

BIMBLEBOX: art – science – nature

EDUCATION RESOURCE



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Bimblebox: art – science – nature is a touring exhibition partnered by
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association with Bimblebox Nature Refuge.

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INTRODUCTION

This teacher resource kit has been developed to accompany the *Bimblebox: art – science – nature* touring exhibition launched at Redland Art Gallery, Cleveland, Queensland. The exhibition has come about through an art project created to highlight the threat to the continuation of the Bimblebox Nature Refuge due to the demands of the coal mining industry.

ABOUT BIMBLEBOX NATURE REFUGE

Bimblebox Nature Refuge is located in semi-arid, desert uplands environment approximately 50km north-west of Alpha in Central Queensland, comprising 8000 hectares of native bushland, the majority of which has never been cleared. Bimblebox also has a rich diversity of fauna including more than 150 species of birds and notably the endangered Black Throated Finch (*Poephila cincta cincta*).

Bimblebox is an example of how production and biodiversity conservation can co-exist. A small herd of beef cattle assist in the control of exotic pasture grasses, and a number of long-term research projects are aimed at generating knowledge and management practices to improve outcomes for biodiversity across the region.

About Bimblebox Art Project

Although legally recognised as a Nature Refuge and part of the National Reserve System of Protected Areas since 2002, Bimblebox is under threat. This is due to the fact that in Australia mineral exploration and mining are granted right of way over almost all other land uses. Fearing the loss of Bimblebox to coal mining interests in the region, the Bimblebox Art Project was conceived with the aims to:

- highlight the threat to the continuation of the Bimblebox Nature Refuge,
- document Bimblebox creatively, and
- show Australians what we are at risk of losing in the wider context of habitat and biodiversity.

A diverse group of artists from various parts of Eastern Australia gathered at the Bimblebox Nature Refuge in September 2012 and 2013. They camped on Bimblebox, exploring and making art to document this part of Australia. The resulting artworks build a dynamic exhibition of installation, works on paper, painting, artist books, digital storytelling and sound.

About *Bimblebox: art-science-nature*

This exhibition explores the challenging subjects of coal mining, global warming, diminishing biodiversity, the changing socio-cultural dispositions of regional communities and the role of creativity in that process. Aiming to document and creatively interpret this unique place and time, *Bimblebox: art – science – nature* may help to save this nature refuge from destruction or it will provide lasting testimony.

The exhibition is divided into the five main themes:

1. A Nature Refuge;
2. A Future Coal Mine;
3. A Model for Environmental Sustainability;
4. A Recharge Zone for the Great Artesian Basin and
5. Changing Perceptions.

ABOUT THE *BIMBLEBOX: ART-SCIENCE-NATURE* EDUCATION RESOURCE

The following elements are integral to the use of this education resource:

- Learning to look and discussion
- Responding to artworks by using the student booklet when viewing the exhibition
- Responding to the issues raised in the exhibition by undertaking some of the suggested hands on activities

Learning how to look at art and to decode images is an important feature of visual arts learning, and makes viewing and appreciating art works more interesting and enjoyable.

Using a selection of images of artworks found in the exhibition, undertake a class discussion using information and questions to lead the students through an enquiry related to the images. When students engage in these types of guided discussions they develop skills for looking at any artwork. The images can also be used as stimulus for learning in other curriculum areas.

A good framework for introducing students to ways of looking and thinking about art is to ask a series of simple questions: *What is it? [painting, installation etc] Who made it? [artist's name] What is it made from? [materials] When was it made? Where was it made? How was it made? Who was it made for? Why was it made? What is it all about?*

You can further discuss artworks by asking students to analyse various features such as the elements and principles of art and design (colour, line, shape, texture, form, space, rhythm, repetition, pattern, balance and so forth).

Hands on activities inspired by the exhibition are provided for students to undertake back at school once they have viewed and interacted with the artworks. In the two workshops, initial activities are designed to provide scaffolding for subsequent activities in the sequence so that more complex activities can be undertaken with confidence.



CURRICULUM CONNECTIONS

The information and activities designed in this education resource and student booklet complement the Australian National Curriculum.

Relevant curriculum areas, Cross Curriculum Priorities and General Capabilities are defined by a symbol.

This symbol is an indicator in recognition of alignment with year level focus and key questioning across year Levels 4-7.

The project symbols are also a stimulus to provoke the use of various subject lenses to utilise when viewing and interpreting artworks. Encourage students to view and investigate the works through the eyes of an artist, scientist, geographer, historian, conservationist, botanist, geologist, archaeologist, philosopher and Indigenous Australian perspectives.



