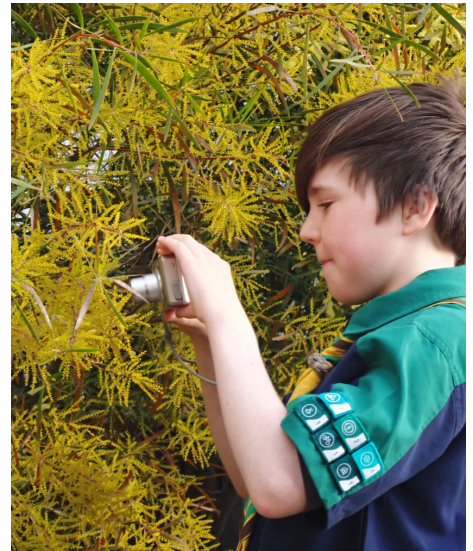


# BUSH BLITZ BADGE



## Challenges & Worksheets





# About Bush Blitz

Bush Blitz is Australia's largest nature discovery program – a unique multi-million dollar partnership between the Australian Government through Parks Australia and the Australian Biological Resources Study, BHP and Earthwatch Australia to document plants and animals across Australia.

Since the program began in 2010 Bush Blitz has discovered more than 1,800 new species and has added thousands of species records to what is already known, increasing our scientific knowledge to help us protect our biodiversity for generations to come.

There are many plants and animals still to be discovered by science. There are an estimated 580,000 to 680,000 species in Australia, but three-quarters of this biodiversity is yet to be identified. Forty-five per cent of continental Australia and over 90 per cent of our marine area have never been comprehensively surveyed by scientists.

Bush Blitz involves specialist taxonomists, Indigenous communities, rangers and landowners, teachers, students and BHP employees. Together they are making an extraordinary contribution to the protection of our country's natural heritage.



# A Bush Blitz discovery story



**When Amanda took a photo of a little brown spider sitting on top of her recycling bin, she had no idea she was about to leave her mark on the taxonomy of rare Australian spiders.**

If you think you need to go to the depths of the Amazon to find a new species, think again. When Amanda De George of Illawarra took a photo of a little brown spider on her recycling bin, she had no idea that she had photographed a rare Australian jumping spider species unknown to science, an undescribed *Jotus*.

Amanda posted the photo to social media in the hope that someone might identify it. She found out just how special it was when it was seen by Museums Victoria taxonomist, Joseph Schubert. "When I got up close to the little brown spider, I noticed it had this vibrant blue face, so I posted the photo on Facebook and didn't think any more of it" said Amanda. "I went to get groceries, and a coffee, and by the time I found out how special it was that spider was long gone!"

To name a new species of spider, taxonomists need to study it under a microscope. This means they need to have the actual spider, not just a photo.

"When Joseph asked if I had the spider from the photo, I frantically started looking for it again, but it was only the size of a pea..." Amanda admitted. "I was kicking myself I hadn't caught it when I saw it. Then a couple of days later, low and behold, I saw another one bouncing along the dash inside my car! Joseph told me how to carefully package it so I could post it to him, and the rest is history."

Amanda posted the carefully packaged cargo across the New South Wales border to Joseph in Melbourne, Victoria. Joseph is caring for the undescribed *Jotus* species at home until he can study it under a microscope at Museums Victoria's laboratory. The new spider will be part of a scientific review of the jumping spider genus *Jotus* and will be formally described and named in the scientific literature.



# How to earn your Bush Blitz badge

To earn your Bush Blitz Badge you need to explore and discover the natural environment around you, take photos of naturally occurring plants and animals, and upload these findings to iNaturalist online or via the app.

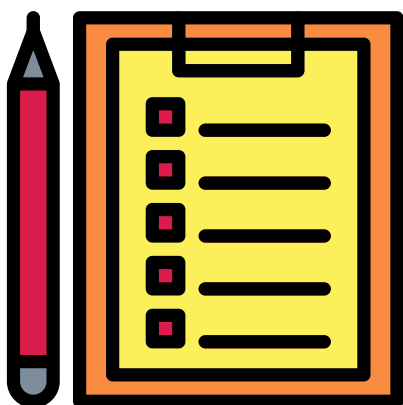
**Explore and Discover**  
the natural environment around you.

**Document and Record**  
plants and animals in their natural environment.

Your leader will tell you which challenge/s you need to complete to earn your Bush Blitz badge:



Lockdown friendly



**Scavenger Hunt**



**Housebound  
Hunting**



**Native Species  
Investigation**



# Challenge 1: Scavenger hunt!

*Discover species in your backyard\**

Discover at least 6 of the 12 items on the checklist below and upload your findings to the Backyard Species Discovery project on iNaturalist to earn your Bush Blitz badge.

