

Sunshine Coast Council

Those Magnificent Flying Mammals!

Bat Education Kit



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Hasting Council), Tigerlily Boyce
(Sunshine Coast Council).

Disclaimer

The information contained in this
publication is based on knowledge and
understanding at the time of
writing (2024). However, because of
advances in knowledge, users are
reminded of the need to ensure that
the information upon which they rely
is up to date and to check the currency
of the information with the relevant
authorities.

Preface

This publication has been prepared as a resource for schools. You may copy, distribute, download and otherwise freely deal with this publication for educational purposes only, provided that Sunshine Coast Council is attributed as the owner. No part of this publication can be reproduced for commercial gain without written consent from the owner.

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Acknowledgement of country

Sunshine Coast Council acknowledges the Sunshine Coast Country, home of the Kabi Kabi peoples and the Jinibara peoples, the Traditional Custodians, whose lands and waters we all now share.

We recognise that these have always been places of cultural, spiritual, social and economic significance. The Traditional Custodians' unique values, and ancient and enduring cultures, deepen and enrich the life of our community.

We commit to working in partnership with the Traditional Custodians and the broader First Nations (Aboriginal and Torres Strait Islander) communities to support self-determination through economic and community development.

Truth telling is a significant part of our journey. We are committed to better understanding the collective histories of the Sunshine Coast and the experiences of First Nations peoples. Legacy issues resulting from colonisation are still experienced by Traditional Custodians and First Nations peoples.

We recognise our shared history and will continue to work in partnership to provide a foundation for building a shared future with the Kabi Kabi peoples and the Jinibara peoples.

We wish to pay respect to their Elders – past, present and emerging, and acknowledge the important role First Nations peoples continue to play within the Sunshine Coast community.

Together, we are all stronger.

Flying Fox illustration credit, BJ Murphy



Flying-foxes and micro-bats may carry bacteria and viruses which can be harmful to humans. People who are not trained and vaccinated should not handle bats. If you find an injured micro-bat or flying-fox, do not attempt to help the animal yourself or touch it in any way. Contact the RSPCA hotline (1300 264 625) for assistance.

Sunshine Coast Council

Those Magnificent Flying Mammals!

Bat Education Kit

Explore the captivating world of flying-foxes with our comprehensive 'Those Magnificent Flying Mammals' education materials, consisting of three essential documents: a Teacher's Guide, engaging Units of Study, and invaluable Flying-fox Roost Field Trip information.



Those Magnificent Flying Mammals!

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Introduction

Flying-foxes are the largest flying mammals in Australia, playing a crucial role as keystone pollinator species. Their significance extends to ensuring the survival of our forests and maintaining the overall health of our local ecosystems. While their presence in urban areas can be a source of contention, with some community members recognising their value and offering support, many others highlight negative impacts stemming from their roosting and foraging behaviours.

Hi, my name is Frankie!

Follow me as I fly through the forest and learn about how important Flying-Foxes are to our whole ecosystem. I'll be your guide through this information kit.



Navigating this complexity requires a strategic focus on education and engagement. By fostering awareness, understanding, and community capacity, we can pave the way for coexistence with these remarkable creatures. As the threats facing flying-foxes escalate, community education becomes paramount. Informing the public about flying-fox behaviours, seasonal movements, ecological and cultural connections, as well as management decisions and practices, is a pivotal step. This comprehensive approach not only promotes long-term tolerance but also inspires increased conservation actions, ensuring a harmonious relationship between communities and these vital members of our ecosystem.

The Sunshine Coast Council's Regional Flying-fox Management Plan (RFFMP) recognises the importance of education and has an ongoing commitment to educating and engaging the community. This program is an outcome of the RFFMP. Its primary objective is to deliver a curriculum-aligned learning experience to local schools on the Sunshine Coast. This program aims to actively engage students in understanding various aspects of flying-fox species, involving them in the observation and collection of data related to these species, and fostering their contribution towards positive and constructive outcomes for crucial flying-fox management practices.

Aligned with the goal of striking a balance between reducing conflicts associated with flying-fox roosting in urban areas and ensuring the conservation and welfare of these essential native species, this initiative emphasises knowledge transfer, heightened awareness, active engagement, and tangible actions within schools and among students. The ultimate aim is to extend this knowledge and commitment beyond the school environment, reaching into the wider community and students' homes.

The program comprises a carefully structured sequence of learning activities, carefully aligned with the Australian Curriculum. Designed to be accessible to school teachers across the Sunshine Coast, these learning sequences and accompanying resources serve as a comprehensive guide. They equip teachers with ideas, concepts, research methodologies, investigative approaches, and actionable items concerning the three species of flying-foxes that frequent the Sunshine Coast. Topics covered include their distinctive features, life cycles, behaviours, habitat requirements, ecosystem and seasonal connections, potential threats, cultural perspectives, conservation values and ethics, as well as pertinent management considerations. Through these activities, the program not only imparts valuable knowledge but also encourages a sense of responsibility and active involvement in the conservation of these remarkable native species.



Welcome to our engaging learning units of study that will take students on an exciting journey into the fascinating world of flying-foxes. In these units, our focus will be on visiting a local flying-fox roost site, providing a unique opportunity for hands-on exploration and discovery. By delving into the intricacies of these roosts, students will gain firsthand insights into the habitats, behaviours, and ecological importance of these remarkable creatures. Through a carefully designed curriculum, the aim is to not only enhance their understanding of bat biology but also foster a deep appreciation for the critical role bats, and flying-fox in particular, play in the broader ecosystem. Get ready for an immersive learning experience that brings the classroom outdoors and opens the door to the captivating world of local flying-fox roosts.

Before You Begin

General information – Pre-visit (k)

Welcome to our engaging learning units of study that will take students on an exciting journey into the fascinating world of flying-foxes. In these units, our focus will be on visiting a local flying-fox roost site, providing a unique opportunity for immersive exploration and discovery.

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Those Magnificent Flying Mammals!

Planning your flying-fox roost visits

Planning your Roost Site visit ahead of time is crucial for keeping humans, flying-foxes and the ecosystem safe and healthy. Minimising disruptions to flying-fox roosts, particularly during the breeding season is important to avoid negative impacts on pregnant flying-foxes and the ecosystem. Here are some safety considerations:

Safety on site

Keeping people safe:

- Complete a thorough risk assessment documentation.
- Carry a first aid kit and have an adult team member with appropriate qualifications.
- Familiarise excursion staff with the medical status of students, especially regarding epilepsy, diabetes, asthma, and heart conditions. Additionally, make staff aware of students with behavioural issues or those requiring extra support, along with the corresponding support strategies.
- Ensure that all participating staff, including the school contact person, understand their specific roles and are familiar with the program itinerary, risk management plans, and emergency response plan.
- Ensure students are dressed appropriately for weather conditions and adhere to sun-safety practices.
- Be vigilant about pathways and roadways, monitoring for vehicular traffic.
- Recognise that these are public spaces, acknowledging the presence of other people and dogs in parks/reserves.
- Maintain supervision ratios of 1:5 for Year 3 students and 1:10 for Years 4-8.
- Distribute Roost Maps to all adults.
- Obtain written or electronic consent from parents/carers for the school excursion.
- Choose an appropriate mode of transport for easy site access. Consider the condition of the track, the vehicle, the weather (muddy ground or steep slope slip risks etc. Is walking part of the way feasible? This can be a good opportunity to make some observations.

