



Biodiversity Up Close

An audit of biodiversity in the school ground

Condensed Version

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LandLearn

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A Sustainability Education program of the Department of Primary Industries.

This booklet was compiled by Kathryn Goyen, Professional Development Coordinator, LandLearn, (2008).

Supported by LandLearn staff: Sheree Burke, Hayley Broecker, Lydia Fehring, Sherin Halliday, Jim Mead, Kylie Tuhan and Heather Wildes.

LandLearn aims to:

- Engage students in active, experiential learning which can include on-going participation in community environmental management projects
- Encourage and support the incorporation of studies about sustainable agriculture and natural resources management into schools' curricula
- Provide support for teachers and school communities through professional development, current learning and teaching resources and student activities that make learning fun
- Promote partnerships between schools and community groups, such as Landcare, and between urban and rural school communities.

Key messages

Caring for our land and its resources is a shared responsibility. Learning and action now is an investment in a future with:

- A sustainable environment
- Quality food and natural fibres produced by farmers using responsible practices
- Viable rural and regional communities
- Challenging, valued and purposeful careers and employment in agriculture-based industries.

Support for schools

Visit the LandLearn website: www.landlearn.net.au

As a provider of curriculum resources and support, LandLearn works in the context of a holistic, integrated approach to environment education. Schools can adapt the learning activities and teaching resources to suit their particular curriculum structure, pedagogical approach and learning themes. Sustainability and the environment, including sustainable agriculture as the source of food and natural fibre, can provide an integrating framework for the implementation of the *Victorian Essential Learning Standards*.

Principals, Curriculum and Professional Development Coordinators and teachers are invited to contact LandLearn to discuss the support LandLearn offers to schools, including professional development and fieldwork. Themes we can assist with include sustainable agriculture as the source of food and natural fibre, school gardens (especially edible ones) as learning environments, landcare, natural resource management, biodiversity in a range of landscapes, all underpinned by the principles of sustainability education.

LandLearn teaching and learning resources aim to support transformative learning that will empower students to take responsibility for their actions and for behaviour change to contribute to a sustainable future. The resources include activities to encourage students as individuals, and whole school communities to participate in local community action and projects to support relevant local and regional management plans.

Email: landlearn.program@dpi.vic.gov.au

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How to use the Biodiversity Up Close Audit Tool

This assessment tool is designed to support the Resource Smart: Biodiversity Module of the Australian Sustainable Schools Initiative – Victoria (AuSSI Vic) by providing a rigorous and easy to use tool to assess the biodiversity in the school ground. It can also be used to assess the biodiversity within an area of native habitat found close to the school. This tool has been adapted from the *Environmental Management in Agriculture Worksheets*. Department of Sustainability and Environment (2005).

It is intended that the Biodiversity Up Close tool will be used a number of times within a school to provide snapshots of the state of biodiversity in the school ground over time. It is hoped that this will support long term and short term improvements to be made within the school ground.

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There are a number of steps in undertaking the audit:

Step 1: Obtaining an Aerial Photograph

Step 2: Determining the Size of the School Ground in Hectares

Step 3: Determining the Vegetation Class/Habitat Type

Step 4: Identifying the surfaces within the School Ground and Surrounding Vegetation

Step 5: Undertaking the Habitat Quality Assessment - assessing: Tree Measurements, Understorey and Vegetation Structure, Environmental Weeds, Organic Litter, Logs and Rocks, Soil Management, Habitat Extras, Quick Habitat Quality Assessment.

Step 6: Undertaking the Flora and Fauna Diversity Assessment

Step 7: Undertaking the *Action Plan for Biodiversity*

This tool can be used as an audit/teaching and learning tool or as an audit tool only. Whichever way it is used, the intention is to raise awareness of the factors that contribute to high quality habitat and biodiversity in an area.

Using the tool with students:

Depending on the Level that your class is at, you may wish to work through each habitat assessment sheet as a class, or split the class into small groups to fill in a number of sheets at the one time and report back to the group.



Students assessing biodiversity in a Plains Woodland Habitat.

