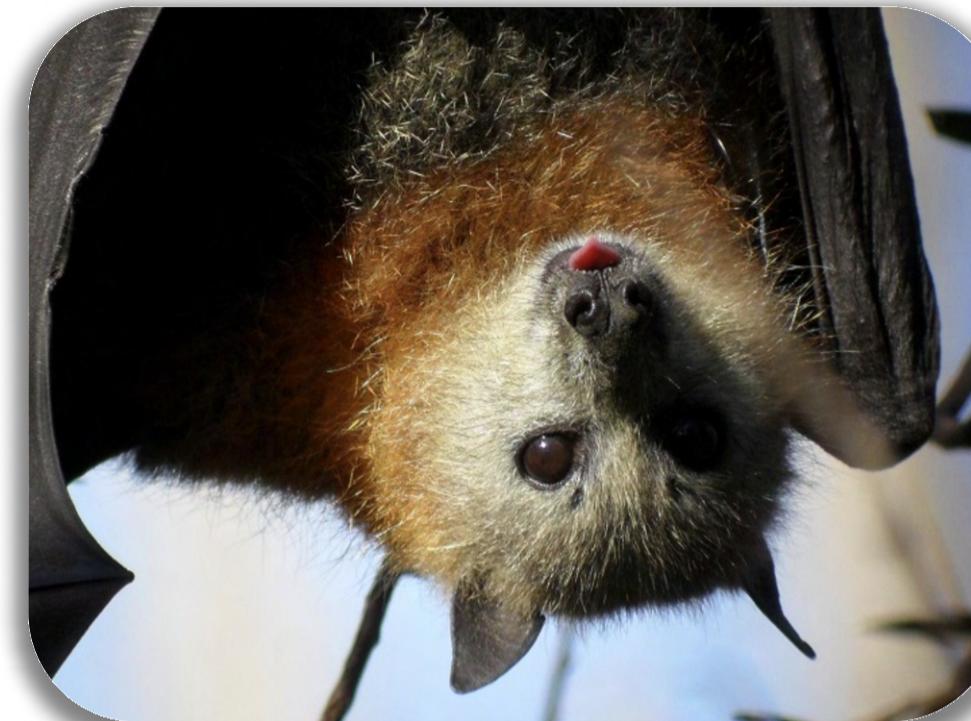


Flying Foxes

Flying foxes are important for our local fauna and flora.

They help pollinate our trees and spread the seeds of all the native plants they visit.

Did you know that most flying foxes move around every 11 days? This means that in a space of two weeks you could encounter 2 different colonies of flying fox!



[learn more here...](#)

Flying Fox Tracking

The sunshine coast council realises the importance of our local flying foxes.

We also understand that flying foxes can be disturbing and that maintaining an ecosystem that is friendly to both humans and flying foxes is important.

That's why we have created a new project which endeavours to track and understand flying foxes via non-invasive photo-identification.



[learn more here...](#)

Want to earn some rewards?



Want to help our wildlife?



Check out our bounty page for information on how to get rewarded.

[Learn more here...](#)

Sunshine Coast COUNCIL

Experience Sunshine Coast | Living and community | Environment | Business | Development | Council | Pay and apply