Keeping flying-foxes safe:

- Minimise disruptions to flying-fox roosts, particularly during the breeding season to avoid any negative impact on pregnant flying-foxes.
- Be mindful and respectful when visiting a roost site – Flying-foxes are wild animals and can be sensitive to noise or disturbances.
- Instruct students not to feed or disturb animals at the roost site, emphasising the potential harm of human food to wildlife.



If you find an injured flying-fox – do not attempt to touch – contact the appropriate authorities. Contact the RSPCA hotline (1300 264 625) for a trained and vaccinated carer.

See “Roost Excursion Notes” factsheet in Teacher’s Guide for more information.

Remember:

‘Leave No Trace’ in wild places.

Encourage students to bring waste-free lunches, especially in parks/reserves without waste bins.



Planning your flying-fox roost visits

Consider the timing of your roost visit

Although a wild animal, flying-foxes do follow a familiar pattern of behaviour. The table below indicates the typical breeding cycles for flying-foxes seen in South East Queensland.

Note, these timeframes may vary considerably in response to changes in the weather and other conditions.



Flying-fox Reproduction Cycle

Although a wild animal, flying-foxes do follow a familiar pattern of behaviour. The table below indicates the typical breeding cycles for flying-foxes seen in South East Queensland. Note, these timeframes may vary considerably in response to changes in the weather and other conditions.

Species	J	F	M	A	M	J	J	A	S	O	N	D
Grey-headed Flying-fox	●	●	●	■	■	■	■	■	●	●	●	●
Black Flying-fox	●	●	●	■	■	■	■	■	●	●	●	●
Little Red Flying-fox	■	■	■	●	●	●	●	●	●	●	■	■

■ Peak Conception/ Mating
 ■ Final trimester of pregnancy
 ● Lactation - milk production for pups
■ Creching - young left at roost
■ Birthing of pups

Pre-visit activities & discussion points

These pre-visit activities aim to enhance students' understanding, curiosity, and appreciation for flying-foxes and their ecosystems before embarking on the roost site visit.

Explore Sunshine Coast Council's BatMap website to determine flying-fox roosts closest to your school grounds. Discuss geographical features, water bodies, and potential habitats for flying foxes. Look at the flying-fox species and numbers listed from monitoring over time at each roost close to your school.

Learn the practice of nature journaling, to document your observations of local wildlife and plants in the lead-up to the visit.

Research and gather information about these flying-fox species, their behaviours, and their ecological significance. Create identification guides for different species of flying-foxes, focusing on distinctive features and characteristics.

What is the environmental impact of flying-foxes and the importance of their role in the ecosystem? Explore local flora and fauna, focusing on species that may interact with flying-foxes or share their habitat.

As a group, listen to "BatPod" - a "choose your own adventure" style interactive podcast. Discuss the options in each chapter and make decisions collectively as you progress through the series.

Connect with local wildlife experts, ecologists, or conservationists - either virtually or in-person interviews - to provide insights into flying-fox behaviour, threats, caring for injured flying-fox and conservation efforts.

Discuss your upcoming visit with the wider school community, family and friends, raising awareness about flying-fox conservation and promoting community engagement.



JUNIOR
PODCAST
SERIES

BatPod

Sunshine Coast flying-fox roost sites for school visits

During the roost visit, students will actively engage in a variety of hands-on activities designed to deepen their understanding of flying-foxes and their habitats.

These on-site experiences aim to foster direct connections with nature, promote scientific observation skills, and instill a sense of responsibility towards wildlife conservation. Through these activities, students will have the opportunity to explore the rich biodiversity of the roost site, enhance their ecological awareness, and develop a profound appreciation for the vital role flying-foxes play in sustaining our local ecosystems.



Roost visit activities & discussion points

During the roost visit, students will actively engage in a variety of hands-on activities designed to deepen their understanding of flying-foxes and their habitats.

These on-site experiences aim to foster direct connections with nature, promote scientific observation skills, and instil a sense of responsibility towards wildlife conservation. Through these activities, students will have the opportunity to explore the rich biodiversity of the roost site, enhance their ecological awareness, and develop a profound appreciation for the vital role flying-foxes play in sustaining our local ecosystems.

The Sunshine Coast Council has a diverse set of options for managing flying-fox roosts on public and council-managed land. While not every option may be suitable for every scenario, a variety of choices are outlined below. Importantly, all the management options listed align with the Code of Practice for the Ecologically Sustainable Management of Flying-fox Roosts.



Activities and Discussion points



Are flying-foxes present in the roost? Take a close look; they might be centrally located or nestled within denser vegetation. Consider whether you heard or smelled them before spotting them. Observe their behaviour. Attempt to estimate their numbers and engage in discussions on effective techniques for counting these animals, especially when they are in motion.



Document the native vegetation observed at the roost using the provided list. Identify which species are currently in flower during your visit. Explore the various animal species, including insects, mammals, and birds, that are reaping the benefits of this flowering. Delve into the advantages these plant-animal interactions offer to the plants themselves.



Start your roost visit by creating a yarning circle with your classmates. Visiting a flying-fox roost site is a unique and educational experience for school groups. As we explore these natural habitats, it is important to recognise and honour the Aboriginal and Torres Strait Islander cultures and traditions that have existed on this land for thousands of years. One way to do this is by performing an Acknowledgement to Country.



Contemplate these roost sites as habitats hosting a diverse range of plants, fungi, and animals. What intricate food webs do you believe are present in this environment?



<https://inaturalist.ala.org.au/projects/bats-in-backyards-flying-fox-watch>



Document the bird species observed and their vocalisations at the roost site. Are there any visible indications of nesting activity?



Use your nature journaling skills you developed before the visit, to record the roost site. Consider the layers of vegetation i.e., look at the groundcovers, ferns, shrubs and taller trees. Record animals you see, note the weather and record how you feel in this natural space.



Flying foxes often choose roost locations in proximity to water bodies. Can you recognise the waterway near the roost site? Describe its appearance, considering whether it appears natural or is confined within concrete drains. Discuss the reasons for such appearances, such as managing water flow in the landscape, safeguarding local residences from floods, and ensuring safety. Explore the potential impacts on wildlife connected to these different waterway features.



