



Newsletter of the Gauteng and Northern Regions Bat Interest Group

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Editor: Trevor Morgan

**Kasanka National Park** is one of Zambia's smallest national parks at 390 km<sup>2</sup>. It is located in the Serenje District of Zambia's Central Province and is a beautiful wilderness of woodland, plains, lakes, rivers and swamps. Despite its small size, Kasanka experiences a unique natural event every year between October and December as five to 10 million *Eidolon helvum*



(African Straw-coloured fruit bats) migrate hundreds of kilometres from various locations in middle and northern Africa to one small swamp forest (0.4km x 1km) known as the Bat Forest in Kasanka National Park.



The main reason for this annual migration is food supply. These bats radiate out in all directions from the forest for several kilometres every night to forage on wild and grown fruits. Nightly foraging distances exceeding 80 km have been recorded for this species.

[www.batsgauteng.org.za](http://www.batsgauteng.org.za)



Millions of African straw-coloured fruit bats (*Eidolon helvum*) emerging from the Bat Forest at sunset

Due to a proposed wind farm project near to Kasanka, Kate MacEwan and Trevor Morgan were in the Serenje District in November 2018 to conduct a bat study and we were very fortunate to witness the migration. We spent 2 days and nights in Kasanka National Park. During that time, we observed the bats from various hides close to and far from the Bat Forest. The sights, sounds and smells were amazing! To see sooooo many bats in one small forest was unbelievable!



*Eidolon helvum*



Fruit bats returning to the Bat Forest before sunrise

They leave the forest in their millions in a peaceful silence against the backdrop of the setting sun and clear dusk sky. However, in the mornings when the bats all returned to the forest, the shouting and sound of cracking and collapsing tree branches due the weight of the bats was deafening. This was followed by a frenzy of activity as they tried to settle again.





Fruit bat heaven



A small clump of bats in the forest



*E. helvum* skeleton at Wasa Lodge



School at the Kasanka Conservation Centre



Kasanka river at dawn



A typical Zambian roadside town



Yellow baboon

A trip to Kasanka between October and December is a definite must on any bat lover's bucket list!

[Go to the GNORBIG Facebook page here](#)

## GNORBIG Committee

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# Bat News Updates

## Interesting new research

### Migrating leap frogging bats

Using stable hydrogen isotope analysis of fur from museum specimens of Silver-haired bats, scientists at a Canadian university have uncovered surprisingly variable migration patterns. They found that some bats do not even migrate, some do over small distances and some cover distances of more than 2000 kilometres. Curiously, some female bats were found to have migrated from southern Canada all the way to Florida, in the process passing over a number of other Silver-haired bat populations. This 'leapfrog migration' is apparently not unusual in the bird world, but not seen in bats before. It is a puzzling phenomenon and academically intriguing although it rather complicates conservation efforts.

<https://www.cbncompass.ca/opinion/columnists/grenfell-matters-revealing-the-secret-lives-of-bats-flying-south-for-the-winter-225241/>

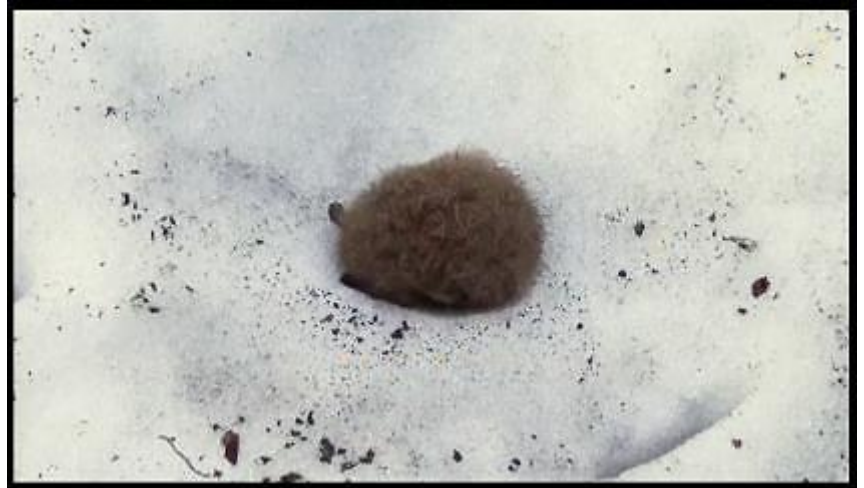


Silver-haired bat (*Lasionycteris noctivagans*)  
 Brock Fenton

## Cosy in an igloo

Hibernating polar bears (and the Inuit) are known to make use of the fact that snow shelters keep out the chilly wind and actually have a good insulation effect. Now another mammal can be added to the list of beasts with igloo lifestyles, the Japanese Ussurian tube-nosed bat.

It was recently discovered that the bat hibernates for months in a snow-covered cavity on the ground. That might sound miserable but here it is protected from predators, has easy access to water (just lick the walls) and is cosier than in less well insulated tree cavities.



<https://www.nationalgeographic.com/animals/2018/08/bats-hibernate-snow-winter-behavior-japan-news/>

## Yucky beetlejuice

Fireflies are actually beetles and thus fly in the typical lumbering manner of these clunky insects, a favourite food of many bats. Not only are they far from agile, but glowing in the dark would surely seal their fate with winged predators on the prowl. However, the fireflies flash with impunity, ignored by bats.

American biologist Dr. Jesse Barber, decided to test the idea that firefly flashing not only served a reproductive signal for the beetle, but also as a visual cue for bats indicating its toxicity.



He and his team experimented by introducing fireflies to a group of Big brown bats in their lab that were from the western USA, an area where these beetles do not occur. The bats attempted to feed on the fireflies but spat them out in apparent disgust, avoiding them thenceforth.

