



# Helping Hands for Habitat

Series of 5 Lesson Plans

## OVERVIEW

To develop students' understandings of the impact that humans have on animals in terms of our purchasing and disposal choices. To support students to consider ways to lessen this impact

## PHASE OF LEARNING

Early Childhood (Yr3)

## LEARNING AREA/S

- Science: Acting responsibly (re 'products of science'); Life and Living; Earth and Beyond
- Society and Environment: Resources/Active Citizenship
- English: Speaking

## VALUES

Environmental Responsibility; Civics and Citizenship

## K – 12 SYLLLABUS SCOPE AND SEQUENCE/S

- Science:
  - Life and Living – Interdependence of living things (Yr3) - people need to care for living things and places where they live – not polluting the environment; different environments contain different living and non-living things. An environment can contain different habitats
  - Earth and Beyond – Sustainability of life and wise resource use (Yr3) – ways to use resources wisely at home/school or in the local community; caring for places
- Society and Environment:
  - Resources/Active Citizenship – Using the principles of sustainability, children should be taught to:
    - Value and respect environments and habitats
    - Conserve resources and preserve environments and habitats
    - Enhance environments (e.g. replanting)
  - Active Citizenship – Resource (1) Sustainable Schools Initiative WA (AuSSI-WA): Example of planting for biodiversity – Action Learning Areas > Biodiversity > Glen Forrest Primary: Revegetating Nyaania Creek

## LESSON 1

### OVERVIEW

For students to develop an understanding of habitats and to develop knowledge regarding a range of habitats for different animals.

### TIME

40 minutes

### MATERIALS

- Set of six habitat photos one for each of the following: forest, desert, arid inland, rainforest, fresh water (lakes or rivers) and ocean. Images can be downloaded from the Department of the Environment, Water, Heritage and the Arts Image Data base from the Online Photo Gallery.  
<http://www.environment.gov.au/about/media/imagedb/index.html>

(These pictures will be the basis for a class display.)

- 6 pieces of butcher's paper
- 1 felt pen
- 6 pieces of lined paper
- 6 pencils
- For information and activities on climate change go to the AuSSI Website and click on the Climate Change portal.< <http://www.det.wa.edu.au/curriculumsupport/sustainableschools/detcms/portal/> >

## OUTLINE

- Ask students what a 'habitat' is. (An alternative word is 'home'.) Ask students to describe/name some different habitats. The teacher may need to provide clues to elicit these: forest, desert, arid inland, rainforest, fresh water, ocean.
- As students name the habitats, the teacher records each name as a heading on a separate sheet of butcher's paper.
- Students brainstorm elements that they would expect to have in each habitat including living and non-living things. The teacher records living and non-living things under the appropriate heading on the sheets of butcher's paper.
- The teacher can discuss living and non-living as items come up, and code the living with an 'L' and the non-living with an 'NL'.
- Put students into six groups, with each group assigned one of the habitats.
- Students use the 'living' list to classify items into plants and animals.
- Students choose a scribe to write their list on the lined paper.
- As a whole class, students are shown photographs of the 6 different habitats. Discuss the pictures. What things did the students include? What elements might they have missed?
- Pin or Blu-Tack the habitat pictures to a display surface.
- Groups attach their respective animals (and plants) lists to the appropriate habitat.

\*In science, 'living' is used to describe anything that is or has ever been alive (ant, flower, seed, road kill, log); non-living is used to describe anything that is not now or has ever been alive (rock, mountain, glass, gold ring).

## FOCUS QUESTIONS

- What are some of the main Australian habitats?
- What are the key non-living features of each habitat?
- What are the key living features of each habitat?

## ASSESSMENT

- Oral contributions to group discussions
- Written group lists (number of animals, relevance of animals (e.g. no tigers), no non-living items included).

## EXTENSION

- Students identify which living or non-living things each of the habitats have in common and give reasons for their answers.

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## LESSON 2

## OVERVIEW

For students to develop an understanding of the differing needs of different animals and the difference between needs and wants.