Record your flying-fox sightings on the "Bats in Backyards" citizen science program - see Teachers Guide for more information.



See individual sites for more discussion points.

Here are four roost sites on the Sunshine Coast suitable for school visits

To learn more about an Acknowledgement of Country or making a Yarning Circle, see the appendices in the Teacher's Guide for more.



Andrea Ahern Bushland Park.....18

Teranna St, Battery Hill.
 Grey-headed Flying Fox (GHFF)
 Black Flying Fox (BFF)

Emerald Woods Environmental Area.....22

Goonawarra Drive, Mooloolaba.
 Grey-headed Flying Fox (GHFF)
 Black Flying Fox (BFF)
 Little Red Flying Fox (LRFF)

Kuluin Neighbourhood Park.....26

Tallow Wood Dr, Kuluin.
 Grey-headed Flying Fox (GHFF)
 Black Flying Fox (BFF)

Tesch Park.....30

Coral St, Maleny
 Grey-headed Flying Fox (GHFF) - *Nationally significant maternity site*
 Black Flying Fox (BFF)

Andrea Ahern Bushland Park

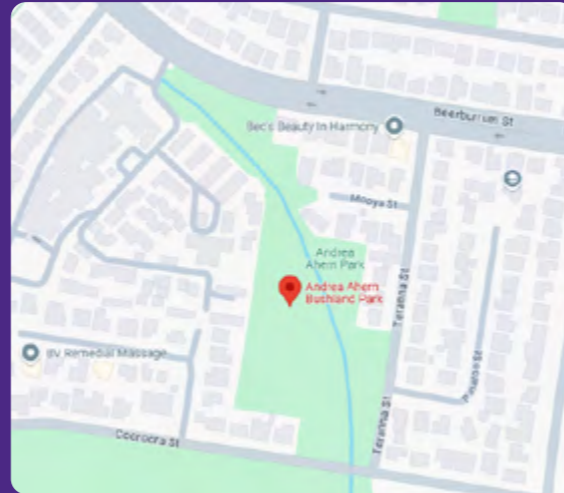
Getting There

Address:

Teranna St, Battery Hill
Caloundra

Recommended parking :

Buses and cars can be parked on the edge of the road directly adjacent to the playground on Teranna St, Battery Hill



Amenities:

- Shade
- Playground
- Rubbish bins
- Pathways

NB: no toilets on site (nearest public toilets would be at Eleanor Shipley Park - 5 min drive)

Pathway:

- Primary path - sealed - a one way path - from Terrana St to Beerburum St. Approx 380m.
- Secondary path - mown grass track - access from Cooroora St. - access past the locked vehicle gate. Approx 70m.

Discussion points:

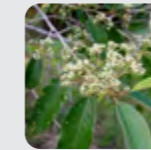
- Flying-foxes like to roost around waterways. Find the waterway running through the Andrea Ahern Bushland Park. How natural does it look?
- Can you identify the key plant species in the Andrea Ahern Bushland Park that might be good food sources for flying-foxes? Look for nectar producing flowers/blossoms.
- There are some big Scribbly Gums, *Eucalyptus racemosa*, trees in the Andrea Ahern Bushland Park. How old do you think they are? Can you see the hollows? These are often used as nesting spaces for hollow dependent species. Find out about local species that use these hollows. What is the relationship between them and the flying-fox at this roost in terms of food sources and pollination?
- Explore this area using aerial maps - where would flying-fox fly to find other food sources?

Andrea Ahern Bushland Park

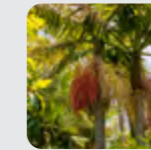
Vegetation present



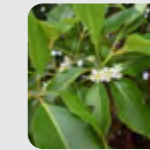
Macaranga
Macaranga tanarius



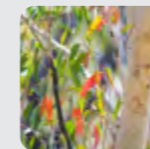
Red Ash
Alphitonia excelsa



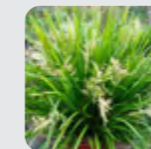
Piccabeen Palm
Archontophoenix cunninghamiana