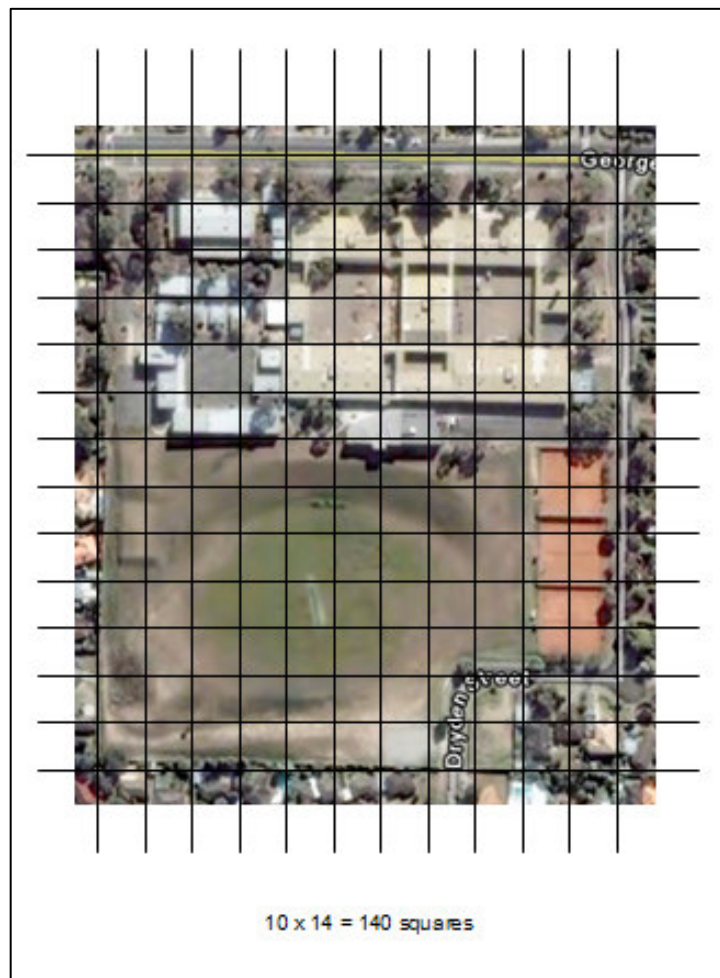
Step 1: Obtaining an Aerial Photograph

To begin your school ground biodiversity audit, you must first obtain an aerial photograph.

Your school may already have one, you may need to contact your local council, or you may be able to use Google Earth (in regional areas Google Earth maps are often poor quality).

The Google Earth mapping tool is found at <http://earth.google.com>

1. Enter your school name and suburb in the 'Fly to' search engine.
2. Zoom in on your school until it fills the frame of the screen, rotate the image so that the school boundaries are square with the frame.
3. Click on 'Edit, copy, copy image'. (Copy three images – one close up of the school ground, and maps showing the land in a 1km and 5km radius around the school.)
4. Paste the images into blank Word Documents – drag the corners of the image to make them fit the size of the page. Draw a grid over the map showing the close up of the school ground (as shown below) and count the number of squares covering the school ground.
5. Finally, determine the area of your school ground in m^2 using one of the methods below:
 - a. Use Google Earth - Go to 'Tools, Ruler, Line' and change the unit of measurement to 'metres'. Use this 'ruler, line' function to obtain the dimensions of your school ground and calculate the area of your school.
 - b. Take accurate measurements on the ground with your students using a trundle wheel.
 - c. Use a pre-existing map that has a scale to work out the area covered by the school.





Step 2: Determining the Size of the School Ground in Hectares

1. Work out the area of your school ground in square metres (m²).

For a rectangular/square shaped school simply multiply the school boundary length by width.

If your school is an irregular shape, break it up into smaller shapes and calculate the area of each individually and then add them up. (The area of a triangle = base x height ÷ 2)

Eg. To calculate the area of a school which has a length of 100m and a width of 75m:

$$100 \times 75 = 7,500 \text{ m}^2$$

Use the space below to calculate the area of your school in m² :

2. Convert area from m² to hectares (ha).

Knowing the area of your school in hectares is important as it allows comparisons to be made accurately between schools of differing size.

To calculate the number of hectares in the school ground divide the school area by the area of a hectare (1 hectare = 100m x 100m = 10,000 m².)

Eg. To calculate the number of hectares in a school of 7,500 m²:

$$7,500 \div 10,000 = 0.75 \text{ hectares (or } \frac{3}{4} \text{ of a hectare).}$$

Calculate the area of your school in hectares (ha)

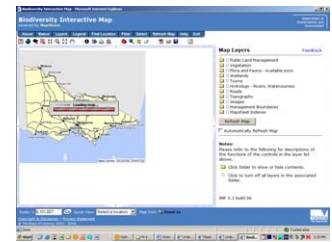
School area (m²) _____ ÷ 10,000 = _____ **ha**

You will need this number for the *Habitat Quality Assessment* calculations.

