CAPE CHATTER

Nature Observations around **The Cape**

Issue No. 35

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The theme this week is invertebrates in the home garden habitat at **The Cape**, including their role as important pollinators

The Cape is on the traditional land of the Bunurong people

"When we tug at a single thing in nature, we find it attached to the rest of the world..." John Muir

Photography and words by David Hartney

Email: dwhartney@bigpond.com

Instagram: @dwhartney

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'Bumbling' around the home habitat ...

I had some wonderful feedback on the last issue of *Cape Chatter* about the wetlands and the role they play in 'our' ecosystem here at **The Cape** along with an introduction into how all the different habitats work together. So, having been curtailed with the latest Covid lockdown, I have been 'bumbling' around the garden with the macro lens to see what is out and about. This issue, the focus is on the home garden habitat at **The Cape**, the role they play in 'our' local ecosystem and an example of what invertebrates have been observed in the short time since the first homes were built.

But first ... Wedge-tailed Eagle are about ...

Monday, a pair of "wedgies" were seen circling near the junction of Seaward Drive and Wilson's Rd right on the border of **The Cape**. A check of my observation notes revealed a "wedgie" circling about the same area just on a year ago – the only other time I have seen them closely overhead. Resident Joe Spano reported another sighting yesterday and managed to get a great photo as well. With lots of rodents, snakes, rabbits, and other creatures about at the moment, the raptors are busy! Keep your eyes peeled!



Above: A glorious Wedge-tailed Eagle circling on the thermals

<u>Below:</u> Joe's picture of one of the *Wedge-tailed Eagles* on 16th February 2021 over **The Cape**



The house garden habitats of The Cape – it all starts at home?

Last issue, I outlined in simple terms the important relationship between the various habitats within **The Cape** and the way water is used and moves through our ecosystem. The home and garden habitat are really important in how this all works. In a chat with Brendan Condon last week on the hydrological design of **The Cape**, he outlined his view of the importance of thinking of our homes and gardens as the first of many "sponges" in retaining this valuable water resource as it works its way through the system. Hydrologically, is not just a flush-through system – our homes and the landscape are designed to hold water 'upstream' as far as possible and to provide important absorption, storage, filtration and hydration functions along the journey and in anticipation of dry climatic times when they come. In our homes and gardens, the use of rainwater tanks, wicking beds, planting selection, mulches, bird baths and frog pools are all important mechanisms in our gardens in making sure sufficient water is available to help maintain viable mini-ecosystems providing vital habitat and protection for pollinators, pest controllers and food along the 'natural' food chain.



'The Cape' Home Gardens - again, something from nothing ...



We have some wonderful examples of thoughtfully designed home gardens within **The Cape**. I am amazed at how some of the gardens have "taken-off" and are providing important habitat for our indigenous creatures. The growth and development is impressive. So again, think about this - five years ago the first homes in Stage 1 began to be built on degraded pasture land. The 'early pioneers' got stuck into their garden landscapes and following the thoughtful *Design Guidelines*, began building some wonderful home landscapes with delightful indigenous plantings. Those initial efforts have inspired subsequent homebuilders to follow the lead and now we are seeing an impressive array of lovely home gardens which are providing important 'stepping stones' of connected habitats for

our creatures to enjoy and live and for us to observe and appreciate. So, using our home garden as an example (that's the one I know best) along with other resident observations, let's take a stroll to see what is happening and what's about!

In the beginning ...



Above: Our vacant lot on 14 Sep 2018



Above: The house garden today after 16 months of growth

Landscape Structure and Flora

Our approach to landscaping was based on having habitat areas, a food production zone, and a "play" area for social activity. Key was being water wise, providing structures for animals such as rocks, stones, logs, stags, constructed habitat boxes and simple water points for creatures to drink and bathe.



Above: A simple bird bath with rocks and fresh water surrounded by low, thick growth plants provides an ideal place for small birds (when they come!) to drink and bathe while having nearby protection when larger, predators appear. Reptiles and frogs love the underneath ground habitat as well where a smaller water dish is provided.

Planting selection was based around having appropriate indigenous plants for the harsh environment, food for animals, groupings of similar plants as companions to help establishment, multiple layers for fauna habitat (ground covers through to small trees), some aesthetic colour from flowers and foliage, a blend with streetscape plantings, and natural mulch layers to help retain soil moisture, break down into organic matter and provide habitat for small creatures/invertebrates.