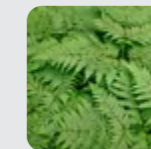
Brush Box
Lophostemon confertus



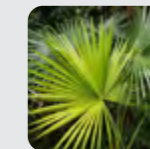
Scribbly Gum
Eucalyptus racemosa



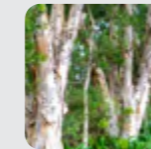
Mat Rush
Lomandra hystrix



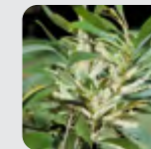
Soft Bracken Fern
Calochlaena dubia



Cabbage Tree Palm
Livistona australis



Paper Bark
Melaleuca quinquenervia

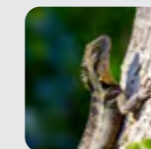


Coil Pod Wattle
Acacia cincinnata

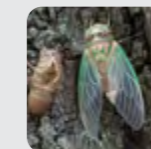
Other animals present



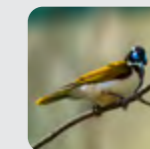
Kookaburra
Dacelo novaeguineae



Water Dragon
Intellagama lesueurii



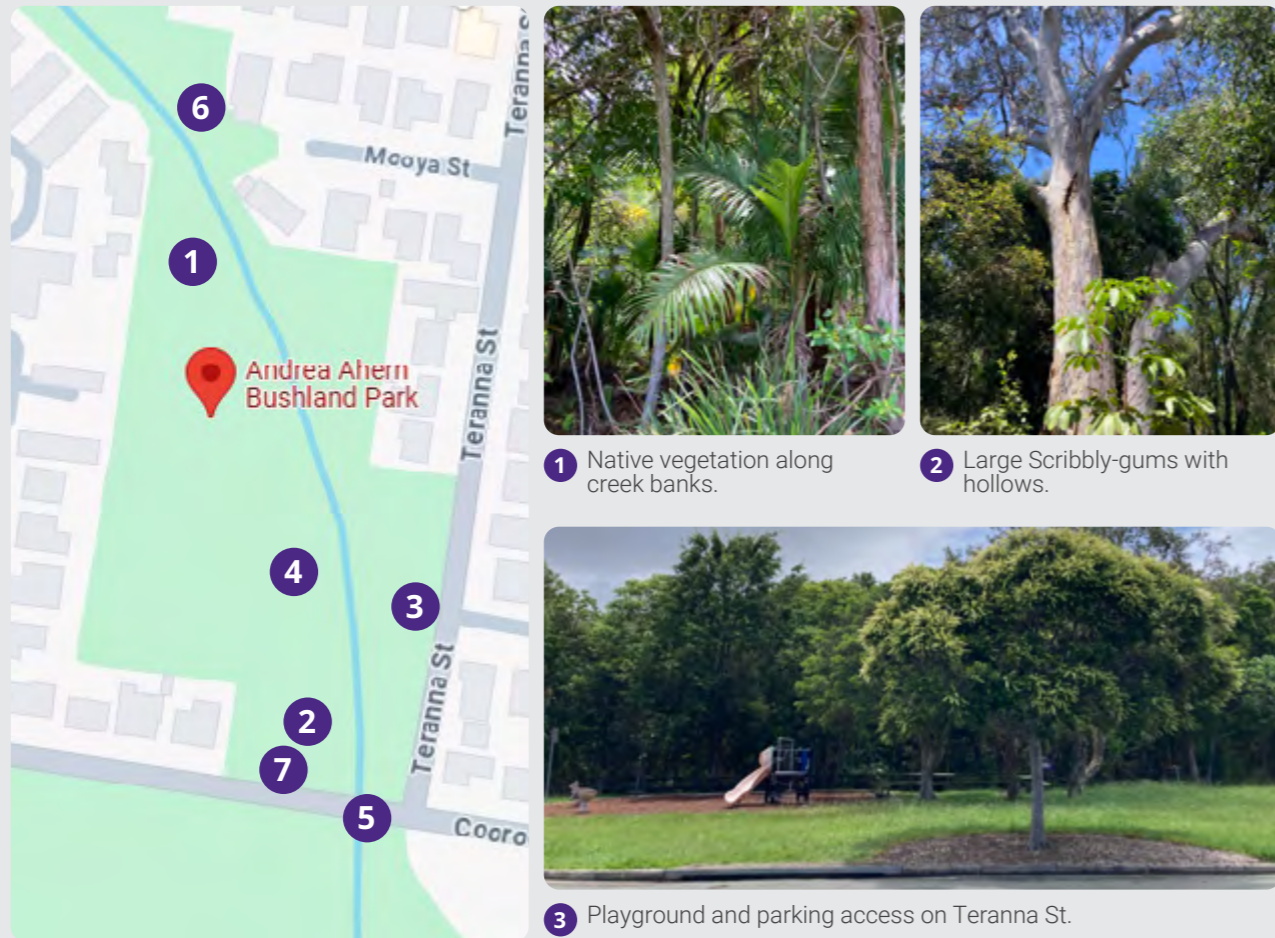
Cicada
Archontophoenix cunninghamiana



Blue Faced Honeyeater
Entomyzon cyanotis

Andrea Ahern Bushland Park

Teranna St, Battery Hill



1 Native vegetation along creek banks.



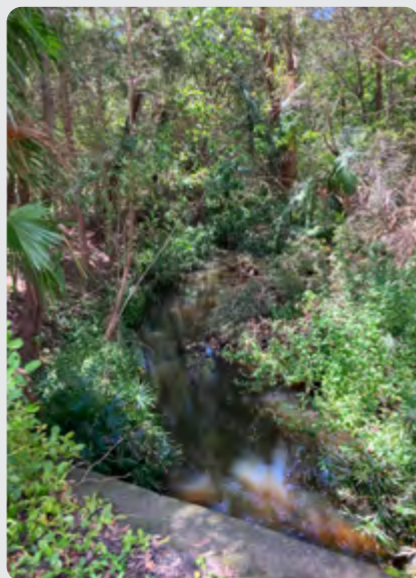
2 Large Scribbly-gums with hollows.



3 Playground and parking access on Teranna St.



4 SC Council FF Management signage.



5 Creek contained in drain system.



6 Sealed pathways — even & level surface.



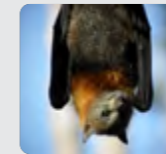
7 Gate access from Cooroora St. Mowed paths to FF location.

Andrea Ahern Bushland Park

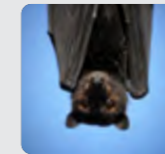
Teranna St, Battery Hill

Exploring flying-fox monitoring online with Council's BatMap website

Flying-fox species present:



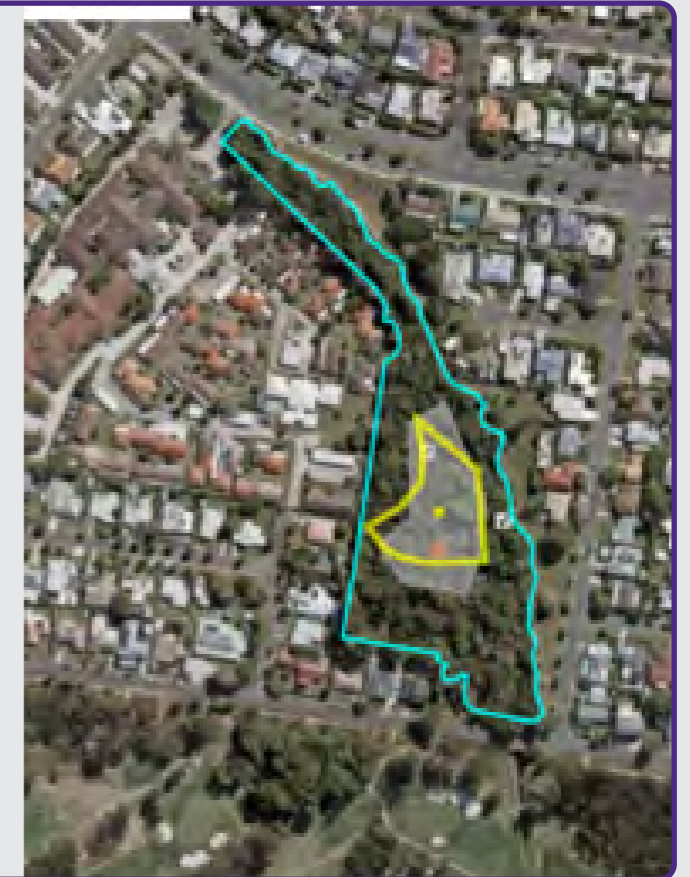
Grey-headed Flying-fox



Black Flying-fox



<https://www.sunshinecoast.qld.gov.au/environment/native-animals/flying-foxes>



Instructions:

- Orange circle show roost sites across the Sunshine Coast council region.
- Yellow circles show recent monitoring/ counting of Flying-fox
- Explore roosts around your school. Are there any? What species of flying-fox are seen there?
- Type into the search bar the roost site i.e. Andrea Ahern Bushland Park.
- Click on the yellow circle - this will show the most recent flying-fox monitoring - with a count of each species seen and location of where flying-fox are within the roost site.