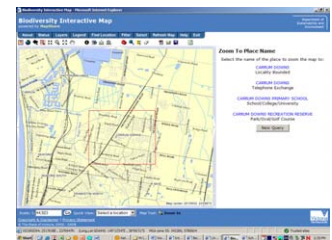
Step 3: Determining the Ecological Vegetation Class / Habitat Type


Knowing the Ecological Vegetation Class (EVC) in the school ground is important as it enables appropriate plants to be planted when undertaking revegetation works. To determine the type of habitat covering your school ground currently and in the past (1970s), follow the instructions given below.

Step 1: Go to www.dse.vic.gov.au > Interactive Maps > Biodiversity Interactive maps. The window pictured will open.



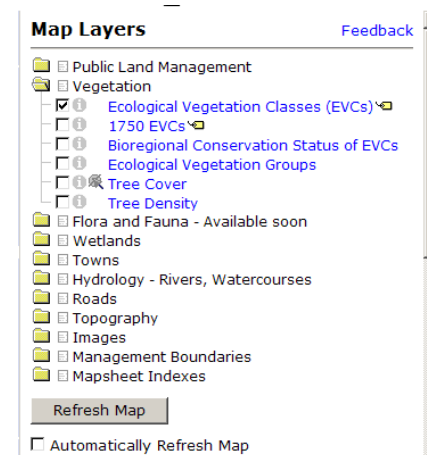
Step 2: Click on Find location > Place Name. Enter the suburb of your study area. Click on the school if it is shown or the locality bounded option for the suburb.




Step 3: Use the  icon to zoom in on your study area.

Step 4: Click on Layers. Next open the vegetation folder and place a tick in the Ecological Vegetation Classes (EVCs) box. Click Refresh Map.

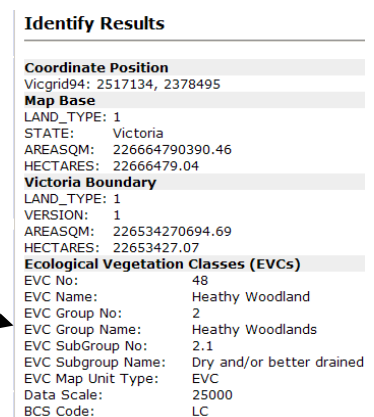
Note: If no colours appear over your study area click on Vegetation and place a tick in the 1750s EVCs box. Click Refresh Map.



Step 5: To determine the EVC click on the  icon and then click on the shaded part of the map. An Identify Results page will appear.

Step 6: The Vegetation Group or Habitat that you will use for the purposes of this audit is found under the EVC Group Name (eg. Heathy Woodlands = WOODLANDS.)

Step 7: Use the mail icon  to e-mail a copy of the map to yourself.



Teacher Notes: Habitat Quality Assessment

Undertaking an assessment of the quality of habitat present in the school ground involves measuring different variables. For each variable there are *Student Worksheets* to assist with data collection.

- ◆ Surfaces within the School Ground
- ◆ Tree Measurements
- ◆ Understorey and Vegetation Structure
- ◆ Environmental Weeds
- ◆ Organic Litter
- ◆ Logs and Rocks
- ◆ Soil Management
- ◆ Habitat Extras

There are a number of ways to undertake the habitat quality assessment component of the audit tool.

Option 1 - You may wish to measure each component of the tool with your whole class (especially with junior students). In this case completing the habitat quality assessment will take a number of weeks to undertake.

Option 2 - Break the class into pairs or groups of three. Assign each group with a habitat quality type to record. (Each habitat quality type may therefore be assessed by more than one group.)

As some components are quicker to measure than others it is recommended that groups are broken up as follows:

- ◆ Surfaces within the School Ground
- ◆ Tree Measurements (Number of Trees and Habitat Trees)
- ◆ Understorey and Vegetation Structure
- ◆ Environmental Weeds
- ◆ Organic Litter
- ◆ Logs and Rocks & Soil Management
- ◆ Habitat Extras

As a class explain any new words and discuss the importance of each variable to be measured. You may wish to send students out to collect data at the same time or, have a parent, staff member or an expert from a local Landcare or community group assist groups one at a time to collect data.

Investigations should be written up as scientific studies and calculations made using the *Student Report Sheets*. Collate Class results using the *Quick School Ground Habitat Quality Assessment* and calculate a Habitat Quality score.

