Embrace the Wild

Date: Time: Surveyor:

SITE DATA

Site Details

Survey ID:

Survey Location:

Survey Area:

Aspect: N NE E SE S SW W NW

Slope: FLAT GENTLE STEEP

Weather Conditions

Temperature: °C

Sunlight: SUNRISE SUNSET NONE PART FULL

Moon: NEW HALF FULL

Cloud Cover: NONE PART FULL

Wind: NONE LIGHT STRONG

Precipitation: NO RAIN LIGHT RAIN HEAVY RAIN SNOW FROST DEW

Notes:

Habitat Description

Habitat Classification:

Notes:

Dominant Plant Types:

1. 2. 3. 4. 5. 6. 7. 8.

Habitat Composition

Clear Area: 0% 25% 75% 100%

Ground Cover: 0% 25% 75% 100%

Shrub Layer: 0% 25% 75% 100%

Mid Story: 0% 25% 75% 100%

Large Trees: 0% 25% 75% 100%

Disturbance: FIRE FLOOD EROSION CLEARING WEEDS ANIMALS OTHER

Fallen Logs: 0 1-2 3-5 5+

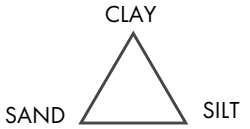
Log Hollows: 0 1-2 3-5 5+

Tree Hollows: 0 1-2 3-5 5+

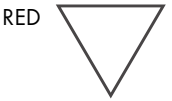
Dead Trees: 0 1-2 3-5 5+

Rocks: NONE SMALL STONES LARGE STONES SOLID BEDROCK ROCKY OUTCROP

Soil Type:



Soil Colour:



Biodiversity Survey

www.rootsandshoots.org.au

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Embrace the Wild

Survey ID: ..... Surveyor: .....

SPECIES DATA

Date	Time	Species	Number M	F	J	T	Habitat Type	Locality Description	GPS	Survey Method	Notes

Biodiversity Survey

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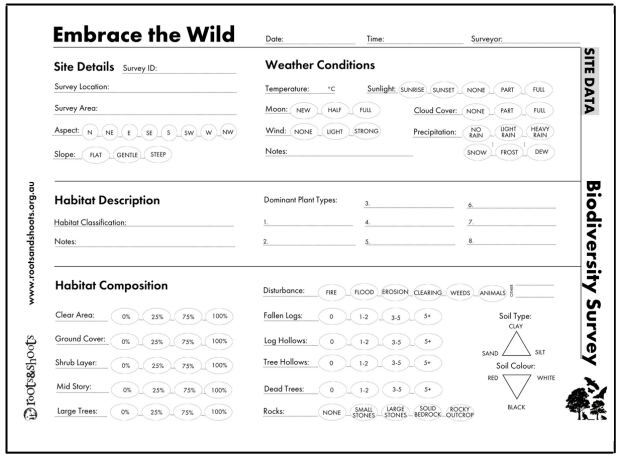
How to Record Your Observations

SITE DATA

Here is a simple explanation for how to use the two Biodiversity Survey sheets: The Site Data and Species Data sheets. Most importantly, this is for your records and the information needs to make sense to you in a way that it can be repeated over time. The codes and detail you use will be different depending on if this is simply for personal use in your garden for example, or team use in a broader landscape. Don't forget that any records can contribute to Citizen Science data collection so try to be as accurate as possible. Ideally, photograph the location using photo point monitoring (taking a photo from the exact same spot every time for easy comparison), and of any animals you see so that the species can be formally identified later, or verified, if need be. Keep all the records together.

SITE DETAILS

Survey ID: Create a code specific to this survey. For example it may be Site 1A. If you were to survey Site 1 again you may allocate B, C etc.
Survey Location: Use a GPS code and/or simple written location such as Front Yard. Ideally you will have defined the area on a digital or paper map that you will keep with these survey records.
Survey Area: Define the area in size (such as 100 m²) or if you intend to survey multiple areas within the location you may want to allocate area numbers. For example you may have 4 quadrants (defined square areas) within the survey location (E.g. Site 1) and could call them Q1-Q4 (100 m² each).
Aspect: Circle the closest aspect (or select between the two closest). This information provides insight into the conditions of the site - for example if it were to receive hot western sun it may offer a different microclimate to a site facing south.
Slope: This information helps explain how things such as water and nutrients flow through the site, or how light travels across the site.



WEATHER CONDITIONS

Temperature: Different animal species are active depending on the temperature - so this is a great detail to be able to compare over time.
Sunlight: Coupled with temperature, this information may explain animal activity too, such as early morning bird behaviour.
Moon: Moonlight influences the behaviour of nocturnal species, while the cycle may impact those tide dependent.
Cloud Cover: This detail may assist to explain temperature or animal activity.
Wind: This detail may assist to explain temperature or animal activity.
Precipitation: This detail may assist to explain temperature or animal activity.
Notes: Add any detail to expand on the weather conditions for example time since rain.

HABITAT DESCRIPTION

Habitat Classification: How would you describe this ecosystem? For example it may be a Eucalyptus woodland, or your home garden featuring mixed plants.
Notes: Add further detail about the Habitat Type to provide greater clarity.
Dominant Plants: Ecosystems are usually classified by the plant communities that dominate such as a Grey Gum-Scribbly Gum Woodland (which you could state as your habitat type above). This woodland would feature dominant mid story plants too. By listing the dominant species it provides a snap shot of the suitability of this site for specific animal types. Include the scientific name if possible.