Emerald Woods Environmental Area

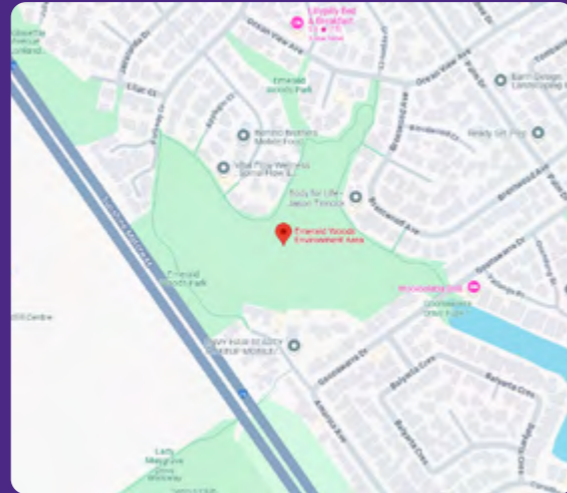
Getting There

Address:

Goonawarra Dr, Mooloolaba
Amarina Ave, Mooloolaba

Recommended parking :

Buses and cars can be parked on the edge of the road on Tallow Wood Drive.



Amenities:

- Shade
- Playground
- Rubbish bins
- Pathways

NB: no toilets on site (nearest public toilets would be at 1 Syd Lingard Drive - approx. 5 mins drive away)

Pathway:

- Pathway - sealed - a one way path - from Amarina Ave to Goonawarra Dr - approx. 1.3kms.

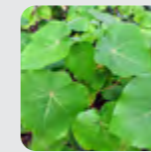
NB: no direct access from Goonawarra entry to Amarina Ave entry - only the pathway around the entire Environmental Area.

Discussion points:

- Flying-foxes like to roost around waterways. Find the waterway running through the Emerald Woods Environmental Area. How natural does it look?
- Can you identify the key plant species in the Environmental Area that might be good food sources for flying-fox? Look for nectar producing flowers/blossoms.
- There is a large swampy area within the centre of the Emerald Woods Environmental Area. What other animal species would call this habitat home?
- This area supports a large number of bird species - make a list of what you see and hear. What is the relationship between these species and flying-foxes? Consider shared food sources, pollination and space for nesting/roosting.
- Explore this area using aerial maps - where would flying-fox fly to find other food sources?
- Did you hear the traffic on the nearby Sunshine Motorway that borders the Emerald Woods Environmental Area? What impact might this have on flying-fox and other animals?
- There are many houses around the Emerald Woods Environmental Area and these residents may be affected by the presence of flying-fox. What could be the issues? Explore ways Sunshine Coast Council has been managing this space to encourage peaceful co-existence.

Emerald Woods Environmental Area

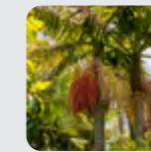
Vegetation present



Macaranga
Macaranga tanarius



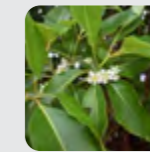
Red Ash
Alphitonia excelsa



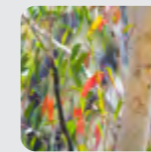
Piccabeen Palm
Archontophoenix cunninghamiana



Blue Quandong
Elaeocarpus grandis



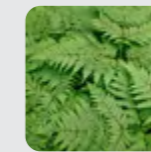
Brush Box
Lophostemon confertus



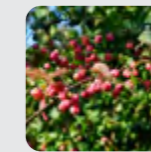
Scribbly Gum
Eucalyptus racemosa



Mat Rush
Lomandra hystrix



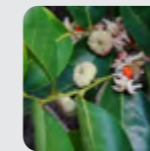
Soft Bracken Fern
Calochlaena dubia



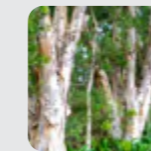
Lilly Pilly
Syzygium species



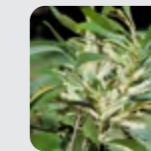
Cabbage Tree Palm
Livistona australis



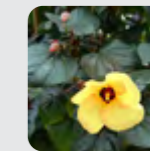
Cheese Tree
Glochidion ferdinandi



Paper Bark
Melaleuca quinquenervia

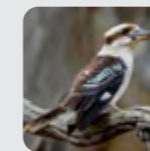


Coil Pod Wattle
Acacia cincinnata

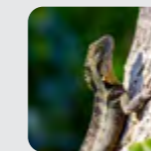


Cotton Tree
Hibiscus tiliaceus

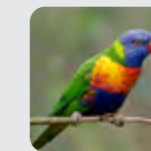
Other animals present



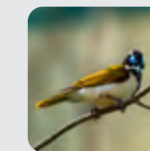
Kookaburra
Dacelo novaeguineae



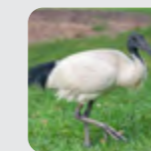
Water Dragon
Intellagama lesueurii



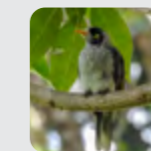
Rainbow Lorikeet
Trichoglossus moluccanus



Blue Faced Honeyeater
Entomyzon cyanotis



Ibis
Threskiornis molucca



Noisy Minor
Manorina melanocephala

Emerald Woods Environmental Area

Goonawarra Dr & Amarina Ave, Mooloolaba



4 Native vegetation along creek banks and swamp area.



1 Entry at Amarina Ave.



3 Tall gum trees



5 SC Council FF Management signage.



2 Entry at Goonawarra Dr



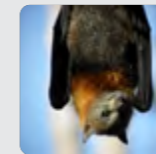
6 Native vegetation along pathway.

Emerald Woods Environmental Area

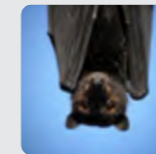
Goonawarra Dr & Amarina Ave, Mooloolaba

Exploring flying-fox monitoring online with Council's BatMap website

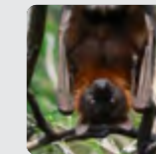
Flying-fox species present:



Grey-headed Flying-fox



Black Flying-fox



Little Red Flying-fox



<https://www.sunshinecoast.qld.gov.au/environment/native-animals/flying-foxes>



Instructions:

- Orange circle show roost sites across the Sunshine Coast council region.
- Yellow circles show recent monitoring/counting of Flying-fox
- Explore roosts around your school. Are there any? What species of flying-fox are seen there?
- Type into the search bar the roost site i.e. Emerald Woods Environmental Area.
- Click on the yellow circle - this will show the most recent flying-fox monitoring - with a count of each species seen and location of where flying-fox are within the roost site.



Kuluin Neighbourhood Park

Getting There

Address:

82 Tallow Wood Drive
Kuluin

Recommended parking :

Buses and cars can be parked on the edge of the road on Tallow Wood Drive.