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Quick School Ground Habitat Quality Assessment



Attribute	Description	Ranking	Score
Number of Trees/ha = = $\frac{\text{number of trees}}{\text{number of hectares in the school}}$	< 10 trees / ha	Red	0
	10 – 20 trees / ha	Yellow	5
	> 20 trees / ha	Deep Green	10
Number of Habitat Trees/ha = = $\frac{\text{number of habitat trees}}{\text{number of hectares in the school}}$	No large trees	Red	0
	< 5 habitat trees/ha	Orange	2
	5 – 10 habitat trees/ha	Yellow	5
	> 10 habitat trees/ha	Light Green	7
	> 10 native habitat trees/ha	Deep Green	10
Understorey and Vegetation Structure <u>Underline when present:</u> Understorey: Shrub (1-5m), Small Shrub < 1m, Tall grass > 1m, Scrambler/climber Herb-layer: Fern, Moss/Lichen, Orchids, Native Grasses < 0.5m, Other _____	< 5% understorey cover in the school ground	Red	0
	5 – 15% understorey cover in the school ground	Orange	7
	15 – 25% understorey cover in the school ground	Yellow	13
	> 25% understorey cover in the school ground	Light Green	19
	> 25% native understorey cover in the school ground	Deep Green	25
Environmental Weeds	No action taken to identify or remove weeds	Red	0
	Weeds present - some action taken to manage weeds	Yellow	8
	No weeds present	Deep Green	15
Organic Litter = Organic litter includes leaves, twigs, small branches, tanbark and mulch < 30 cm circumference	< 25% cover of organic litter in gardens	Red	0
	25 – 49% cover of organic litter in gardens	Orange	2
	50 – 74% cover of organic litter in gardens	Yellow	5
	75 – 99% cover of organic litter in gardens	Light Green	7
	100% cover of organic litter in gardens	Deep Green	10
Logs and Rocks/ha = = $\frac{\text{number of logs and rocks}}{\text{number of hectares in the school}}$	No Logs or rocks	Red	0
	3 – 5 logs or rocks/ha	Yellow	3
	> 5 logs or rocks/ha	Deep Green	5
Soil Management	Soil management issues present, no action or plan to manage these made	Red	0
	Soil management issues present, some attempt made to manage these	Yellow	3
	Soil managed effectively	Deep Green	5
Habitat Extras <u>Underline when present:</u> Composting area, Vegetable garden/ orchard, Lids on bins or bins located inside the buildings, Indigenous plant propagation, Lizard lounge, Plants and/or animals in the classroom, Frog pond/wetland, Plan to decrease rubbish in the school ground, Bird bath, Indigenous food garden, Plants (flora) in the school ground identified and labelled, Nest boxes, List of animals (fauna) in the school ground maintained, Limited spraying of chemicals in the school ground, Fallen branches and leaf litter remaining in garden beds, Water from taps used to water gardens, Native plants naturally regenerating, Other	0 enhancements underlined	Red	0
	< 3 enhancements underlined	Orange	5
	3 – 6 enhancements underlined	Yellow	10
	7 – 10 enhancements underlined	Light Green	15
	> 10 enhancements underlined	Deep Green	20
TOTAL (out of 100)	Aim for score > 75		

Student Worksheet: Surfaces within the School Ground



Creature Feature

Sulphur-crested Cockatoos are large white parrots up to 50cm in height.

Cockatoos can be found nesting in large **trees** or feeding on the ground amongst the **grass** in school grounds.

New words: Native, Exotic, Percentage, Estimate

What to do:

Step 1: Walk around the school ground and shade on the map (using different coloured pens), where each type of surface is found.

Step 2: Count the number of squares coloured in for each type of surface and enter this in the table below.

Step 3: Calculate the percentage cover of each surface.

Surface	Estimate	Number of boxes covered by surface type		Total number of boxes covering the school ground = ____		Percentage cover
<i>Eg: Buildings</i>		69	÷	100	X 100	= 69%
Built structures / roofs			÷		X 100	=
Hard impermeable surfaces			÷		X 100	=
Soft surfaces						
<i>Tree and/or shrub cover (indigenous or native)</i>			÷		X 100	=
<i>Tree and/or shrub cover (exotic)</i>			÷		X 100	=
<i>Grass cover (indigenous or native)</i>			÷		X 100	=
<i>Grass cover (exotics – lawns / ovals)</i>			÷		X 100	=
<i>Ornamentals and vegetable gardens</i>			÷		X 100	=
<i>Mulch cover</i>			÷		X 100	=

Student Worksheet: Understorey and Vegetation Structure



Creature Feature

The **Chocolate Lily** is an **understorey** plant that smells like chocolate! The beautiful purple coloured flowers produce a chocolate smell to attract insects to aid in pollination.

