Biodiversity Values in South-east Melbourne

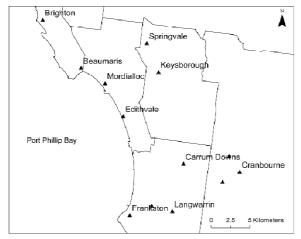


Melbourne School of Land & Environment

Thank you for participating in the first surveys in the Biodiversity Values project by the University of Melbourne. This is our first Newsletter, to let you know what we found in your front yards!

Aim of the project:

To understand the diversity of plants and animals in residential gardens throughout south-east Melbourne. We visited 50 residential gardens spanning from Brighton to Frankston during January – March 2012. The areas we visited are shown in the map below.



These suburbs represent some of Melbourne's oldest suburbs, including Brighton. They also include some of Melbourne's newest suburbs, like the new developments in the Cranbourne area.

What bug is that?

So far, we have looked at the diversity of insects within front gardens. To collect insects we used nets and traps, as seen in the pictures below. We have found over 50 species of native bugs, and there could be up to 200 species of native bees in SE Melbourne.



Left: PhD student, Luis Mata, collecting insects using a sweep net. Right: Yellow pan trap used to attract and collect native bees.

We have started the long processes of sorting all of the insects we collected, to be able to measure just how many species there are. Below is a photo of some of the insects we have been finding.



Native bees and wasps under a microscope.

Microbat mania



Microbats are small, native mammals that can fly. They eat insects, and can eat up to half of their body weight in insects each night. We recorded what bats fly around your garden at night using recording devices which we put inside the box shown here with Dr Caragh Threlfall, the project researcher.

So far, we have recorded the presence of bats in every yard we visited, some yards recorded up

to six bat species. One of the most common species found in Melbourne is the Gould's Wattled Bat. This bat only weighs 13 grams, and eats beetles, flies and bugs. Unlike large fruit bats, most people never see or hear microbats flying around, but they can be one of the most common urban mammals.



Common Gould's Wattled Bat.









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Plant Facts

We did plant surveys in all front yards to look at how many and what type of plant species there were, see the photos below. Information about the types of plants occurring in your gardens is going to be used later to relate to insect diversity, bat diversity, bird diversity and your own perspectives on biodiversity values.



What's coming up in 2012

We will be posting a questionnaire about your gardening practices and your use of local parks.

This will be conducted by Virginia Harris (photo on the right), a Masters student at the University of Melbourne. The aim of the project is to investigate how people use their local parks and gardens, and how some types of parks might be preferred over others. It would really help our project if you were able to find a few minutes to complete this questionnaire. We are interested in everybody's opinions, so even if you don't use your local parks or aren't interested in gardening, your responses are still really important to us. This project will help to inform the development and management of urban green spaces. The surveys will be posted to you in May 2012.



Masters student, Virginia Harris (above) will be posting you surveys about green space in your area.

In spring and summer 2012, we will be doing more plant and animal surveys in your front yards, starting in September. These include:

- <u>Bird surveys</u> will be conducted by our team from the University of Melbourne. We will be walking through your street early in the morning to record what birds are using the area.
- <u>Bee surveys</u> will be conducted again using the same pan traps and sweep nets. This time we hope to find more bees around when more plants are in flower.
- <u>Leaf litter collection</u> surveys will be conducted at the same time, to see how many good bugs live in the soil and leaf litter in your gardens.

Please contact Caragh (Cara) Threlfall if you would like to know more, or how to be involved.

For more information

We can be found at the Burnley campus of the University of Melbourne, Richmond.

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