





AN END TO LOGGING? WHAT ABOUT THE WEST? PUBLIC ACCESS TO PUBLIC LAND SNOWY 2.0 OTWAYS CUT UP PROMISED GRASSLANDS OF THE NEVER NEVER THE PROM AS A SANCTUARY



DOUG GIMESY (CONSERVATION AND WILDLIFE PHOTOGRAPHER) AND **HEATHER KILEY** (CONSERVATION BIOLOGIST) OPEN OUR EYES TO THE LIVES OF GREY-HEADED FLYING-FOXES.

As the sun sets

As the sun finally slips below the horizon, the small crowd that had gathered on a hill just off Yarra Boulevard to see a glorious Melbourne summer sunset, slowly starts to drift away. If only they had waited another 15 or 20 minutes, they would have witnessed something much more spectacular, unique and memorable than just another sunset over a big city – the daily exodus of up to 50,000 Grey-headed Flying-foxes making their way from their urban sanctuary of Yarra Bend Park, to the suburbs of Melbourne and beyond. But why do they fly out each night and where are they going? Like many Melbournians, they are heading out for a meal. But these residents are hoping to feed on the nectar of our flowering eucalypts and native hardwoods (such as banksias and melaleucas). Of course, you can't always get the meal you desire. Their preferred native trees and plants are not as plentiful as they used to be, and so flying-foxes will also resort to eating the 'exotic' introduced fruits commonly found in our gardens. It's when they drop in for a bite to eat that most people get their first close-up encounter with these amazing flying mammals.

The great night gardeners

While an incredible spectacle to witness, this daily nocturnal excursion also plays a vital role in the health of our native forests.

pollinators for our native vegetation.

Travelling on average around 20 kilometres a night to feed before returning home means that they help disperse pollen and seeds, and in doing so contribute to the reproductive and evolutionary processes of forest communities. In fact, they are our most effective longdistance native pollinators and seed dispersers – at least as important as other well-known pollinators such as birds and bees, who are often given all the credit for this role. Indeed Grey-headed Flying-foxes have been recorded travelling between Melbourne and Sydney in just two days – that's 880 kilometres.

The spreading of pollen and seeds isn't just limited to the area around an established camp, however. The trees that flying-foxes rely on for food tend to flower at different times in different parts of the Australian landscape, so local nectar and pollen supplies are generally not stable enough for many bats to base themselves in a single place for the entire year. As winter approaches in Victoria, many of our greyheaded flying-foxes will leave the safety of their Melbourne camp and move up the east coast in search of large flowering events to help them get through the lean colder months. During this time the Melbourne grey-headed flying-fox population that can swell to nearly 50,000 over summer will drop to between just 2,000 and 5,000. According to the Australasian Bat Society, "Camps are more like backpacker hostels than stable households, housing a constantly changing clientele that comes to visit local attractions. Camps are connected into large networks through which flying-foxes move in response to changes in local food resources"

Seeing up to 50,000 flying foxes venture out across the Melbourne sky can give the impression that this species is doing well. Unfortunately, that is not the case, and the national population is now estimated to be just a small fraction of what it once was. Population decline and continued threats mean they are now listed as vulnerable to extinction. The decline not only impacts them directly but also our forests.

Heading out can be dangerous

Leaving the safety of their homes at Yarra Bend Park in search of food can be extremely dangerous for flyingfoxes. Natural predators include large birds of prey such as powerful owls, large snakes and goannas. But human-driven impacts, such as entanglement in fruit tree netting and barbed wire, as well as electrocution on power lines, can take a terrible toll. In January this year, it was estimated that at least 100 flying-foxes were entangled in inappropriate fruit-tree netting and barbed wire in Victoria alone. Tragically the majority of these were either not rescued in time, or didn't survive after rescue.

But these are not the only threats they face. Habitat destruction, shooting in orchards, attacks from some domestic animals like dogs, climate change induced heat stress events, and camp disturbance by some locals, developers and councils, continues to impact heavily on flying-fox numbers.

Continued overleaf

We can all help

There are many simple things we can all do to help our Grey-headed Flying-foxes.

