BUSHLAND NEWS

KATANDRA BUSHLAND SANCTUARY NEWSLETTER
Autumn 2026

Greetings from Katandra

April has been quite dry after above average rainfall in the first three months of this year. Long range forecasts issued by the Bureau of Meteorology predict below average rainfall for eastern Australia through winter, so conditions may remain quite dry for a while. Climate models suggest recent warming in the tropical Pacific Ocean will continue, reaching El Nino thresholds in the coming months. While every El Nino event is unique, typically they bring drier conditions to eastern Australia, with a greater reduction in winter/spring rainfall than in summer.

The application for the development of land at 120 Mona Vale Road that was submitted to Northern Beaches Council in the second half of last year is still being assessed. There have been many submissions opposing this development sent to Council including one from the Katandra Trust which opposes this development of over 60 dwellings on the grounds that it will have an enormous detrimental impact on the local flora and fauna along the already fragile bushland corridors of the Warriewood/Ingleside escarpment.

Maintenance work carried out in the Sanctuary over the past few months has focussed on removing small pockets of weeds, mainly crofton weed, cassia and fishbone fern. Attention will now turn to track clearing in readiness for the Open Season beginning in July.

You can contact us by email katandrainfo@gmail.com, phone 0431857407 or via the Contact Us page on the Katandra website.

We look forward to seeing you at Katandra.

David Seymour

Flies

When one hears the word “fly”, thoughts usually turn to the common **house fly** (*Musca domestica*), the **Australian Bush fly** (*Musca vet*ustissima) or a **Blow fly** (from the family Calliphoridae). There are however, many hundreds of thousands of different fly species world-wide with more than 150,000 being formally described. It is thought that there are more than 30,000 true fly species in Australia, most of which are yet to be named. Flies are found in almost all terrestrial environments and can be both beneficial and harmful to humans and other animals

Left; House fly (photo – NPMAPestworld), Right; Australian Bush Fly (photo J & F Hort via Flickr)

Diptera

Flies are insects with a single pair of wings that belong to the order **Diptera**. The word Diptera comes from Ancient Greek words meaning two (di) wings (pteron). This possession of a single pair of wings distinguishes most true flies from other insects with "fly" in their names, eg butterflies, dragonflies and sawflies.
The order Diptera was traditionally divided into two suborders, Nematocera and Brachycera, distinguished by the differences in antennae. The Nematocera have long, often feathery antennae and are identified by their elongated and many-segmented bodies, eg mosquitoes, gnats, midges and crane flies. The Brachycera have rounder bodies and much shorter antennae.

Mosquitoes belong in the order Diptera and so are classified as flies

Flies have a mobile head, with a pair of large compound eyes, and mouthparts designed for piercing and sucking (mosquitoes, black flies, and robber flies), or for lapping and sucking in the other groups.

The life cycle of a fly involves complete metamorphosis, in which there are four distinct stages – egg, larva, pupa and adult. The larva is the growth phase and is very different from the adult stage. The larvae (sometimes referred to as maggots or wrigglers) use different food sources to the adults so there is no direct competition between them.

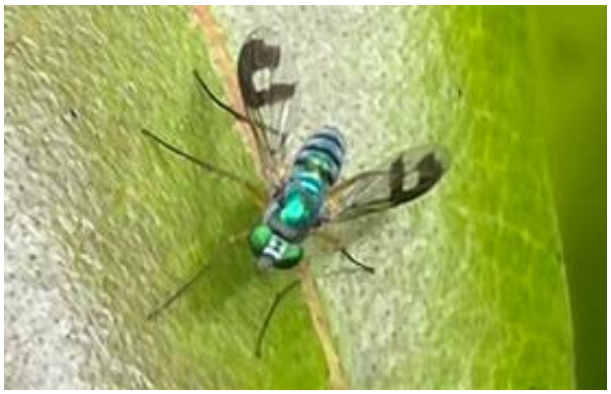
Australian Bush fly and the ‘Aussie Salute’