Art



Geography



Science



History



Cross Curriculum Priorities



General Capabilities

REFERENCES AND LINKS

Bimblebox Digital Catalogue App:
(available from the App Store in May)

Bimblebox Nature Refuge:
www.bimblebox.org

Bimblebox Art Project (with blog, information on the artists, photos plus blogs about the artist residencies on Bimblebox):
<http://bimbleboxartproject.wordpress.com>

Bimblebox: art - science - nature touring exhibition website:
www.bimbleboxexhibition.com

Can we offset Biodiversity losses? The Conversation:
<https://theconversation.com/can-we-offset-biodiversity-losses-13805>

Why the Galilee Basin is worth worrying about.
The Conversation, Sonya Duos:
<https://theconversation.com/why-the-galilee-basin-is-worth-worrying-about-10959>

Talking Fire, Burning for Pastoral Management in the Desert Uplands,
by Rod Fensham and Russell Fairfax:

http://savanna.cdu.edu.au/savanna_web/publications/downloads/Talking_Fire_Desert_Uplands.pdf

National Reserve System
(Australian Government Department of Environment):
<http://www.environment.gov.au/topics/land/national-reserve-system>

The Conversation: Expanding coal exports is bad news for Australia and the world (13 September, 2013):

<https://theconversation.com/expanding-coal-exports-is-bad-news-for-australia-and-the-world-17937>

CSIRO; Climate Response:
<https://blogs.csiro.au/climate-response>

Australian Curriculum:
<http://www.australiancurriculum.edu.au>

BIMBLEBOX: art – science – nature GLOSSARY

Bimblebox: (*Eucalyptus populnea*) Also known as Poplar Box because of the shape of the leaf, is common throughout most of inland Queensland and New South Wales.

Bimble: A leisurely walk or journey.

Box: A space defined by a flat base and sides.

Fauna: The animals of a given region or period considered as a whole.

Flora: The plants of a particular region or period, listed by species and considered as a whole.

Ecosystem: A biological community of interacting organisms and their physical environment.

Biodiversity: The variety of plant and animal life in the world or in a particular habitat.

Investigation: Formal or systematic examination or research.

Interpretation: 1. An explanation or way of explaining
2. A stylistic representation of a creative work or dramatic role.

Installation: A form of modern sculpture where the artist uses sound, movement, or space as well as objects in order to make an often temporary work of art.

Frottage: The technique or process of taking a rubbing from an uneven surface to form the basis of a work of art.

Artefacts: 1. An object made by a human being, typically one of cultural or historical interest.
2. Something observed in a scientific investigation or experiment that is not naturally present but occurs as a result of the preparative or investigative procedure.

Point of view: Location from which a scene is viewed.



VISITING THE GALLERY

Preparing for your visit

To fully appreciate the exhibition it is ideal to provide the context in which the art works were created, and to interact with them in situ (in the gallery or specially set up environment). Before visiting the exhibition, prepare your students by providing them with background information about *Bimblebox: art-science-nature*, the importance of nature refuges, and the conflict between environmental sustainability and economic development (particularly with reference to the coal mining industry in Queensland). Find a specific environmental issue relevant to your locality, identifying species that are endangered to underpin a discussion of the broader issues raised by this exhibition.

It is also important to discuss how to behave in a gallery setting, particularly if this is the first time that students have been to an exhibition. Points to raise with students include: speaking quietly, being considerate of other gallery visitors, standing an appropriate distance from the art works, no touching of art works unless invited to do so (that is, when an art work is interactive: using head phones to listen to the sound for example).

During your visit

A student booklet that can be used in conjunction with viewing the exhibition has been developed to enhance their experience of the art works. Students are asked to find and identify art works, answer questions and draw their responses to some art works.

Students can work in pairs or groups of three, and discuss their answers. This should highlight how different people see different things in art works. The meaning of an artwork changes depending on what an individual brings to viewing the work as each person has different life experiences. You might like to use this as a point of discussion – how is meaning made in an art work (by the artist, the viewer, the viewing context, a combination) and is the meaning fixed?

Following your visit

The following are some ideas for using a visit to the exhibition as a starting point for additional learning across the curriculum.

Visual Art: Create your own gallery exhibition with art works students make from the activities in the teacher notes (How are art works displayed? What information is included in the label? How is an exhibition put together?)

Science: Draw a labelled diagram of a flower. Investigate why flowers are so colourful and have such varied shapes. Design a science experiment about growing a flower from a seed and draw/photograph each stage for incorporation into a poster/power point about plant life cycles, OR Investigate different types of coal and coal mining and the impact that they have on the landscape.

Geography: Source, research and create four large wall maps of Australia using cartographic conventions combined with creative designs highlighting the aesthetic, cultural and spiritual value of nature refuges, national and marine park regions.