Unfortunately this flower does not taste like chocolate!!

New words: Overstorey, Understorey, Herb-layer, Pollination, Estimate, Percentage, Shrub

What to do:

Step 1: Estimate the percentage of your school ground where understorey is present (*Understorey includes all plants that grow below trees excluding lawn.*) _____

Step 2: Walk around the school ground and shade in on the map where understorey is found.

Step 3: Tick below the types of vegetation you find in the school ground:

Overstorey:

Tree > 5m

Understorey:

Shrub (1-5m)

Small Shrub < 1m

Scrambler/climber

Tall grass (or grass like) > 1m

Herb-layer:

Fern

Orchids

Small grass (or grass like) < 0.5m

Moss/Lichen

Other _____

Step 4: Are most of these plants native or exotic? _____

Step 5: Count the total number of boxes that are shaded on the map _____

Student Worksheet: Organic Litter



Creature Feature

Slaters look like mini armadillos! They like to live in dark and moist environments such as **leaf litter**, compost heaps, under rocks and logs.

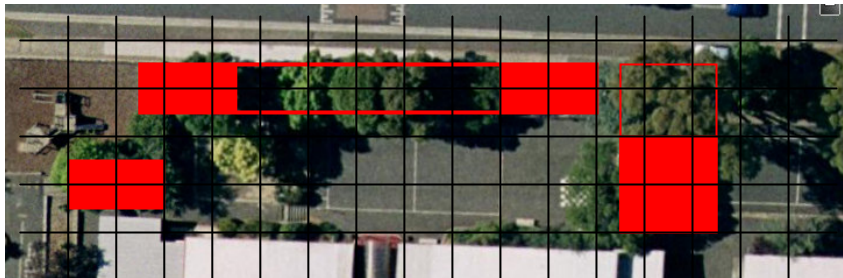
They eat decaying vegetable matter and fungi, turning it into rich soil nutrients.

New words: Organic Litter, Estimate, Circumference

What to do:

Step 1: Estimate the percentage of garden beds in your school ground that are covered by organic litter or mulch (*Organic litter includes things such as fallen leaves, twigs, tanbark, mulch and small branches less than 30cm circumference*) _____

Step 2: Walk around the school ground and outline on the map the garden beds in the school ground. Shade in the areas of the garden beds that are covered by organic litter or mulch (See example below.)



Step 3: Count the total number of boxes that are outlined on the map _____

Step 4: Count the total number of boxes that are shaded on the map _____

Student Worksheet: Logs and Rocks & Soil Management



Creature Feature

Echidnas look scary but are actually scared – e – cats! They prefer to hide in hollow **logs** or curl up in a ball than to fight a predator.



Termites are like little soil engineers. They munch on rotting logs, which assist them to break down into rich **soil nutrients** and sculpt hollows in **logs** as they feed.

New words: Estimate, Circumference, Tally, Compaction

What to do: Logs and Rocks

Step 1: Walk around the school ground and make a tally below of the number of rocks and logs found in the school ground. (Logs must have a circumference greater than 30cm – approximately the size of your ankle).

Number of Logs in the School Ground	Number of Rocks in the School Ground

What to do: Soil Management

Step 1: Walk around the school ground and answer the following questions:

- Is there any erosion present in the school ground? Yes/No _____
- Is there any compaction present in the school ground? Yes/No _____
- Are pesticides or chemicals used in the school ground? Yes/No _____
- Are the garden beds in the school ground mulched? Yes/No _____
- Are there any management strategies in place to manage the soil in the school ground eg. fencing off areas, planting to reduce erosion. Yes/No _____
- If yes what are these? _____

Student Worksheet: Habitat Extras



Creature Feature

Ponds and **wetlands** provide important habitat for numerous species including insects, **frogs**, reptiles and birds. Did you know that there are 208 species of frogs in Australia?

New words: Wetland, Indigenous, Regenerating

What to do:

Step 1: Walk around the school ground and from the list below, place a tick beside the Habitat Extras that are present.

- Composting area
- Vegetable garden / orchard
- Lizard lounge (habitat for lizards and small animals)
- Plants and/or animals in the classroom
- Frog pond/wetland
- Plan to decrease rubbish in the school ground
- Bird bath
- Plants (flora) in the school ground identified and labelled
- Nest boxes
- List of animals (fauna) in the school ground maintained
- Indigenous food garden
- Lids on bins or bins located inside the buildings
- Indigenous plant propagation
- Limited spraying of chemicals in the school ground
- Fallen branches and leaf litter remaining in garden beds
- Water from taps used to water gardens
- Native plants naturally regenerating

Step 2: List any other activities or actions that have been taken to enhance biodiversity in the school ground.

