

AS4 - Biodiversity Walk

Syllabus references

Outcomes

Core Content: 4.8.2 classification a) classify living things according to structural features
b) identify a range of animals using simple keys
4.10 a) describe some adaptations of living things to factors in their environment

Skills: 4.15 a) make and record observations and measurements accurately

Pre – reading

C1 Biodiversity Information Sheet,
E1 Biodiversity Environmental Issues Sheet

Sub – Catchment Information Sheet for your school’s sub-catchment

1. Pre-walk Activities

Estimated Time 2 hours

Plan the walk

- a. Identify the sub-catchment that your school is located in. Identify where the catchment or sub-catchment boundaries are in relation to the landscape. This is best done with the assistance of topographic maps and aerial photographs.
- b. On the aerial photo and topographic maps identify vegetation zones. Choose a path for your walk.

2. Biodiversity Walk

Estimated time: Half Day

Valuable first hand information can be gathered by direct observation.

Optional equipment: Field Guides and binoculars

Key features to look for along the walk:

- Keep an eye out for any signs of pollution or other threats to biodiversity. As you walk keep a look at for birds. Complete the Bird Sighting Record Sheet. If you are not sure of the bird’s name, carefully record its size and colouring. Then check out your bird field guide, school library for bird books.
- Note what other animals you see, if you don’t see any you may see evidence of their presence eg tracks, trails, burrows or you may hear their calls.
- Observe the major plant communities and weeds. Note any relationships you observe between plant communities and soil type.
- Collect specimens of weeds to press later. Use the weed and plant identification guides provided with this kit, or go to school library.

4. Make a Sketch Map

As you walk the catchment gather the following information for a birds eye view sketch map:

- Location of catchment boundaries
- Path of water course
- Native vegetation
- Parks and playing fields
- Location of your school
- Major roads and railways

Decide on a system of symbols for each of the above and use these to draw a rough sketch map of the route taken for the walk.

5. Sit Quietly

Sit quietly for a few minutes.

Look around you – what do you feel as you sit there?

Describe the vegetation cover.

What proportion is native or exotic plants?

Describe any visible signs of pollution.

Close your eyes for a few moments. What sounds do you here?

Make a note of your thoughts, feelings and impressions. Be creative!

After the Biodiversity Walk

6. Make a Biodiversity Map

Back in the classroom, create a large-scale catchment map. Mark in catchment boundaries. (A topographic map and aerial photographs will help). Use coloured pencils or crayons to illustrate the information collected during the catchment walk. Each group can report to the entire class about what they observed.

7. Make a Herbarium

- a. Use the weed guide to identify any weeds collected during the walk and use plants guide to identify native species.
- b. Collect small specimens of plants (leaves, flowers) for drying and pressing.
- c. Place the plants between a few sheets of newspaper and cover with heavy books.
- d. Change the newspaper regularly to prevent the plant going mouldy.
- e. Once the plants are dry and pressed, they can be stored in plastic sleeves or laminated for preservation.
- f. Research the features of the plants collected during the walk and include the background information within the herbarium.
- g. Label each plant with common name, scientific name, location found and background information.

8. Research the birds, animals and plants observed during the walk.

- a. Each student selects one plant and one animal observed during the walk.
- b. Students research the plants and animals and prepare a report to present to the class about their findings. The report should include information about the distribution and ecology of the selected species.

Links and Resources

UPRC Education Resource Kit:

- ◆ C1 Biodiversity Overview
- ◆ C10 Vegetation Communities
- ◆ E1 Biodiversity
- ◆ E8 Weeds

Animal Sightings Record Sheet

Record animal sightings on this sheet. If you are unsure of the bird or animal name, check in your field guide or your library.

What does the animal look like? What is its approximate size?	Alone or in a group?	What was it doing?	Where did you see it?	What is its name?
<i>Small, maybe 10 cms from beak to tail, blue, black and brownish bird with straight tail sticking up in the air.</i>	<i>In a group of 6 birds</i>	<i>Hopping around on the ground, catching insects.</i>	<i>On the edge of the creek, near site signs for bush regeneration.</i>	<i>Blue wren</i>

Pollutant Sighting Record Sheet

Identify the problems that could impact on the environment of the catchment.

What did you see?	Where?	Source of Problem
<i>Litter caught in the reeds in the creek bed</i>	<i>Domain Creek.</i>	<i>People dropping litter on streets and pathways which is washed into creek during rain.</i>