The Australian Bush fly (*Musca vetustissima*) is the specific fly that has given rise to the expression ‘Aussie salute’, the continuous hand-waving required to shoo flies away from one’s face. This native dung fly is closely related to the common house fly, but it has distinct characteristics that make it far more irritating outdoors.
Bush flies are persistently annoying because of their biological need for certain nutrients. These flies do not bite, but they are drawn to the protein, salts, and moisture found in bodily secretions. They are strongly attracted to tears, sweat, saliva, and the mucous membranes of the eyes, nose, and mouth. The flies land repeatedly on exposed skin and orifices to suck up these fluids. Their lack of innate fear, combined with their sheer numbers and intense drive to feed on these secretions, makes them a uniquely persistent nuisance in the outback Australian environment.
A Bush fly’s reproductive cycle is deeply linked to moisture and temperature. Warm, wet weather is the ideal condition for the flies to hatch from their pupal cases. They possess resilience in their pre-adult stage, where they can survive drought conditions by remaining dormant in the soil until favourable circumstances allow them to emerge. The combination of higher temperatures and widespread rain provides a sudden, abundant source of moist dung where larvae can thrive, leading to massive swarms that can appear almost overnight.
Native Australian herbivores, such as kangaroos, produce small, dry, pelleted dung that native dung beetle species are well adapted to handle. When European settlers introduced millions of cattle, they created a new problem - large, moist dung pads ideal for Bush flies but which other native decomposers could not efficiently break down. Hence much higher numbers of Bush flies than before.

Flies as Pollinators

Flies are major pollinators, second only to insects in the order **Hymenoptera**, which includes bees, wasps and their relatives. Flies tend to roam more widely, visiting flowers to feed on nectar and pollen, inadvertently transferring pollen on the many hairs on their bodies. In wet and colder environments and at altitude where bees are

scarce, flies are significantly more important as pollinators. Additionally, compared to bees, they need less food as they do not need to provide for their young. Many flowers that bear low nectar and those that have evolved trap-pollination depend on flies. Often fly-trapping flowers produce the smell of carrion (rotting flesh) to attract flies.



Austrosciapus connexus *(the* ***Green Long-legged fly****) is a species of long-legged fly from the family Dolichopodidae. It is found in the south-west and eastern coast of Australia as well as some areas of the Pacific. This individual was recently photographed in Katandra*

Pollination by flies, known as **myophily**, is economically important. It has been estimated that flies contribute to the pollination of at least 70% of the world's food crops and are key pollinators of many species of cultivated plants such as cacao, mango, cashew, avocado, oilseed rape, strawberry and blackberry.
Fly pollination is set to become increasingly important as in recent years bee populations world-wide have been declining at an alarming rate. According to the United Nations Food and Agriculture Organization, bee colonies have declined by 30% over the past decade. This decline is not limited to a single species; it affects various types of bees, including bumblebees, honeybees, and solitary bees. The causes behind this massive decline are multifaceted. Contributing factors include habitat loss, pesticide use, climate change, and Varroa mite infestations.
Pollinators require habitat that contains year-round food sources, breeding resources and nesting sites. A brochure titled 'Powerful Pollinators Planting Guide' prepared by the Wheen Bee Foundation lists a range of native plants that support a diverse and healthy community of pollinators that includes flies. Many of the plants listed are present in the Katandra bushland. These include;

Trees - Black Wattle, Blueberry Ash, Sydney Red Gum, Ironbark, Turpentine.
Shrubs -Blackthorn Bursaria, Banksia, Native Hopbush, Rice Flower, Guinea Flower, Parrot Peas and many other pea plants.
Grasses – Kangaroo Grass
Herbs - Creamy Candles (Stackhousia), Pomax, Native Violet, Matt Rush (Lomandra), Grass Trees (Xanthorrhoea)
Climbers – Love Creeper (Glycine)