Step 3: How many Habitat Extras are present in your school ground? _____

Student Report Sheet: Tree Measurements



Introduction and Aim (write a brief statement about what you are trying to find out):

Materials (list all the equipment and/or materials used in the study):

Method (describe how you collected the data and the calculations used):

Results (record your observations and results):

Number of Trees in the school grounds: _____

Number of trees/ha in the school grounds = $\frac{\text{number of trees in the school grounds}}{\text{number of hectares in the school grounds}}$ = _____ =

Number of Habitat Trees in the school grounds: _____

Number of habitat trees/ha in the school grounds = $\frac{\text{number of habitat trees in the school grounds}}{\text{number of hectares in the school grounds}}$ = _____ =

Number of Native Habitat Trees in the school grounds: _____

Number of native habitat trees/ha in the school grounds = $\frac{\text{number of native habitat trees in the school grounds}}{\text{number of hectares in the school grounds}}$ = _____ =

Habitat Score

Using the information collected, determine the 'Tree Measurements' ranking (colour) and score (number).

< 10 trees/ha		10 - 20 trees/ha		> 20 trees/ha
0		5		10
No large trees	< 5 large trees/ha	5 -10 large trees/ha	> 10 large trees/ha	> 10 large native trees/ha
0	2	5	7	10

Discussion and recommendations:

- ◆ Why do you think it is important to have trees in the school grounds?
- ◆ Were you surprised with the results? Why/why not?
- ◆ How could the school provide more habitat for native wildlife that requires tree hollows and nesting space?
- ◆ Large trees that contain hollows are difficult to replace because they take so long to grow. What can be done to protect and increase the number of large trees in your school and local area?
- ◆ What long and short term actions can be undertaken to improve the number of trees and habitat trees in the school grounds?

Conclusion (summarise your findings from this study):

Student Report Sheet: Understorey and Vegetation Structure



Introduction and Aim (write a brief statement about what you are trying to find out):

Materials (list all the equipment and/or materials used in the study):

Method (describe how you collected the data and the calculations used):

Results (record your observations and results):

- Overstorey: Tree > 5m
- Understorey: Shrub (1-5m) Small Shrub < 1m
 Scrambler/climber Tall grass > 1m
- Herb-layer: Fern Orchids
 Native Grasses < 0.5m Moss/Lichen Other _____

Number of understorey boxes shaded in: _____

Percentage cover of understorey = $\frac{\text{number of understorey boxes shaded in}}{\text{number of boxes in the grid covering the school grounds}} \times 100$

= _____ x 100 =

Habitat Score

Using the information collected, determine the 'Understorey and Vegetation Structure' ranking (colour) and score (number).

< 5% understorey cover in school grounds	5 - 15% understorey cover in school grounds	15 - 25% understorey cover in school grounds	> 25% understorey cover in school grounds	> 25% native understorey cover in school grounds
0	7	13	19	25

Discussion and recommendations:

- ◆ Where you surprised with the results? Why/why not?
- ◆ Why do you think that it is important to have understorey plants in the school grounds?
- ◆ What types of animals do you think that planting understorey plants would encourage into the school grounds?
- ◆ How do you think you could improve the quality of understorey in the school grounds?
- ◆ What long and short term actions can be undertaken to improve the understorey and vegetation structure in the school grounds?

Conclusion (summarise your findings from this study):

Student Report Sheet: Environmental Weeds



Introduction and Aim (write a brief statement about what you are trying to find out):

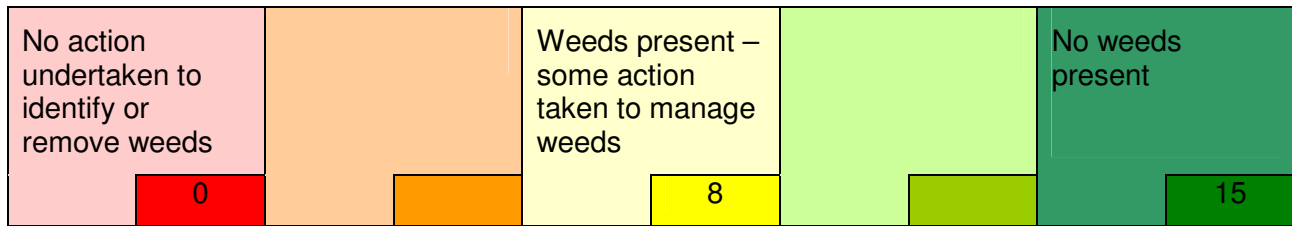
Materials (list all the equipment and/or materials used in the study):

Method (describe how you collected the data and the calculations used):

Results (record your observations and results):

Habitat Score

Using the information collected, determine the 'Environmental Weeds' ranking (colour) and score (number).