HABITAT COMPOSITION

Plant Layers: The composition of the site is not only comprised of the plant species, but also the vertical assemblage - or plant layers. For example a site may be cleared of all ground and shrub layers and only have large trees - which would offer reduced habitat. Give a percentage cover of the 5 main plant layers.
Disturbance: This is vital information. Use the notes to add detail (E.g. date and severity of fire disturbance, or type of animal impact such as rabbits).
Fallen Logs: Woody debris offers hiding and basking spots, and soil stability.
Log and Tree Hollows: The cavity will provide shelter and breeding sites and coupled with the location, dictate the suitability for different species. If you are surveying for local hollow dependent species, understanding their specific needs will inform whether they are likely to use the hollows at the site. Keeping a seperate record of the specifications of tree hollows is a great reference for survey efforts.
Dead Trees: Called stags, large dead trees often contain hollows. Trees can die from old age or a host of other reasons, so records can provide a good indication of forest health over time.
Rocks: This will provide information about basking and shelter sites or how the rock composition may impact plant growth, erosion and water flow.
Soil Type and Colour: The composition of the soil will dictate what can grow and how suitable it is for different species. Instructions for soil tests can be found online.

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Biodiversity Survey

Embrace the Wild

How to Record Your Observations

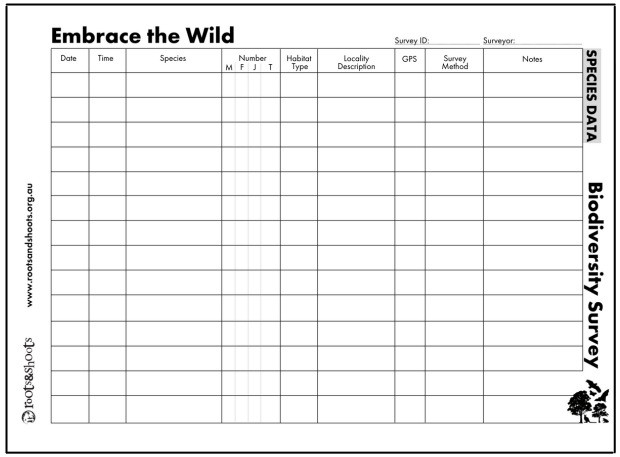
SPECIES DATA

Biodiversity Survey

There are a number of survey methods discussed in the Embrace the Wild Resource Book (Activity 5: Regular Surveys) and the method you choose will depend on the species you aim to record, the time of day, size of the survey area and the time you have. This general purpose sheet allows you to use a number of methods or record opportunistic sightings across the same site. To provide a full understanding of the habitat and conditions a new Species Data sheet should be used for each new Site Data sheet linked via the Survey ID code. You could also create a digital version of this resource and use an iPad to record the data. Use the results from Activity 1: Habitat Mapping to help inform target areas, and repeat species surveys seasonally to witness any changes your projects make to species occurrence.

DATE & TIME

Recording the date and time is important for comparison between surveys and over time. For example it may show change a change in annual activity such as migration or breeding times, or daily behaviour. Coupled with the temperature, weather conditions or other data this helps to show patterns in behaviour from which we can also understand what is normal or unusual.



LOCALITY DESCRIPTION

This category assists in pin pointing exactly where the animal occurred and over time provides an indication of its habitat preference and behaviour. For example you may have observed a blue-tongue lizard (Tiliqua scincoides) peaking out from within the 'boulder pile' listed in Habitat Type.

GPS

If you are conducting a survey over a large area you can use GPS coordinates to indicate precise information such as the locality of a nesting bird. Many mapping apps allow you to drop a pin and label it from which you can save the bespoke map and record the name and or coordinates on this sheet.

SPECIES

Write the species name and include the scientific name as well. Animals and plants can have multiple common names which can easily cause confusion. If you are not certain of the species, gather information to assist including colouring, markings, size, key features and behaviour. Note this extra information and or take a photo if you can. There are apps that can assist with identification from a photo. If you are using a field guide, pay attention to the distribution of the animal as this will rule out similar species that do not occur in the area.

NUMBER

It is great to get a total number of a species observed (T), and in some cases you may be able to include additional information such as if they are Male (M), Female (F) and Juvenile (J). This can be useful to show breeding success or the ratio of male to female. If the animals are in a large group, just have a guess at the total.

HABITAT TYPE

Although 'Habitat Classification' has been defined on the 'Site Data' sheet, 'Habitat Type' on the 'Species Data' sheet specifies the microhabitat - such as a 'boulder pile' within for example the 'Grey Gum-Scribbly Gum Woodland' that may represents the overall classification of your site (see Site Data Sheet).

SURVEY METHOD

Define your survey area: Within your survey site you may further define your focus area so that it can be repeatable. Observations, or species sightings, can be recorded by spotting wildlife from a single location (point) for a set period of time (e.g. 15 minutes), within a defined area (such as a quadrant) or along a set transect (straight line of set distance). You could apply a code for each of the above such as P/15 mins, Q 100 m², or T 100 m for example, which you would include under Survey Method. Mark the point, quadrant or transect on your map.
Method: Once the survey area is defined you can select a method to record occurrence, such as spotlighting, bioacoustics recordings, or survey a specific group such as invertebrates (E.g. minibeast survey). Apply your own code to suit.
Opportunistic: You can also record any species that you see opportunistically (by chance), or any clues (scats, tracks, scratches) and suggest the species responsible.

Record anything interesting about the animals behaviour such feeding, nesting, interactions between same and different species and add it to the NOTES column!