Amenities:

- Shade
- Playground
- Rubbish bins
- Picnic table and chairs
- Pathways

Pathway:

- Sealed - circular path - approx. 800m return

NB: no toilets on site (nearest public toilets would be at Lions Park, 107 Fishermans Rd - approx. 5 mins away).

Discussion points:

- Flying-foxes like to roost around waterways. Find the waterway running through the Kuluin Neighbourhood Park. How natural does it look?
- Can you identify the key plant species in the Kuluin Neighbourhood Park that might be good food sources for flying-fox? Look for nectar producing flowers/blossoms.
- There is a small swampy area within the Kuluin Neighbourhood Park. What other animal species would call this habitat home?
- This area supports a number of bird species - make a list of what you see and hear. What is the relationship between these species and flying-foxes? Consider shared food sources, pollination and space for nesting/roosting.
- Explore this area using aerial maps - where would flying-fox fly to find other food sources?
- There are many houses around the Kuluin Neighbourhood Park and these residents may be affected by the presence of flying-fox. What could be the issues? Explore ways Sunshine Coast Council has been managing this space to encourage peaceful co-existence.
- Did you hear the traffic on the nearby Maroochydore Road that borders the Kuluin Neighbourhood Park? What impact might this have on flying-fox and other animals?

Kuluin Neighbourhood Park

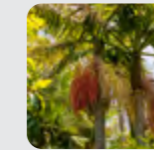
Vegetation present



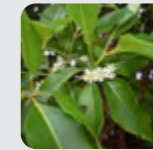
Macaranga
Macaranga tanarius



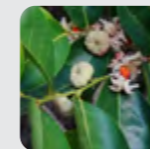
Red Ash
Alphitonia excelsa



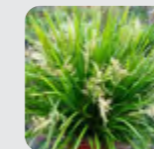
Piccabeen Palm
Archontophoenix cunninghamiana



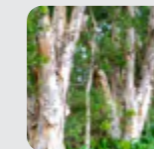
Brush Box
Lophostemon confertus



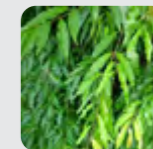
Cheese Tree
Glochidion ferdinandi



Mat Rush
Lomandra hystrix

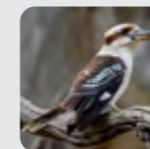


Paper Bark
Melaleuca quinquenervia

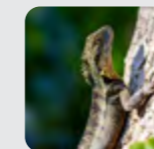


Waterhousea
Waterhousea floribunda

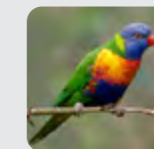
Other animals present



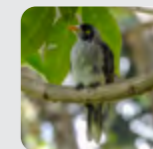
Kookaburra
Dacelo novaeguineae



Water Dragon
Intellagama lesueurii



Rainbow Lorikeet
Trichoglossus moluccanus



Noisy Minor
Manorina melanocephala

Kuluin Neighbourhood Park

Tallow Wood Drive, Kuluin



1 Tall trees suitable for roosting FF.



2 Entry from Tallow Wood Dr.



3 Creek contained in drain



4 Tree planting around pathway edge



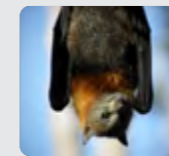
5 SC Council FF Management sign

Kuluin Neighbourhood Park

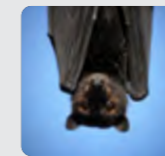
Tallow Wood Drive, Kuluin

Exploring flying-fox monitoring online with Council's BatMap website

Flying-fox species present:



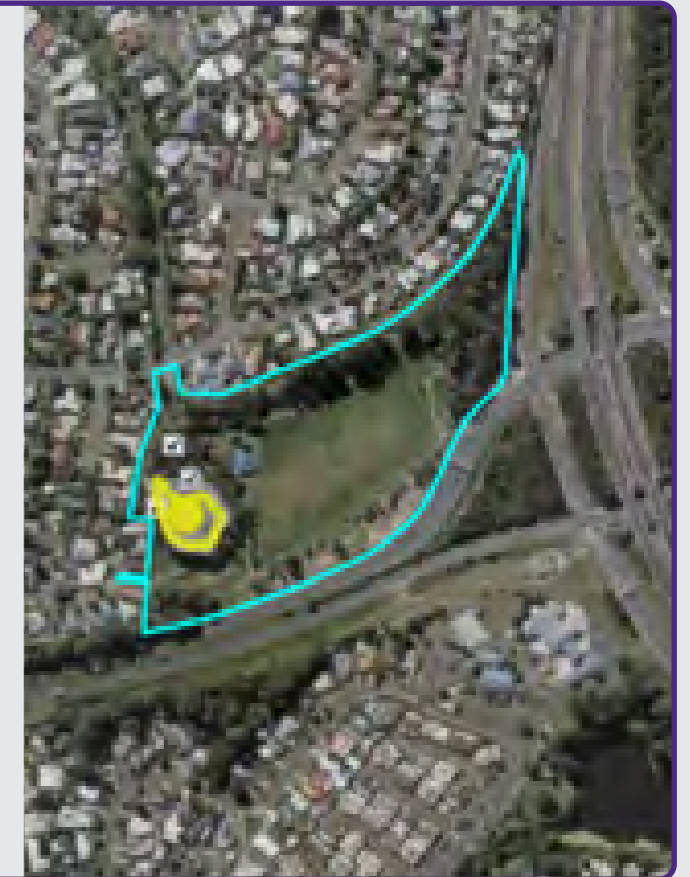
Grey-headed Flying-fox



Black Flying-fox

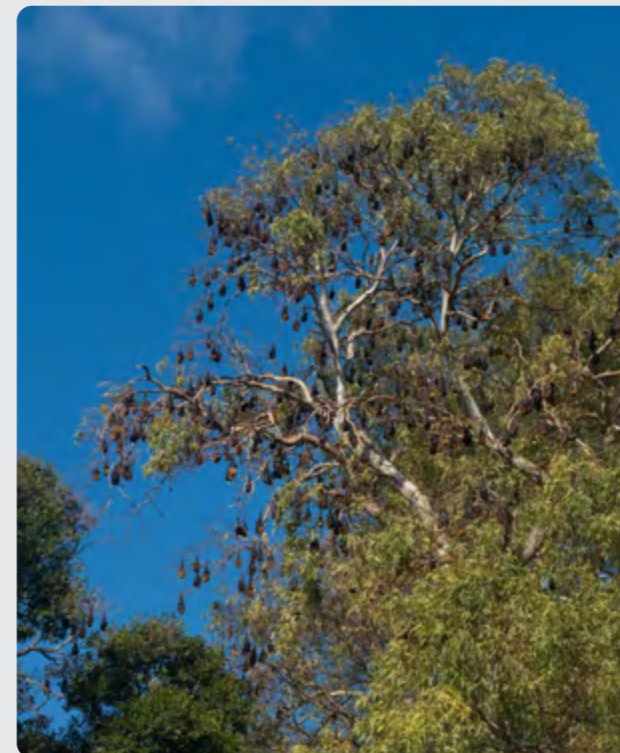


<https://www.sunshinecoast.qld.gov.au/environment/native-animals/flying-foxes>



Instructions:

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- Yellow circles show recent monitoring/counting of Flying-fox
- Explore roosts around your school. Are there any? What species of flying-fox are seen there?
- Type into the search bar the roost site i.e. Kuluin Neighbourhood Park.
- Click on the yellow circle - this will show the most recent flying-fox monitoring - with a count of each species seen and location of where flying-fox are within the roost site.