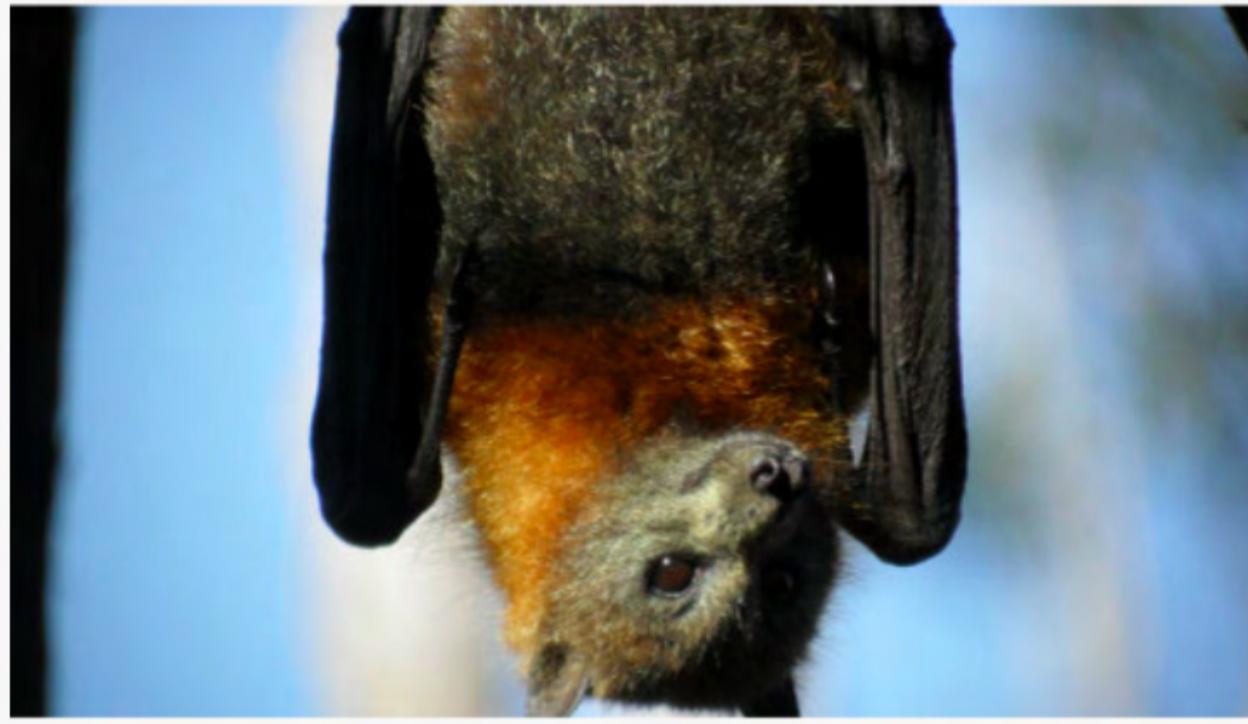
I want to ... Search website Rates information Check my bin day Search fees and charges Register an animal

Home > Environment > Native animals > Flying foxes

Flying foxes

In this section

- Native animal species
- Defensive birds
- Flying foxes**
- TurtleCare
- Sick or injured wildlife
- Shorebird protection
- Conservation stories
- Macropods
- Koala conservation

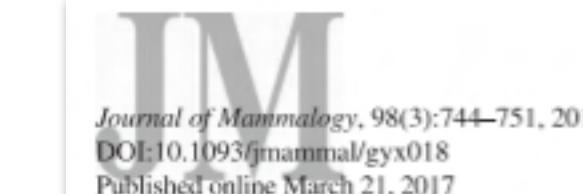


More information

[Flying Foxes on the Sunshine Coast](#)

[Bat wing biometrics - Research Journal](#)

[Flying-fox-facts - Little Aussie battlers](#)



Bat wing biometrics: using collagen–elastin bundles in bat wings as a unique individual identifier

SYBILL K. AMELON,^{1,*} SARAH E. HOOPER,¹ AND KATHRYN M. WOMACK²

¹USDA Forest Service, Northern Research Station, University of Missouri, 202 Anheuser-Busch Natural Resources Building, Columbia, MO 65211, USA (SKA)

²College of Veterinary Medicine, University of Missouri, 4011 Discovery Drive S219, Columbia, MO 65211, USA (SEH)

School of Natural Resources, University of Missouri, 202 Anheuser-Busch Natural Resources Building, Columbia, MO 65211, USA (KMW)

* Correspondent: samelon@fs.fed.us

¹Co-first authors.

The ability to recognize individuals within an animal population is fundamental to conservation and management. Identification of individual bats has relied on artificial marking techniques that may negatively affect the survival and alter the behavior of individuals. Biometric systems use biological characteristics to identify individuals. The field of animal biometrics has expanded to include recognition of individuals based upon various morphologies and phenotypic variations including pelage patterns, tail flukes, and whisker arrangement. Biometric systems use 4 biologic measurement criteria: universality, distinctiveness, permanence, and collectability. Additionally, the system should not violate assumptions of capture–recapture methods that include no increased mortality or alterations of behavior. We evaluated whether individual bats could be uniquely identified based upon the collagen–elastin bundles that are visible with gross examination of their wings. We examined little brown bats (*Myotis lucifugus*), northern long-eared bats (*M. septentrionalis*), big brown bats (*Eptesicus fuscus*), and tricolored bats (*Perimyotis subflavus*) to determine whether the “wing prints” from the bundle network would satisfy the biologic measurement criteria. We evaluated 1,212 photographs from 230 individual bats comparing week 0 photos with those taken at weeks 3 or 6 and were able to confirm identity of individuals over time. Two blinded evaluators were able to successfully match 170 individuals in hand to photographs taken at weeks 0, 3, and 6. This study suggests that bats can be successfully re-identified using photographs taken at previous times. We suggest further evaluation of this methodology for use in a standardized system that can be shared among bat conservationists.