Discussion and recommendations:

- ◆ Were you surprised that some of the plants in the school grounds were environmental weeds?
- ◆ Why do you think that it is important to control environmental weeds in the school ground?
- ◆ What long and short term actions can be undertaken to control or eliminate environmental weeds in the school grounds or local area?

Conclusion (summarise your findings from this study):

Student Report Sheet: Organic Litter



Introduction and Aim (write a brief statement about what you are trying to find out):

Materials (list all the equipment and/or materials used in the study):

Method (describe how you collected the data and the calculations used):

Results (record your observations and results):

Number of Organic Litter boxes outlined: _____

Number of Organic Litter boxes shaded in: _____

Percentage Cover of Organic Litter in Garden Beds = $\frac{\text{Number of boxes shaded in}}{\text{Number of boxes outlined (containing garden beds)}} \times 100$

$$= \underline{\hspace{2cm}} \times 100 = \boxed{\hspace{2cm}}$$

Habitat Score

Using the information collected, determine the 'Organic Litter' ranking (colour) and score (number).

< 25% cover of organic litter in gardens	25 - 49% cover of organic litter in gardens	50 - 74% cover of organic litter in gardens	75 - 99% cover of organic litter in gardens	100% cover of organic litter in gardens
0	2	5	7	10

Discussion and recommendations:

- ◆ Organic litter is made up of a range of different materials – what types of things were found in the organic litter in the school grounds (eg. leaves, twigs, tanbark, mulch).
- ◆ Was there any variation in the quality of organic litter found in the school grounds?
- ◆ Did you see any insects hiding in the organic litter? Do you think there would be more there than on concrete or grassy areas?
- ◆ Why do you think it is important to have organic litter in the school grounds?
- ◆ What long and short term actions can be undertaken to improve the organic litter layer in the school grounds?

Conclusion (summarise your findings from this study):

Student Report Sheet: Logs and Rocks



Introduction and Aim (write a brief statement about what you are trying to find out):

Materials (list all the equipment and/or materials used in the study):

Method (describe how you collected the data and the calculations used):

Results (record your observations and results):

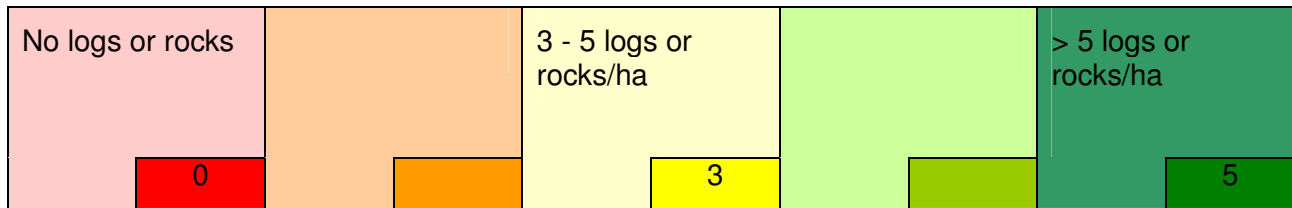
Number of Logs and Rocks in the school grounds: _____

Number of logs and rocks/ha = $\frac{\text{number of logs/rocks in the school grounds}}{\text{number of hectares in the school grounds}}$

$$= \underline{\hspace{2cm}} = \boxed{\hspace{2cm}}$$

Habitat Score

Using the information collected, determine the 'Logs and Rocks' ranking (colour) and score (number).



Discussion and recommendations:

- ◆ Were you surprised with the results? Were there more rocks or logs?
- ◆ Do you think that all of the logs and rocks that you counted provided habitat for biodiversity?
- ◆ Why do you think that logs are removed from areas? Are there alternatives?
- ◆ Which species do you think would benefit from logs and rocks being present in your school grounds?
- ◆ What long and short term actions can be undertaken to protect and provide habitat for native wildlife in the school grounds?