Tesch Park

Getting There

Address:

Coral St, Maleny

NB: the area where the Flying-fox roost is locally known as Pecan Park.

Recommended parking :

Buses and cars can be parked on the edge of the road on Coral St. Students can be dropped off at a dedicated bus-stop in front of Tesch Park on Coral St.



Amenities:

- Shade
- Playground
- Rubbish bins
- Pathways
- Toilets
- Drinking water

Pathway:

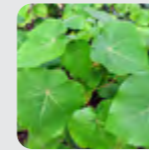
- Sealed - circuit pathway - approx. 500m return.

Discussion points:

- Flying-foxes like to roost around waterways. Find the waterway running through Tesch Park. How natural does it look? Does the creek have a name? What's the significance of the name?
- Can you identify the key plant species in Tesch Park that might be good food sources for flying-fox? Look for nectar producing flowers/blossoms. What other animals would also use these food sources?
- This site has a "Nationally Significant Roost" classification. Why do you think a flying-fox roost site is considered 'Nationally Significant'? What factors or characteristics do you think make it important on a national scale?
- This area supports a number of bird species - make a list of what you see and hear. What is the relationship between these species and flying-foxes? Consider shared food sources, pollination and space for nesting/roosting.
- Explore this area using aerial maps - where would flying-fox fly to find other food sources?
- This roost impacts neighbouring residents and businesses. What do you think would be the issues? Explore ways Sunshine Coast Council has been managing this space to encourage peaceful co-existence.

Tesch Park

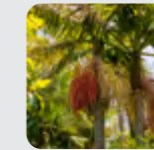
Vegetation present



Macaranga
Macaranga tanarius



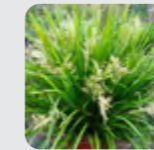
Waterhousea
Waterhousea floribunda



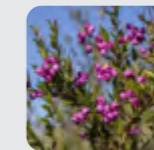
Piccabeen Palm
Archontophoenix cunninghamiana



Blue Quandong
Elaeocarpus grandis

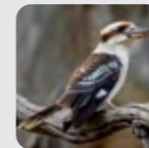


Mat Rush
Lomandra hystrix

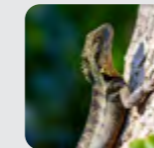


Creek Lillypilly
Acmena smithii

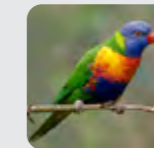
Other animals present



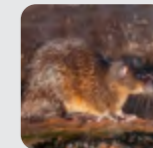
Kookaburra
Dacelo novaeguineae



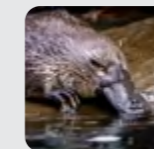
Water Dragon
Intellagama lesueurii



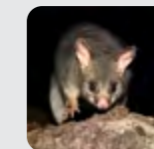
Rainbow Lorikeet
Trichoglossus moluccanus



Water Rat
Hydromys chrysogaster



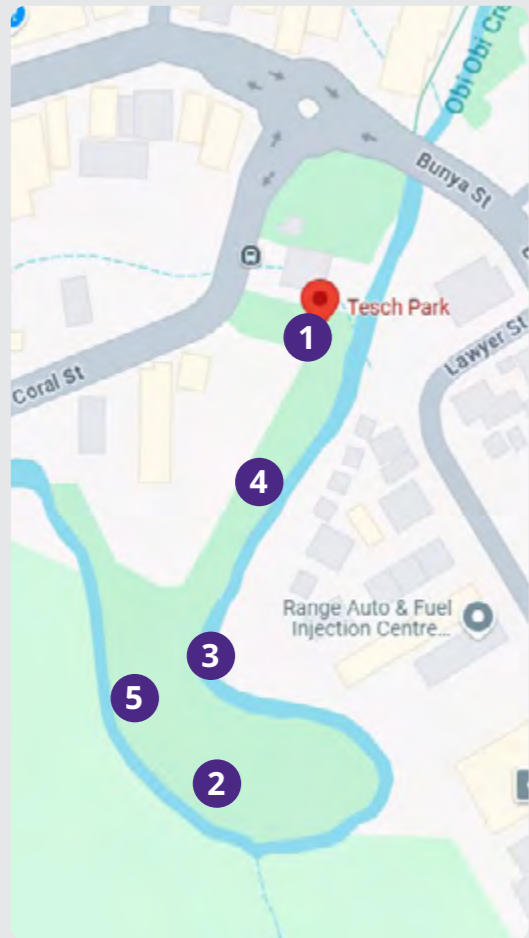
Platypus
Ornithorhynchus anatinus



Mountain Brushtail Possum
Trichosurus cunninghami

Tesch Park

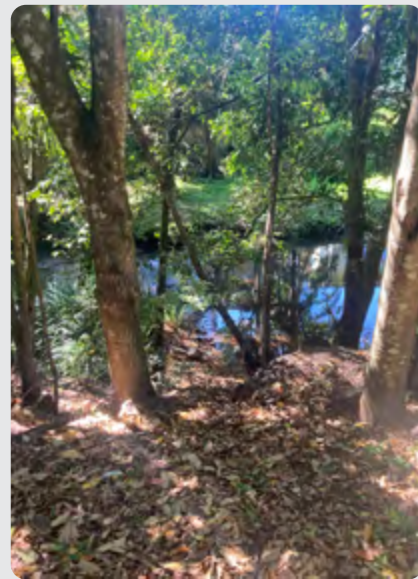
Coral St, Maleny



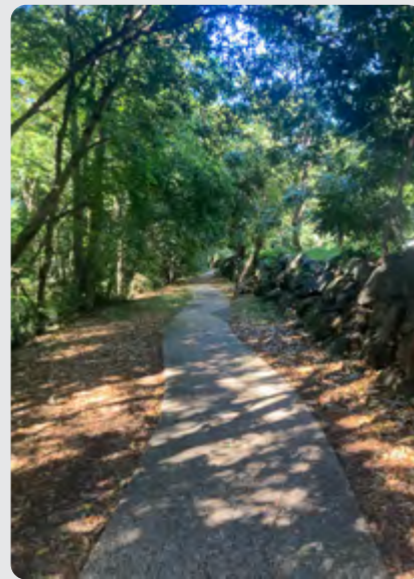
1 Entrance beside Maleny Library with interpretive signage.