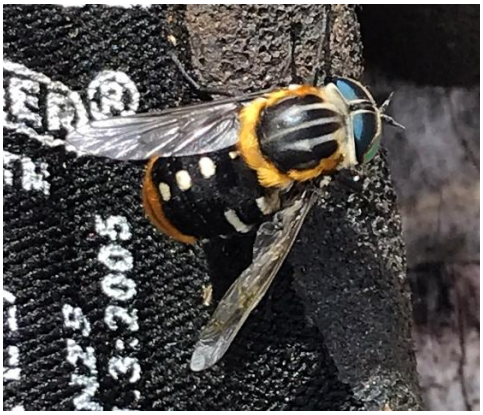
There is no doubt that many other plants present in Katandra could also be included in such a list.

Flower Types

Specialist flowers have modifications to their shape and size that only let certain pollinators access the nectar and pollen. The advantage of specialisation is that pollination is very targeted and efficient, with accurate pollen placement made possible by co-evolution between flowers and insects. The disadvantage is that if the correct pollinator isn't there, the flowers aren't pollinated. Many native ground orchids are specialised for fly pollination.
Generalist flowers however, can be pollinated by many different animals and insects including flies. They are typically saucer shaped with many stamens and have a surface that insects can walk on. Eucalyptus flowers and daisy flowers are generalist flowers.
Therefore, a healthy ecosystem requires a diverse range of pollinators that include flies.

Other Impacts of flies

Apart from being pollinators, flies have many other significant impacts on ecosystems.
Flies are an important part of the food chain, being eaten by birds, bats, amphibians and by other invertebrates.
They are active decomposers, feeding on and helping breakdown animal waste and so returning nutrients to the soil.
Some flies help to control the populations of other insect pests by being predators feeding on them or by acting as parasitoids, laying eggs inside a host so that the developing larvae feed on and eventually kill the host from within.
Flies may act as disease vectors, carrying and spreading a wide variety of diseases to plants, food crops and other animals including humans.



Some flies can resemble bees in appearance

KATANDRA BUSHLAND SANCTUARY
Foley's Hill, Lane Cove Rd, Ingleside NSW
Department of Lands Reserve No 86487
Founder: the late Harold Alfred Seymour
Managed by Katandra Bushland Sanctuary Trust.
Phone: 0431857407

OPEN: Every Sunday: July, August, September, October
HOURS: 10 am — 4 pm
ADMISSION: $5 donation

KATANDRA BUSHLAND SANCTUARY TRUST
PO Box 485 Mona Vale NSW 1660

President: David Seymour
Vice-President; Marita Macrae
Treasurer: Peter Hammond
Trustees: Marita Macrae OAM
Antony Westwood
Myles Holloway
Bushland News Editors: Marita Macrae OAM
David Seymour

(Cover Design by the late Walter Cunningham)

Enquiries: phone – 0431 857 407,
email - katandrainfo@gmail.com
or via the Contact Us page on the Katandra website

Katandra website -
katandrabushlandsanctuary.com

DONATIONS

Donations to Katandra to help maintain the Sanctuary can be made by direct deposit. Katandra's bank details are below

Account Name –
Katandra Bushland Sanctuary Trust
BSB – 082132
Account No. - 509347998

PUBLIC OPEN DAYS 2026

Each Sunday of July–October
10 am – 4 pm

Picnic tables are available for use should you wish to bring along a picnic lunch to enjoy in the Sanctuary.

DIARY DATES 2026

SANCTUARY MAINTENANCE 2026
Maintenance days are generally the third Sunday of the month from March to November, from 9am. Please check by contacting us on 0431 857 407 as these dates and times may vary.

Volunteers are needed
If you can assist on maintenance days or with welcoming visitors to Katandra on open days, please phone 0431 857 407.

Katandra Bushland Sanctuary Trust
PO Box 485 Mona Vale NSW 1660