## TIME

40 minutes

## MATERIALS

- Old magazines and newspapers
- 6 sheets of A3 paper
- Pencils
- Scissors and glue per student

## OUTLINE

- Ask what needs humans have.
- Discuss with students the difference between needs and wants.
- Elicit from the students that animals have needs, as opposed to wants. Bring out the point that different animals have different adaptations to help them satisfy their needs, specific to their habitat.
- Divide students into six groups. Each group is given a sheet of A3 paper.
- Direct the students to divide their sheet of paper into two columns by folding it in half length-wise. Label the left column 'PEOPLE' The right column is labelled KANGAROO for one group, NUMBAT, FROG, LIZARD, SWAN, and PENGUIN for the others. Teachers can use any other animals that belong in the respective habitats. Information sheets on animals can be downloaded from the Perth Zoo website. Students are asked to cut out magazine pictures (or draw if there is no useful magazine picture), of the corresponding need for people and their animal on their paper.
- Each group shows their picture sheet to the class and explains why they included the images that they did.
- Discuss group presentations, clarifying animals' respective needs. Elicit from the students that varying habitats affect needs.
- Groups connect their respective sheets with appropriate habitat on the display. For example, the students with the kangaroo may attach, or connect with string or arrows, their list to the 'arid inland' habitat picture.

## FOCUS QUESTIONS

- What are needs? Name some human needs.
- What are wants? Name some human wants.
- Are animal needs the same as human needs?
- Do animals have wants?

## ASSESSMENT

- A written list by each student of their needs, their wants and what animals in general need.

## EXTENSION

- Children collect pictures of everyday items and classify them according to needs and wants. Some items can be tricky – we need to wash, but do we need the plastic bottle? The shampoo with palm oil? The individual sachets?

## LESSON 3

### OVERVIEW

For students to understand what 'rubbish' is, where it comes from i.e. discarded products and its potential impact on animals.

## TIME

40 minutes

## MATERIALS

- Old magazines and newspapers (with pictures of products e.g. canned drinks, plastic bags, etc)
- Photographic images of impact of litter on wildlife

## OUTLINE

- Students brainstorm what 'rubbish' is including types of rubbish, e.g. paper, plastic (bags, bottles, etc), glass, aluminium cans, etc.
- Students scan magazines for *products* that could potentially end up as rubbish (e.g. cans, fishing line, car tyres, etc) and cut these out.
- In their original habitat groups, students discuss how the pictures that they cut out could affect their particular habitat.
- Have each group of students pick four of their pictures, then make a label explaining the damage it could do in their habitat. (e.g. fishing line could get tangled around a bird's leg; plastic bags or balloons could be ingested if mistaken for food). Attach this to the display.
- Retain the newspapers for Lesson 5.

## FOCUS QUESTIONS

- What is rubbish?
- Does most rubbish come from needs or wants?
- How can rubbish have a negative impact on animals?
- Would particular types of litter be more or less harmful in one habitat compared to another habitat?

## ASSESSMENT

- Group discussion
- Labels of how rubbish items affect animals in their group's habitat

## EXTENSION

- Look at non-Australian habitats. Discuss how what individuals do can affect animals and habitats in other parts of the world.
- Use a particular piece of rubbish as an example, perhaps an aluminium can. Put the six habitats in the order that you think would be most affected to least affected by that particular item. Explain why.

## LESSON 4

### OVERVIEW

For students to understand how they can reduce rubbish that they personally generate and how to dispose of what is left, to the benefit of local animals.

### TIME

40 minutes

### MATERIALS

- Whiteboard
- Whiteboard marker

- A4 printer paper

## OUTLINE

- Students brainstorm how they can reduce the rubbish they generate. (Teachers may want to revisit needs versus wants.) Elicit from them the alternatives: reduce, reuse, recycle.
- Write down suggestions on a whiteboard.
- Students design and create 'I can do that' cards for the classroom. Suggested format: image of a piece of litter above text (behind text if created on the computer). Text consists of the damage that the piece of litter can do. A second section of text has the heading 'I can do that!' followed by suggestions of how we could creatively reuse, change purchasing behaviour, or as a last resort, recycle that item. An image of an animal that would benefit is added.
- Pledge cards can be attached to the relevant habitat sections of the class display.