- 
- |                          |                               |
|--------------------------|-------------------------------|
| <input type="checkbox"/> | Fungi                         |
| <input type="checkbox"/> | Lichen                        |
| <input type="checkbox"/> | Flowering plant               |
| <input type="checkbox"/> | Vertebrate                    |
| <input type="checkbox"/> | Gastropod                     |
| <input type="checkbox"/> | Insect                        |
| <input type="checkbox"/> | Crustacean                    |
| <input type="checkbox"/> | Myriapod                      |
| <input type="checkbox"/> | Sound recording               |
| <input type="checkbox"/> | Tracks or traces of an animal |
| <input type="checkbox"/> | Mammal                        |
| <input type="checkbox"/> | Arachnid                      |

## Equipment

- Camera
- Copy of checklist
- Phone or computer

## Preparation

- Copy of checklist
- Sign up to iNaturalist and join the Backyard Species Discovery Project

## Duration

- 1 hour group activity
- OR can be done over multiple days for as much time as you like

## Setting

- Backyard
- Local outdoor area



View the iNaturalist instructions page at the back of this booklet to learn how to sign up and upload your findings to our Backyard Species Discovery project.

*\*Backyard can include your local outdoor area*



## Challenge 2: Housebound hunting

*Discover what creatures live inside your house!*

**Find and photograph as many creatures as possible in 30 minutes...**

**Ready, set, go!**

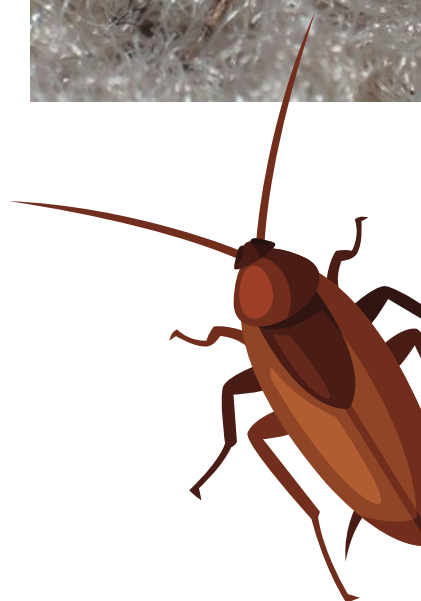


Check out your window sills, as flying insects can often be found looking for a way out. Don't worry if your insect is dead, you can still add it to our Backyard Species Discovery project - plus they're easier to photograph if they're not moving!

**Upload your household creatures to our Backyard Species Discovery project on iNaturalist to earn your Bush Blitz badge.**

Investigate ceilings, bathroom drains and sheds for arachnids (spiders). This White Banded House Jumper (*Maratus griseus*) was found in a carpet 'jungle'.

Remember not to touch our 8-legged friends!



### Equipment

- Camera
- Phone/ Computer

### Preparation

- Sign up to iNaturalist and join the Backyard Species Discovery Project

### Duration

- 30 min

### Setting

- Inside your house!

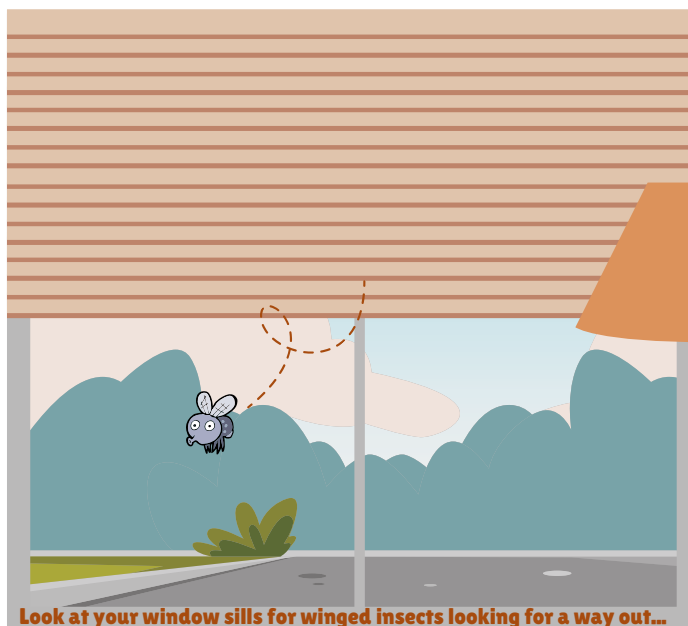
**The average Aussie house is home to about 100 different species!**



# Housebound hunting tips

*Where to look?*

Have a look at lamp shades for light-attracted insects like moths.



Look at your window sills for winged insects looking for a way out...



Look inside pot-plants for insects living on foliage or in soil.

*Hi! Please remember not to touch us!*



Have a closer look at your rugs...



## Challenge 3: Native species investigation

*Identify native plant or animal species and their habitat and reflect on why habitats are important*

- Investigate your local natural environment and discover and photograph 3 different native plant or animal species.
- Upload your 3 observations to our Backyard Species Discovery project on iNaturalist.
- If you're not too sure what your finding is, our knowledgeable iNaturalist community can help you identify it.



### Investigating habitat

What is habitat?

*A habitat is the natural home or environment of a **plant**, **animal**, or **other organism**. It provides the organisms that live there with food, water, shelter and space to survive.*

**Investigate each of your species' habitats by researching and answering these questions:**

- Where did you find your native species?
- What does your species need to survive?
- What habitat does your species need?
- Is their habitat threatened? If so, what threatens their habitat?