Above: Large rocks provide wonderful spots for lizards, frogs, and invertebrates to shelter under as well as provide warmth in the cooler months. It will be some time before we have some established trees, but in the meantime, the tree stags provide great perching points for birds to watch and poop (and help regenerate local plants), as habitat for invertebrates, and dark spots for microbats to hide behind shedding bark. Our grassy 'play' area has become a popular spot for our local Eastern Grey Kangaroo to graze and lizards to bask!

Some of the more favoured plants appear to be those with yellow, blue, mauve, and purple flowers, with plants such as comfrey, borage, rosemary, coastal rosemary, and kangaroo paws proving popular with insects.

And do not foget the importance of your veggie patch ...

Our food growing zone utilises predominantly the wicking bed approach which is designed to achieve maximum production in a small area with minimum effort and water usage — it also acts as a water reservoir and a heat bank — and I quite often find frogs in the overflow leveller!!



We use companion planting and crop rotation principles in our garden and importantly let a range of plants flower and 'go to seed' to support the important natural pollinators and pest controllers. Plants like dill, coriander and sunflower are great attractors. To be honest, as I have taken a closer look into our veggie garden with the macro lens, I am absolutley stunned at the amazing world at our fingertips and how such an important job our invertebrates do.

The home garden is an interesting world and pretty weird looking at times ...

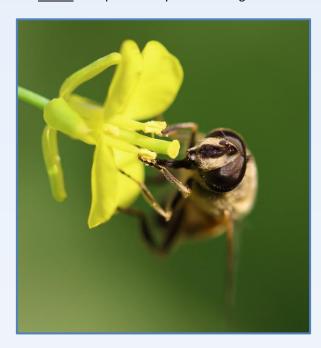
Let's delve deeper into the world of terrestial invertebrates in the garden and look at some of the more interesting creatures we may bump into in our home gardens at **The Cape**.



I thought I would start at the smallest level of the animal kingdom and work up in size. Unfortunately, my lens and skills prevent me from capturing photos of microscopic creatures, so I am starting with **pollinators** and the best known, the introduced *European Honey Bee*. I was planning a 'nectar to honey' feature in this issue on the *honey bee* with resident and apiarian Peter Watkins, but Covid put a hold on that so we will get to it as soon as we can.



Above: European Honey Bee on borage flower



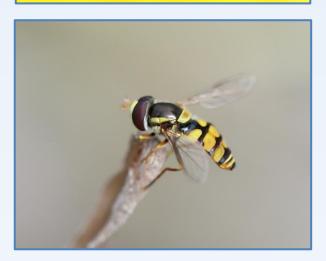
Above: Honey Bee on the flower of a Bok Choy plant

Nectar is collected with long tongues (seen above) and they carry pollen in specialised hairless pollen baskets on their hind legs rather than in haired areas. But, as you can see, sometimes pollen does get caught up in the hair particles as can be seen in the photo (left) – it looks like it is draped in golden jewels!

The native *Common Hover Fly* (pictured below) covered in pollen emerging from a pumpkin flower, is a small, hovering fly which has been around long before those annoying mechanical drones! It is an extremely important native pollinator and reasonably common but not in numbers like the *Honey Bee*.







Common Hoverfly are about 1 cm long, and can fly very fast. Their larvae eat aphids so they are a pest controller as well. It looks so regal covered in pollen!

The other day another *Hover Fly* appeared in the garden, much bigger than the native 'Common' and with a loud buzzing sound as it "eyeballed" me. I have tracked it down as the introduced *Eupeodes confrater*, pictured below.



Now this is interesting! A bit of research reveals this fly is both a pollinator and a pest controller as well. It feeds on nectar and honey dew, but it lays its eggs near plants infested with aphid and after three days, the larvae feed on aphids before another 1-2 weeks when the pupa emerge as adults to feed on nectar and honey dew again. Guess where this picture was taken – yes, right near our kale plants in the veggie garden which were infested with aphids underneath the leaves! Nature at work!



I am still on the lookout for Australia's only native bee, the *Blue-banded Bee*, as there are reports of sightings around **The Cape**. Unlike the *Honey Bee*, they live mainly solitary lives but nest in groups, digging individual nest cells in soil. So, we have constructed a nesting site in our garden made from a besser brick filled with clay complete with pencil shaped holes as potential nesting habitat for these bees – let's keep the fingers crossed they are attarcted to our attempt at a 'Buzz Inn'!