2 Undercover area.



3 Obi Obi creek.



4 Pathway beside creek.



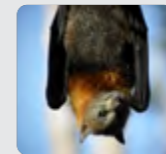
5 Pathway framed with blackbean, Waterhousea, sandpaper fig and White Bollygum trees.

Tesch Park

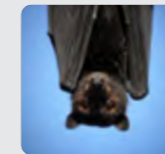
Coral St, Maleny

Exploring flying-fox monitoring online with Council's BatMap website

Flying-fox species present:



Grey-headed Flying-fox



Black Flying-fox



<https://www.sunshinecoast.qld.gov.au/environment/native-animals/flying-foxes>



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- Yellow circles show recent monitoring/ counting of Flying-fox
- Explore roosts around your school. Are there any? What species of flying-fox are seen there?
- Type into the search bar the roost site i.e. Tesch Park
- Click on the yellow circle - this will show the most recent flying-fox monitoring - with a count of each species seen and location of where flying-fox are within the roost site.



Post-Visit



Post-visit activities & discussion points

These post-visit activities aim to reinforce learning, stimulate creativity, and encourage students to take active roles in conservation and community engagement based on their experiences at the flying-fox roost site.



Create Nature Reflection Journals and document your experiences, observations, and feelings during the roost visit. This activity helps reinforce what you have learned and fosters a deeper connection to nature. There are many creative ways to express this connection - including drawing, painting, writing poems, or even creating short plays related to flying-foxes and their habitat.

Did you collect any data during the roost visit? This could include bird species counts, observations of flying-fox behaviour, or environmental data. How can these observations be represented to share with others?

Create a community awareness campaign to raise awareness in your school or local community about the importance of flying-foxes. This could involve creating posters, organising presentations, or initiating discussions to share knowledge gained from the roost visit.

Become environmental stewards by organising a habitat restoration project. Participate in planting native vegetation, creating bird or bat boxes, or engaging in other activities that contribute to the well-being of the local ecosystem.

Arrange for a guest speaker, such as a wildlife biologist, conservationist, or local environmental expert, to talk to you (and the wider school community) about the broader context of flying-fox conservation. This will connect your roost visit to larger conservation efforts.

Make a "Promise to Frankie" and encourage others to join in the movement - display in a public space.

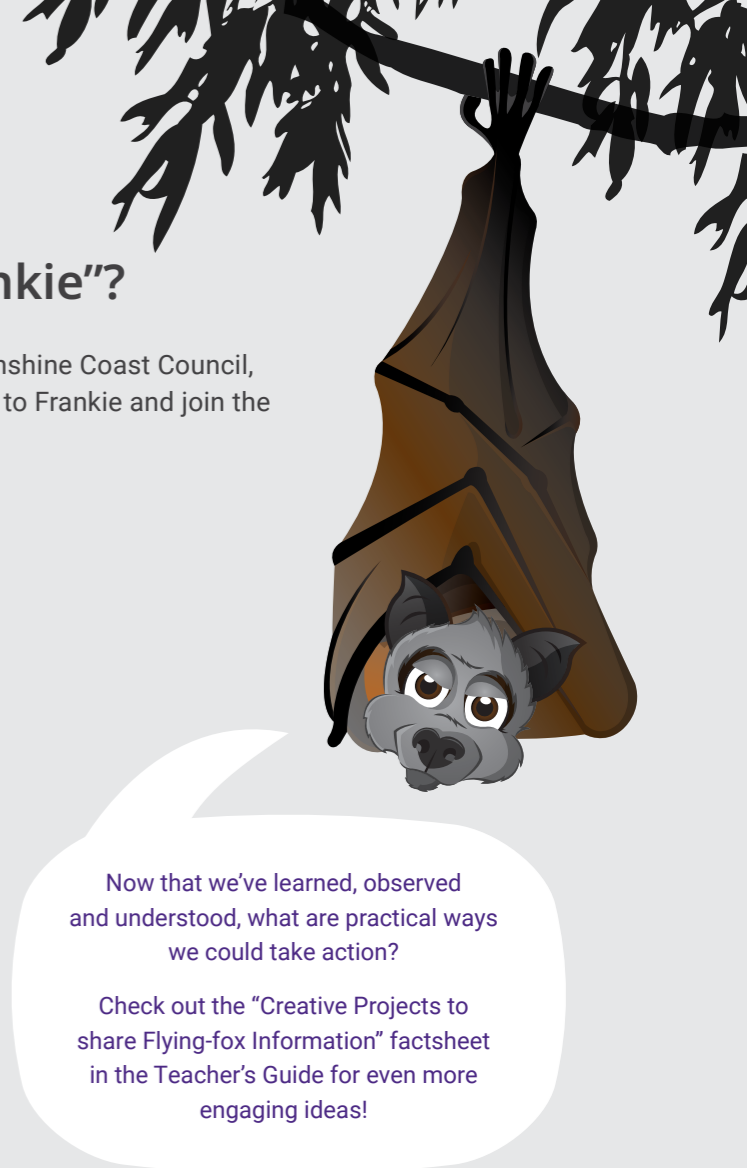


What is your “Promise to Frankie”?

Meet Frankie, the charismatic flying-fox mascot from Sunshine Coast Council, on a mission to inspire positive change! Make a promise to Frankie and join the movement for environmental stewardship.

Pledge to protect our unique flying-fox friends and their habitats and embark on a journey of discovery and responsibility. Your commitment to Frankie’s cause not only nurtures a deeper understanding of our natural world but also contributes to the collective effort in safeguarding the Sunshine Coast’s ecological treasures.

Together, let’s soar towards a future where every promise to Frankie becomes a powerful act of conservation and a step towards a sustainable, harmonious environment.



Now that we’ve learned, observed and understood, what are practical ways we could take action?

Check out the “Creative Projects to share Flying-fox Information” factsheet in the Teacher’s Guide for even more engaging ideas!

My Promise to Frankie

- I will welcome you when you visit.
- I will be quiet in your home.
- I am grateful for the important role you do in pollinating forests.
- I will spread the word by telling people about you.
- I will help protect your home by protecting and planting trees and forests.
- I will ask people to use only wildlife-friendly fruit-tree netting.
- I will support a local animal rescue group.

Signed







Environmental Operations
naturalareas@sunshinecoast.qld.gov.au