To help you answer these questions you can complete one of the 2 worksheets below.

What is a native species?

*A species that is within its known natural range, and occurs naturally in a given area or habitat, as opposed to an introduced species or invasive species.*



### Equipment

- Camera
- Phone/ Computer

### Preparation

- Sign up to iNaturalist and join the Backyard Species Discovery Project

### Duration

- 2 hours
- OR can be done over multiple days for as much time as you like

### Setting

- Backyard
- Local outdoor area



iNaturalist username \_\_\_\_\_

Name: \_\_\_\_\_



# Native Species Investigation – Option 1

**Instructions:** Draw your three native species observations and their habitat below. Try to capture key characteristics of the species and what habitat they need.

1. Native Species

Habitat

2. Native Species

Habitat

3. Native Species

Habitat

iNaturalist username \_\_\_\_\_

Name: \_\_\_\_\_



# Native Species Investigation – Option 2

**Instructions:** Research the native species that you have observed and answer the following questions. Repeat this worksheet for each of your observations

## Identification

Circle one:      Fauna / Flora / Fungi / Lichen

Common name  
(if applicable):

Scientific  
name:  
(iNaturalist can  
help you with  
this)

## Habitat - observations

Describe where you found the species.

## Habitat - research

Research what habitat your species' needs.

## Threats

What is threatening your species' habitat?  
Do humans threaten their habitat?

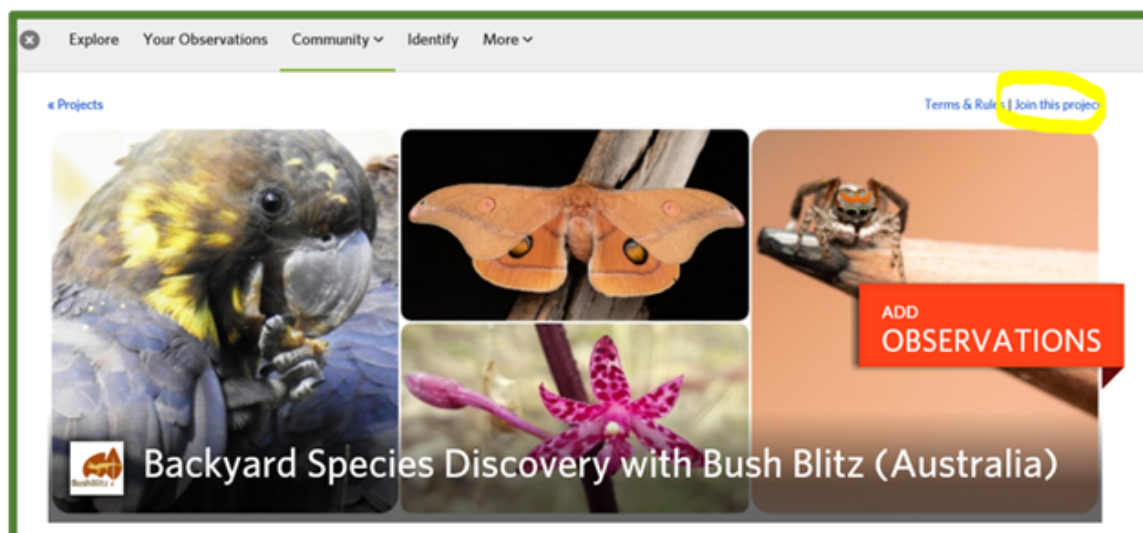


# iNaturalist Instructions

## How to upload and submit your Bush Blitz badge observations!

1. Sign up for an iNaturalist Australia account at <https://inaturalist.ala.org.au/> (best done on a computer) and let your leader know your iNaturalist username.
2. Join our Backyard Species Discovery project: Click on Community, then Projects, then search for Bush Blitz.

a) Click Join this Project.



b) Click Yes, I want to join

3. Download the iNaturalist app (optional: the app is the simplest way to upload your findings).
4. Take a photo or record a sound of your finding.
5. Upload your finding:
  - a) On the app click on the green + button, or on a computer click on the green Upload button.
  - b) Choose your image or sound recording from your files.
  - c) Click on the Species Name and enter a name or wait for suggestions. Remember to only ID to a level you are confident of (e.g. if you don't know what kind of spider, just select 'Spiders'). Our scientists can help identify your finding.
  - d) Add the Date and Location.
  - f) We recommend you select 'obscured' under the Geoprivacy dropdown options when making observations from home to protect your privacy.
  - e) Click on the Projects dropdown and search for Backyard Species Discovery Project.
  - g) Submit by clicking on the green button: Submit observation.
6. Let your leader know when you have completed your Bush Blitz challenge/s. We encourage you to continue adding observations to the Backyard Species Discovery project after you have earned your Bush Blitz badge.

# Staying safe

**Protect yourself from the sun by wearing a hat and sunscreen.**

**Don't touch any wildlife or plants they could be dangerous.**

**Make sure your parent/leader knows where you are going to look for plants and animals.**

**We recommend you change your iNaturalist geoprivacy setting to "obscured" when observing from home (see iNaturalist instructions)**