Key words: animal identification, bats, biometrics, *E. fuscus*, *M. lucifugus*, *M. septentrionalis*, *P. subflavus*

746

JOURNAL OF MAMMALOGY

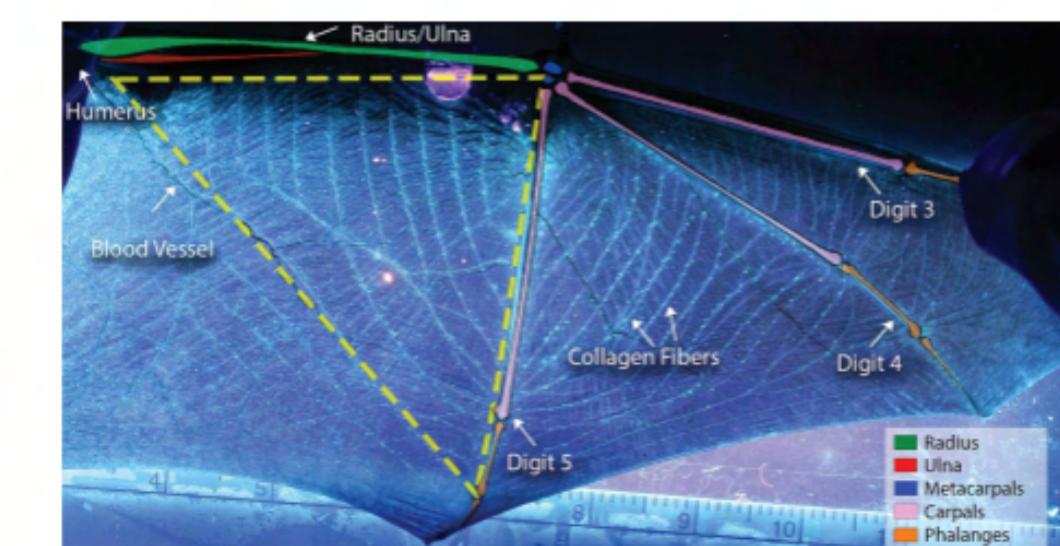


Fig. 1.—Representative photograph of a bat's left wing. Section 1: triangular-shaped section (dashed line) of the plagiopatagium bordered by the radius and ulna, extending the length of the 5th metacarpal and associated phalanges. Section 2: dactylopatagium between digits 4 and 5. Section 3: dactylopatagium between digits 3 and 4. Section 4: plagiopatagium along humerus, extending along the body and along the trailing edge to the distal 5th phalanx.

Do you have flying foxes in your backyard?

Want to earn rewards?

Submit photos of flying foxes to earn rate reductions and other rewards

Rewards are based on every successful submission that correctly identifies a flying fox.

To get a successful photo it must satisfy this criteria:

1. The wings of the flying fox must be clearly visible
2. It must contain the veins that run throughout the wing.
3. If the flying fox is nursing young it is important to include these in the picture providing it satisfies the above criteria.

Rewards for successful photos:

1. Reduction in rates
2. Shopping gift cards
3. Parking points to use at parking meters

Flying Fox photo submission form

The most important thing about the photos is staying safe, please do not approach the flying foxes. Please make sure you get the flying foxes' wings and the vein pattern as this is how we identify flying foxes.