Protect their homes

They are already running out of space and places to live and eat, so reject any 'development' or 'works' that encroaches on or disturbs their homes (i.e. established colonies or camp sites) or impacts our native forests.

Increase their food supply

Plant flowering gums and nectar-bearing native trees and shrubs – <u>and ask</u> your local council to do the same.

Do not disturb

If you are visiting a colony or camp, or are lucky enough to find a bat or two enjoying a meal of fruit or nectar somewhere, keep noise to a minimum, keep your distance and keep pets away.

Welcome them

If they visit your garden, welcome them for dinner – you're pretty lucky to have them, and it's always nice to have guests pop over.



Use only wildlife friendly fruit-tree netting

Ideally, fruit tree netting should not be used at all. But if it must, ensure it is wildlife-friendly. This means:

- It should not have a gap size of more than five millimetres when taut. If you can put your little finger through it, it is too big.
- · Avoid using black or monofilament types.



Manage any barbed wire

Avoid using barbed wire if you can, as it can maim and kill many species, not just bats.

If you must, paint the top strand fluoro or white as this allows them to see it more easily at night. Also consider covering any wire with bags or plastic pipes near trees where flying-foxes may feed. And if you have barbed wire that no longer has any purpose, get it removed.

Get help immediately if you find an injured grey-headed flying-fox

A bat found alone during daylight hours is most likely in trouble. If you see one tangled in fruit tree netting, on power lines or caught on barbed wire, it is definitely in trouble and in need of urgent care. The longer they are trapped, the more damage they will do to themselves and the more stress they suffer. Also in the breeding season (late September–December) keep an eye out for possible babies with electrocuted mothers on power lines. Sometimes the mother will be dead but the baby is still alive.

Immediately call Wildlife Victoria on 03 8400 7300, or your local wildlife group for assistance, who will arrange for a trained, vaccinated volunteer to attend.

Never touch a bat if you find one

Immediately call your local wildlife group for assistance.

Bring your friends and enjoy the view

And finally, if you want to show your friends a glorious summer sunset over Melbourne's city skyline, head to the hills near Yarra Bend Park and wait a few minutes longer after the sun has set. If you do, you'll have a good chance of witnessing something spectacular and unique – up to 50,000 flying mammals heading out for a meal, which in turn helps provide a vital service to our native forests and ecosystems.

Doug Gimesy and Heather Kiley are writing a children's educational book about the grey-headed flying-fox. It will be available early 2020. For more information go to www.gimesy.com or email info@gimesy.com

MELBOURNE GREY-HEADED FLYING-FOX CALENDAR

Summer

Summer is when the colony is at its largest.

Early in summer new mothers will be carrying their young as they head out to feed at night. Later pups will be left in 'crèche' trees. At this time young ones also learn to fly and start to make their first trips to nearby flowering trees.

In late summer, there may be over 50,000 individuals roosting along the river, with maximum numbers reached around February.

Summer is also the season when bats are most vulnerable to overheating. On exceptionally hot days you may see them 'dipping' their bellies while in full flight to cool down and grab a drink by licking the water of their belly fur.

Autumn

Autumn is mating season.

Last year's pups are now weaned, and the females are ready to become pregnant again, and mating starts.

In late autumn thousands of nomads will also start to migrate northwards, looking for anything flowering.

Grey-headed Flying-foxes in motion.



Winter

Winter in Melbourne is when the colony is at its smallest.

Most females have left, and colony numbers drop to between 2,000 and 5,000 (or less than 10 per cent of the colony's peak size).

It is unclear why some stay when all the other bats are migrating across eastern Australia. It might be that they enjoy the lack of competition when foraging across the city, or the winter bats may be juveniles not yet brave enough to venture away from their birthplace, or some males don't want to give up their territories. This is one of the questions scientists are still trying to unravel about these fascinating creatures.

Spring

Spring sees the return of the nomadic bats and the colony size swells.

Most of the adult females come back ready to give birth to a single pup, which they breastfeed for two to three months over summer.

It has been estimated that the majority of all births occur in October, and if you are visiting the Melbourne colony in spring you have a high chance of seeing a pup.