Some interesting flies ...

"Where's the fly swat" is a common call in our house when one of those pesky "Louie's" sneak in ... but they are quite beautiful close-up and have an important role in nature. Recently in the garden, I thought I came across a large drone like bee when I noticed the other *Honey Bees* were chasing it off. The culprit was a *Drone Fly*, pictured below saying "what have I done wrong ... I am just going about my day!"



The *Drone Fly* feeds on nectar and is also an important pollinator. Their larvae (*Rat-tailed Maggots*) are aquatic and have an extendable snorkel tube to the surface to breathe!



Above: Drone Fly pair at The Cape

There are so many species of flies and indeed, invertebrates that the mind boggles at the variety of species and within species. The website "Insects of Tasmania" is one very useful resource that I have been using to try and identify the various species I have photographed to date on my wanderings and as a quickie, 'Museum Victoria Field Guide to Victorian Fauna' app.

The Lesser Brown Blowfly pictured below generally prompts the call for the flyswat!



These guys are not pollinators but are attracted to light and so are often found on windowsills in homes. But they do have an important role in breaking down organic matter by laying eggs or releasing live maggots (larvae) onto food such as dead carcasses or dung.

Now the fly pictured below I am unsure of: it is possibly a *Broad-mouthed/Anther fly* or a *Tachinid Fly*? Does anyone know?



Other bugs I have stumbled across ...

I haven't had the chance to properly identify these creatures, but I thought I would share their beauty.









Some not so scary spiders ...

Spiders are everywhere at the moment. There are so many spider traps about snaring unsuspecting invertebrates with their elaborate, intriguing, and tangled webs. Here are some of my recent observations in the garden.



<u>Above:</u> The *Badge Huntsman* feed on invertebrates and do not construct webs but build a silk "retreat" in which to moult and lay eggs. About 2 cm long. This was in one of our citruses.



<u>Above</u>: Golden Orb-Weaving Spider (I think) amongst the tomatoes.

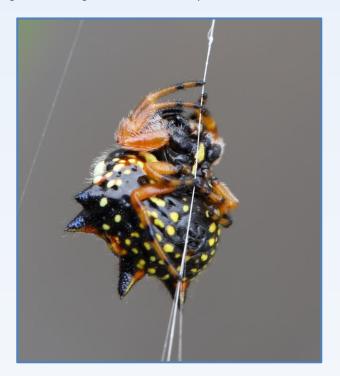
More interesting spiders ...

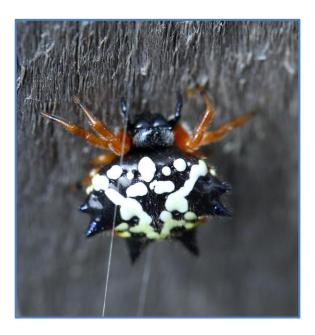


Above: *Jumping Spider*, a very small spider about 7mm long with two large eyes which moves by jumping. They are active hunters that can jump several centimetres to catch their prey of invertebrates. Love the sunglasses!

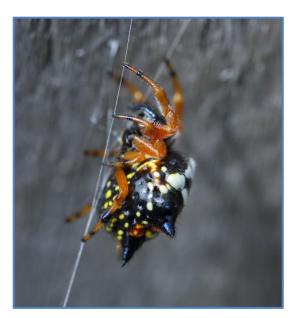
The stunning Spiny Spider

Have a look at this stunner ... the absolutely magnificent *Spiny Spider*. This spider is about 1 cm long and has a shiny black abdomen with a yellow and white pattern and six large spines as well as orange legs. Looks like the spider version of the gorgeous *Spotted Pardalote* bird. You can't get more indigenous than this can you?





These spiders form colonies where each spider makes its own individual web which are then laced together with silk to become one large structure capable of covering entire bushes. This specimen is residing around our *leucodendron* patch.



Next Issue, I will feature some of the larger fauna in our garden habitats from amphibians to reptiles (including the young snake in our garden), birds, and mammals.

And finally ... another Frog Species

Big thanks to residents Joe Rayner and Graeme Campbell for letting me know about the *Barking Marsh Frog* they heard in Moonshadow Ave. It was croaking so loud they thought a dog was trapped in the drain!! That is frog species number eight (8) on our list.