## FOCUS QUESTIONS

- How could we (I) reduce the rubbish we (I) generate?
- How could we reuse some of the things that we throw away?
- What animals will/could benefit from my behaviour? Directly? Indirectly?

## ASSESSMENT

- 'I can do that!' sheets

## EXTENSION

- In groups children can brainstorm scenarios of people performing actions that are bad for the environment, and the consequent damage to an animal. This scenario can be performed as a mime for the rest of the class. Another student can mime the 'antidote'. This can be enlarged and adapted as the basis for an assembly item.

# LESSON 5

## OVERVIEW

For students to undertake a specific activity to reduce rubbish and create or enhance local habitat

## TIME

1 hour, including planting

Prior to the lesson, seeds or seedlings should be sourced\*. Local suppliers may be able to help. The teacher may wish to discuss suitable plants with the students.

\*Apac Inc. <http://www.argo.net.au/apac/>

\*Men of the Trees [www.MenOfTheTrees.com.au](http://www.MenOfTheTrees.com.au)

## MATERIALS

- Old newspapers
- Cardboard rolls from plastic wrap cut into 10 cm long tubes
- Stapler and staples
- Sand, soil or potting mix
- Seeds or seedlings

## OUTLINE

- Students make paper pots from magazines and newspapers used previously.

1. Keep the newspaper closed. Use the centerfold of the newspaper for the top. (i.e. no loose, fringy bits); 4 folded sheets (8 ply in total) works best.
2. Cut a strip across the folded newspaper 3 cm longer than the cardboard roll. (This 3 cm is the bit that will fold under for the bottom.)
3. Wrap the roll with paper, leaving 1 cm of the roll sticking out the top.
4. Fold the paper at the bottom under. (The curves mean that it will not unravel.)
5. Staple the top, without stapling the cardboard roll.
6. Remove cardboard roll from the top.
7. Fill with soil and an appropriate (locally sourced) plant or seeds. Water.

The pot will hold together, even when damp, for over a month. The pot can be planted in the ground without removing it, to reduce root shock. The pot will degrade naturally in the soil.

- Seeds can be raised to plant in the gardens at school, at home or for a school fete.
- Discuss how to transplant the seedling into the garden. If the teacher has no expertise, a parent may be willing to come in and demonstrate.

## FOCUS QUESTIONS

- What positive action can we take to increase habitat?
- What plants would you like to grow that would benefit our native fauna?
- What can we do with the rest of the bits of newspaper?

## ASSESSMENT

- Students write a set of instructions for making a plant pot, including diagrams.
- Students can list the steps needed in planting a seed.
- Students detail what local fauna will benefit from this planting activity

## EXTENSION

- Make your own paper from recycled egg cartons and newspaper. Look for recipes on the Internet.
- Join Perth Zoo's Fodder Program (free) and grow food to feed Perth Zoo's animals.  
<http://www.perthzoo.wa.gov.au/Schools/Special-Programs/Community-Service-Program/>

### Suggested alternative activities and action:

1. Look at the Australian Sustainable Schools Initiative (AuSSI) Website for case studies of schools with extensive sustainable programs.  
<http://www.det.wa.edu.au/curriculum/support/sustainable-schools/detcms/navigation/action-learning-areas/?oid=MultiPartArticle-id-1861255>
2. Do a litter pick and associated activities. Link to Clean Up Australia <http://www.cleanup.org.au/au/>
3. Encourage waste-free lunches. Link to the Waste Wise Schools Program <http://www.wastewise.wa.gov.au/>
4. Drain stencilling - link to Phosphorus Action Group  
<http://www.sercul.org.au/index.html>