Map 1 – Indigenous Australian tribal regions; Map 2 – Australia 1900; Map 3 – Australia 2014 and Map 4 – Australia 2064

BACK AT SCHOOL WORKSHOPS

WORKSHOP 1 – BIRDS



Following a guided discussion about Lindsay's artwork set a research task for students about endangered bird species in your region. Create a profile of that bird, include an image of the bird, and document its features, their common and scientific names, details of their habitat, diet and nesting habits.



15 endangered black throated finches (*Memento mori for Bimblebox*) 2013, digital photograph on Hahnemuhle paper. Artist: Emma Lindsay.

Context for making art

Create an installation artwork that gets people thinking and talking about the loss of a bird species in your regional area, OR create your own endangered species made up of characteristics of various birds. Use your imagination to create the bird's profile.

Experimenting with materials and ideas

Begin your art study of birds by completing a series of drawings using various drawing media such as 2B pencils, charcoal, textas and oil pastels. Fold a piece of A3 cartridge in four. Carefully observe either a bird model from the museum (best) or a photo. Then undertake four drawings each using a different material (pencil, charcoal, crayon, texta): 1. Continuous line; 2. Blind contour (look at bird, not at drawing), 3. Rapid drawing (30 seconds) and finally 4. 3-5 minute drawing. It is good practice to demonstrate drawing techniques to students prior to each drawing activity.

Then, referencing the research images of an endangered bird complete a labelled pencil drawing. This is a more sustained drawing that should take at least 15 minutes. Instruct students to start by sketching large shapes first, then smaller shapes and lastly fine details.



Clay and Plasticine 3D Bird

Materials: Paper clay, Modelling tools, Plasticine – various colours, Natural materials – feathers/leaves/twigs/sticks, Clay board and cloth, Egg cup of water and PVA glue

Construction: 1. Briefly massage clay to remove air bubbles. Roll a ball to the required size and cut in two, rolling these into two even sized balls. 2. Press thumbs into one ball and indent, continuing to press and pinch to form a pot like shape. Keep the width of clay to at least 5mm. Repeat with the other ball of clay so that you have two pots. Score and wet edges so that two pots can be joined to form hollow body. Carefully pierce with biro to allow air in to dry. 3. Sculpt additional features of the bird, including head, beak, eye folds, wings and tail using scoring and wetting technique to join to body. Use found objects for legs (sticks) and feathers and leaves to embellish wings. 4. When completely dry use plasticine to build patterns and features of bird onto clay. Finally seal with PVA glue.

Respond: Write an artist statement using the framework for looking at art described on P1.

WORKSHOP 2 – WORKING AS A SCIENTIST & ARTIST



Look at Orr's artwork and facilitate discussion based on the following concepts: point of view and unusual materials for artmaking.

The term 'view' has a number of varying meanings: *ability to see something or to be seen from a particular place - an aerial view, a birds eye view; an inspection of things; sight or prospect; work of art depicting a sight of natural scenery, or a particular way of considering or regarding something - an attitude or opinion or strong political views.*

In their booklet students noted materials used to make artworks in the exhibition – discuss the more unusual materials.



Undertake a scientific investigation

Plan a scientific investigation of various natural materials from the local environment that can be used as paint. Select a number of materials to prepare and test. Design methods for preparing the materials (e.g. grinding, crushing, tearing etc). Decide on suitable binding materials to test with the prepared natural materials such as water, juice or glue. Students should predict which they think will be the most suitable mixture for painting with and then test to find the mixtures that give the best consistency and colour for painting. Conduct the experiment and document the results. Make observations and recommendations on the materials that an environmental artist could use for best results in their artwork. Write a science report that includes all the above information.

Context for making art

Responding to Orr's practice (unusual view point and materials) and students' new knowledge about the use of natural materials in artworks, create an artwork that records the day sky from a perspective that creates an interesting view.

Experimenting with materials and ideas

Select different sites in the school grounds that include natural and built environment elements. Using paper on a clipboard and pencil, students place themselves so that they have an unusual viewpoint when drawing what they see. Make a series of line drawings that document the contours of various views. Share the drawings with the class and discuss the varying views and how these images impact on thoughts about the spaces that have been drawn.

PAINTING: CHANGING THE VIEW

Materials: Paints from science investigation, Brushes/sticks, Various papers – cartridge, newsprint tissue, brown craft, handmade.

Process: Consider the view and drawing that you like best. Using this work for inspiration create a series of four images of the same view using different papers and paints. Dribble, dip, dab, drag and play with the properties of the natural paint.

Display: Formally display the four images side by side accompanied by the scientific report on the making of paints using natural materials and binders.

Image left: Bimblebox Sky Map 2013, Bimblebox sap on blind embossed rag paper. Artist: Glenda Orr.