Conclusion (summarise your findings from this study):

Student Report Sheet: Soil Management



Introduction and Aim (write a brief statement about what you are trying to find out):

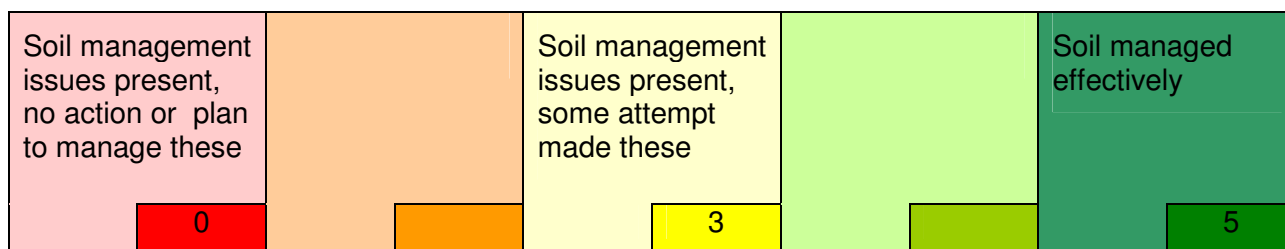
Materials (list all the equipment and/or materials used in the study):

Method (describe how you collected the data and the calculations used):

Results (record your observations and results):

Habitat Score

Using the information collected, determine the 'Soil Management' ranking (colour) and score (number).



Discussion and recommendations:

- ◆ Were you surprised by the amount of erosion and compaction present in the school ground?
- ◆ What is currently being done to manage the soil in the school grounds?
- ◆ What long and short term actions do you think should be undertaken to effectively manage the soil in the school grounds?

Conclusion (summarise your findings from this study):

Student Report Sheet: Habitat Extras



Introduction and Aim (write a brief statement about what you are trying to find out):

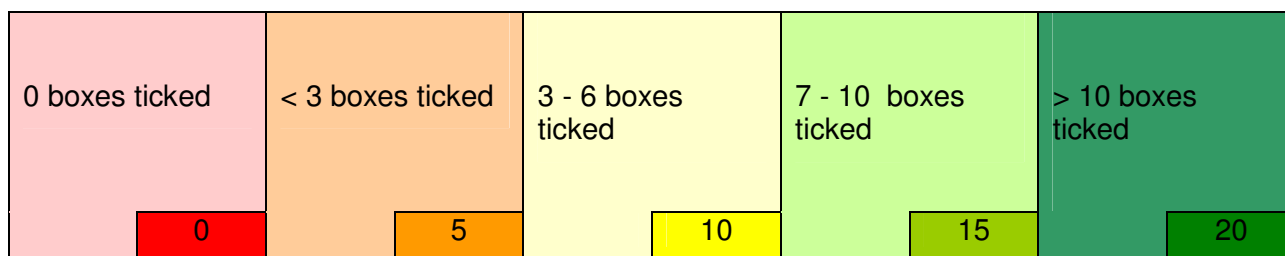
Materials (list all the equipment and/or materials used in the study):

Method (describe how you collected the data and the calculations used):

Results (record your observations and results):

Habitat Score

Using the information collected, determine the 'Habitat Extras' ranking (colour) and score (number).



Discussion and recommendations:

- ◆ Why do you think having things like wetlands and nesting boxes increase biodiversity?
- ◆ Why would having less rubbish in the school grounds and using less chemicals be important for conserving biodiversity?
- ◆ What long and short term actions do you think should be undertaken to increase biodiversity in the school grounds?

Conclusion (summarise your findings from this study):

Student Worksheet: Action Plan for Biodiversity - Study Area

Issue	Current results	Priority for improvement (High, Medium, Low)	Goal Result	Action Required (Yes/No)	Action - long and short term (Who, what, when, where, how)
% Cover of : Buildings					
Hard impermeable surfaces					
Soft surfaces					
Tree and/or shrub cover (indigenous or native)					
Tree and/or shrub cover (exotic)					
Grass cover (indigenous or native)					
Grass cover (exotics – lawns / ovals)					
Ornamentals and vegetable gardens					
Mulch cover					
Surrounding Vegetation: Large patches present (yes/no)					
Corridors or Stepping stones present (yes/no)					

Student Worksheet: Action Plan for Biodiversity - Habitat Quality

Issue	Current rating <small>(Red – Green)</small>	Current score	Priority for improvement <small>(High, Medium, Low)</small>	Goal Score	Action Required <small>(Yes/No)</small>	Actions - long and short term <small>(Who, what, when, where, how)</small>
Number of Trees/ha						
Number of Habitat Trees/ha						
Understorey and Vegetation Structure						
Environmental Weeds						
Organic Litter						
Logs and Rocks						
Soil Management						
Habitat Extras						
TOTAL						