Name



Upload your images here

Maximum photo size is 10MB

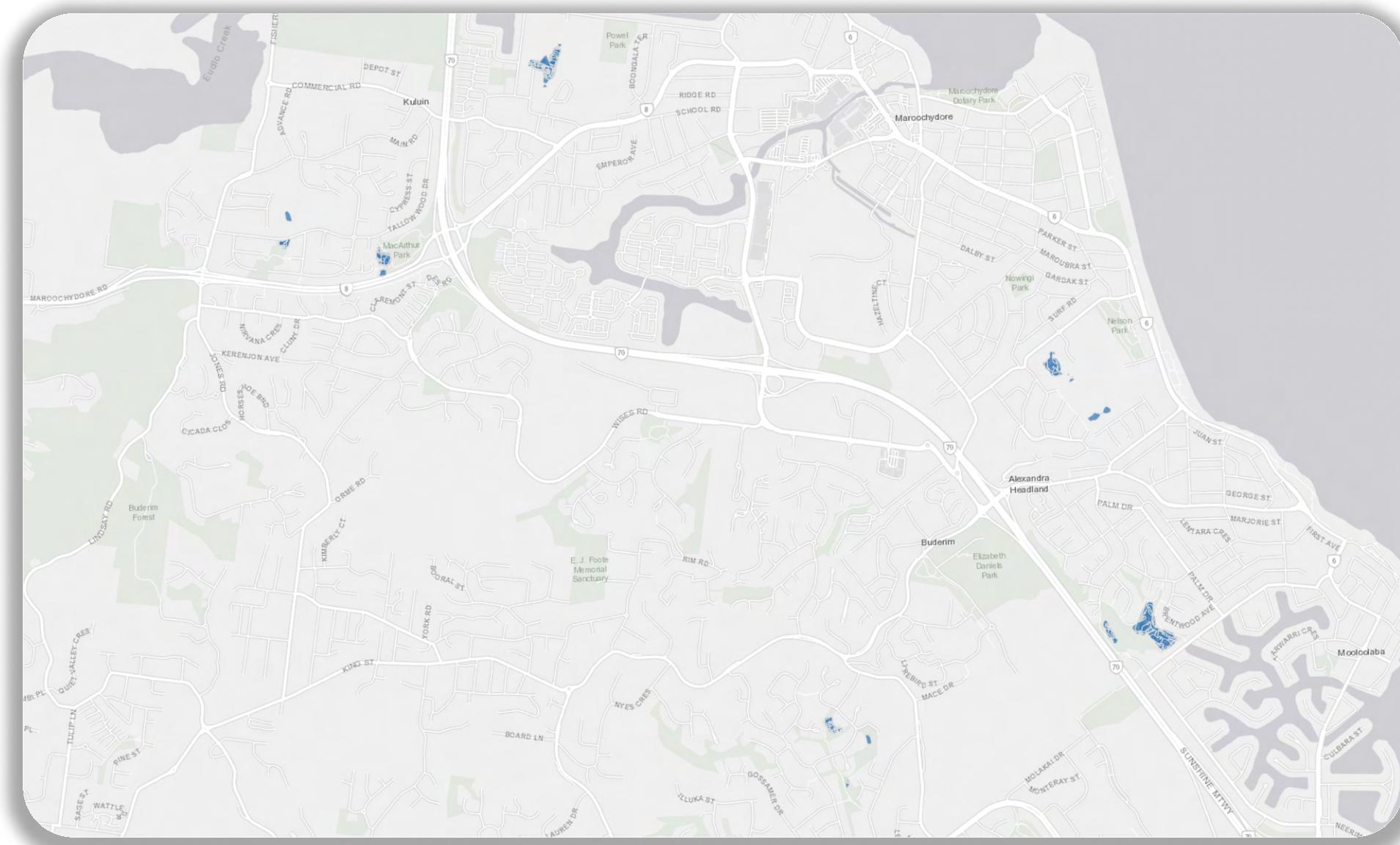
Phone number:

Email:

Submit

Camera Locations

Albany	Kolora
Alex	Kuluin
Andrea	Macdonalds
Aragorn	Mary
Buderim	McArthur
Cassia	Mellum
Currimundi	Meridan Downs
Dunning	Mooloolah
Elizabeth	Nambour
Emerald	Parksides
Frizzos	Pecan
Hardie	Porter
Herron	Tallangatta
Jubilee	Vidler
Kawana Island	William



Database

[Generate Report](#) 

