The Australian Curriculum identifies sustainability as a cross-curriculum priority, which means it is embedded in all learning areas.

Science, technology, engineering and maths (STEM) link well with the topic of sustainability. Environmental issues are often challenging, requiring complex solutions. STEM encourages the use of hands-on practical activities to help learners experiment, use new technologies, test ideas and make/create innovative solutions to real, complex problems.

The services and resources offered by the Education program enable teachers and provide the knowledge and resources to address sustainability within their programs.

All resources developed by the Education team are linked to the Australian Curriculum and the program as a whole links directly to the following **sustainability organising ideas**: OI.1 The biosphere is a dynamic system providing conditions that sustain life on Earth

OI.2 All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival

OI.3 Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems

OI.6 The sustainability of ecological, social and economic systems is achieved through informed individual and community action that values local and global equity and fairness across generations into the future

OI.7 Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments

OI.9 Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.



For more information about the Education program visit: www.landscape.sa.gov.au/ki/education

To download teacher resources, posters and other printables visit: www.landscape.sa.gov.au/ki/education/education-resources/teacher-resources

To arrange loan of kits and books contact:

Deb Laver Environmental Education Coordinator P 08 8553 2476 E <u>deb.laver@sa.gov.au</u>

A 35 Dauncey Street, Kingscote SA 5223



Invertebrates kit (insects and pollinators)

Kit includes:

- bug viewers/magnifyers
- macroinvertebrate ID charts
- "Beyond bees and butterflies" pollinator poster
- imprinted bug stones
- insect anatomy microscope slides
- real insects set in resin blocks
- "100 Australian butterflies, bees and bugs" book
- folder of various resources including butterfly gardens, local invertebrates and pollinators.

Use the kit to assist in educating about:

- mini-beasts/invertebrates
- the importance of pollinators
- features of living things
- adaptable resource that could be used for any early years or primary level learning about natural environments or native species.

Curriculum links

Early Years

National Quality Standards:

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3.2.3 Environmentally responsible: supporting children to become environmentally responsible. **EYLF Outcomes:**

Outcome 2: children are connected with and contribute to their world. Outcome 4: children are confident and involved learners.

	Year	Content description
	F	Living things have basic needs, including food and water (ACSSU002)
	Year 1	Living things have a variety of external features (ACSSU017)
	Year 2	Living things grow, change and have offspring similar to themselves (ACSSU030)
U U U U	Year 4	Living things have life cycles (ACSSU072)
U		Living things depend on each other and the environment to survive (ACSSU073)
Science	Year 5	Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)
	Year 7	Classification helps organise the diverse group of organisms (ACSSU111) Interactions between organisms, including the effects of human activities can be repre- sented by food chains and food webs (ACSSU112)

Waterwatch kit

Year levels: F-10

Kit includes:

- pH strips, EC/Salinity meter, turbidity tube
- plastic cups/jug
- water monitoring data sheet and instructions.

Use the kit to assist in educating about:

- water as a natural resource
- the importance of water quality
- use in conjunction with River Murray or wetland excursion to compare water quality
- participate in Waterwatch to assist in long -term monitoring of our waterways.

Curriculum links

Australian curriculum:		
	Year	Content description
	F	Living things have basic needs, including food and water (ACSSU002)
Ce		
	Year 4	Living things depend on each other and the environment to survive (ACSSU073)
Science	Year 6	The growth and survival of living things are affected by physical conditions of their envi- ronment (ACSSU094)
	Year 7	Some of Earth's resources are renewable, including water that cycles through the environ- ment, but others are non-renewable (ACSSU116)
Geography	Year 7	Classification of environmental resources and the forms that water takes as a resource (ACHGK037) The quantity and variability of Australia's water resources compared with other continents (ACHGK039)