ID	Flying Fox	Colony	Location	Date	With Juveni	Metadata	Click to Add
1	B 001	Alpha	Emerald	10/07/2023	<input type="checkbox"/>	Identified by r	
2	B 004	Alpha	Emerald	10/07/2023	<input type="checkbox"/>	Identified by r	
3	B 005	Alpha	Emerald	10/07/2023	<input type="checkbox"/>	Identified by r	
4	B 002	Beta	Vidier	10/07/2023	<input type="checkbox"/>	Identified by r	
5	B 003	Delta	Hardie	10/07/2023	<input type="checkbox"/>	Identified by r	
6	B 001	Alpha	Vidier	21/07/2023	<input type="checkbox"/>	Identified by r	
7	B 004	Alpha	Vidier	21/07/2023	<input type="checkbox"/>	Identified by r	
8	B 005	Alpha	Vidier	21/07/2023	<input type="checkbox"/>	Identified by r	
9	B 002	Beta	Hardie	21/07/2023	<input type="checkbox"/>	Identified by r	
10	B 003	Delta	Emerald	21/07/2023	<input type="checkbox"/>	Identified by r	
11	B 001	Alpha	Hardie	1/08/2023	<input type="checkbox"/>	Identified by C	
12	B 004	Alpha	Hardie	1/08/2023	<input type="checkbox"/>	Identified by r	
13	B 005	Alpha	Hardie	1/08/2023	<input type="checkbox"/>	Identified by r	
14	B 002	Beta	Emerald	1/08/2023	<input type="checkbox"/>	Identified by r	
15	B 003	Delta	Vidier	1/08/2023	<input type="checkbox"/>	Identified by r	

Roosting Pattern



Flying Fox: B 001
Colony: Alpha
Species: Black flying-fox
Sex: M

10/07/2023 Emerald

21/07/2023 Vidier

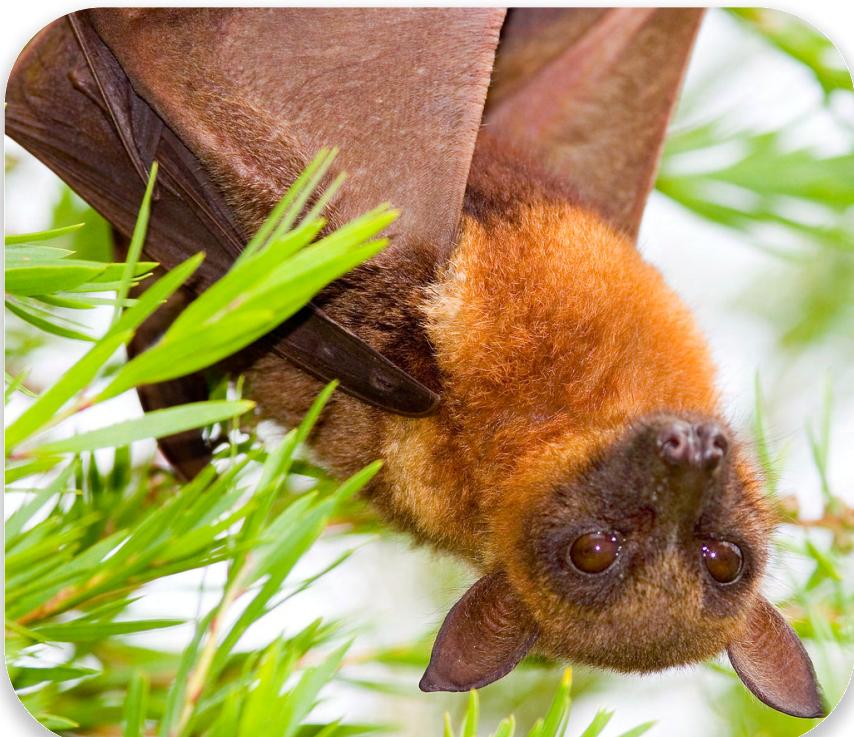
1/08/2023 Hardie

WANT TO EARN REWARDS?

SUBMIT PHOTOS OF FLYING FOXES

Dear resident,

We have noticed a flying fox roost close-by. The council is currently conducting research to better understand flying foxes as our growing urban areas are coming into much more contact with our flying mammal friends.



We want to collect pictures of mothers and infants, so the large ones looking after the young. We can identify the flying foxes from the patterns on their wings and you can help by sending through photos of adults with juveniles

Please remember they are wild animals

DO NOT APPROACH

Use the zoom on your camera

Scan here for more information on rewards and how to upload photos!

[https://www.sunshinecoast.qld.gov.au/environment/
native-animals/flying-foxes/tracking-bounty](https://www.sunshinecoast.qld.gov.au/environment/native-animals/flying-foxes/tracking-bounty)