When the fireflies were painted to obscure their light, the bats had to again learn to avoid them, but it took longer, using less obvious acoustic cues.

This is an interesting variation on aposematism (warning colouration): in the dark, bright colours or bold patterns are useless as warning signals, thus flashing light is a solution to this problem.

[https://www.washingtonpost.com/science/2018/08/22/fireflies-twinkles-are-sweet-reminder-that-they-taste-like-trash-study-says/?noredirect=on&utm\\_term=.291f6bb104a1](https://www.washingtonpost.com/science/2018/08/22/fireflies-twinkles-are-sweet-reminder-that-they-taste-like-trash-study-says/?noredirect=on&utm_term=.291f6bb104a1)

## The False Vampire Tzotz

In the last newsletter I wrote of a recent trip to Belize where I was lucky enough to get a glimpse of South and Central America's large carnivorous bats, the False Vampires. These are indeed scarce and sensitive animals and many local scientists have never seen one. In the engaging clip 'In search of Tzotz', Rodrigo Medellin a well-known Mexican veteran of bat studies together with photographer Anand Varma, document exploration of the jungle and ancient Mayan ruins, trying to locate roosts of this uncommon bat and photograph it.

Note: There are actually two species of False Vampire and the video seems to be referring to the smaller of the two, the Woolly False Vampire.



[https://www.youtube.com/watch?v=B8QhY\\_0H99g](https://www.youtube.com/watch?v=B8QhY_0H99g)



<https://www.theatlantic.com/video/index/573730/vampire-bats/>

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# Chairman's Report

## for 2017 to 2018

GNOR BIG was born in 1994 and is now **twenty-four years old**. I think that's impressive.

The cliché at this point is to say that we've grown from strength to strength, but I don't think that is applicable in our case. Rather, I'd say that we've maintained a good standard for all these years.

### The year reviewed

In August 2017 I gave a **radio interview** for a station whose name I cannot remember, and to an interviewer whose name I cannot remember. What I do recall is that it was not my best interview:

At one stage I said that 'Bats are amazing animals. He then asked simply, 'Why?'

I went blank for a moment.

The question was too broad – where would I start?...

There was an uncomfortable delay, as if I had been caught in a lie but then I made a slow recovery. Overall, I think I still conveyed a positive message on bats.

I mention interviews as part of our events because they are an important part of our primary aim of educating the masses and helping to improve awareness of bats.

For October we went on an outing to **Wag n' Bietjie** which is a beautiful farm near Bela Bela. Many bats were caught, although not of a great variety. Nevertheless, the site has promise and I'd like to return.

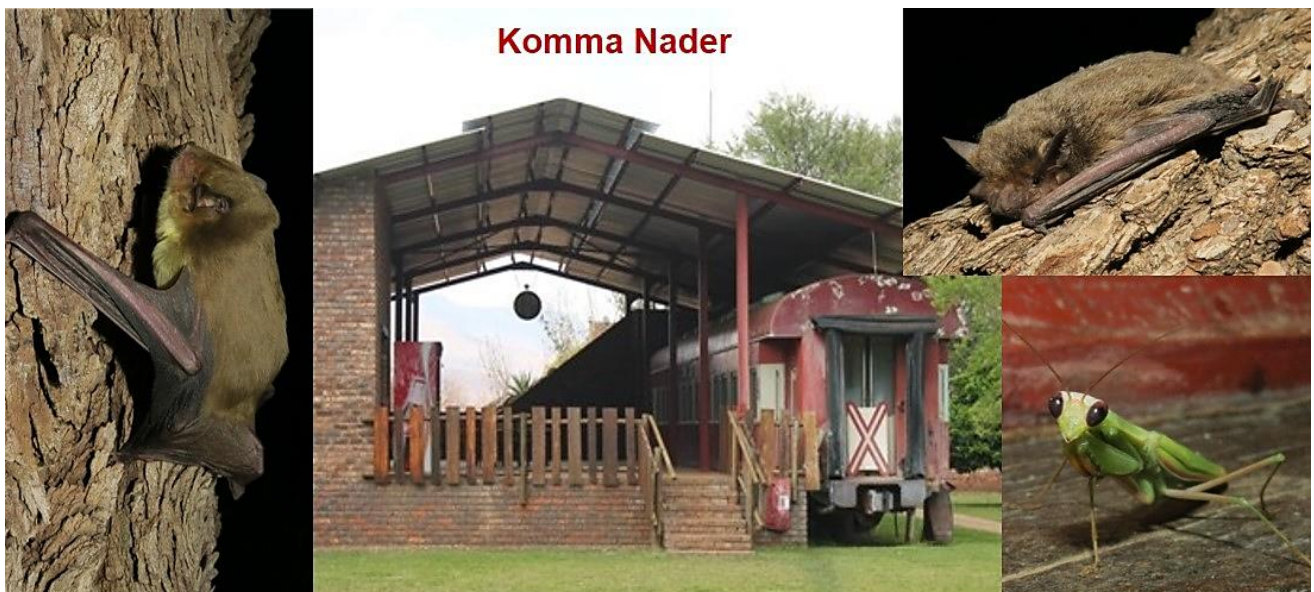


The first bat walk of the season was at **Modderfontein Reserve** in November. Taking place in an old storage facility for explosives, which also has no electricity, it is not an ideal venue.

And there were practically no bats on the walk.

But we made it work. The turnout was good (72 people) and the audience appeared enthused and satisfied. It is our second bat walk there.

The same month we did a trip to **Komma Nader Guest House** near Thabazimbi, which is traditionally a good area for bats. Once again, many bats of a limited variety. Fortunately, the guest house is very close to Marekele National Park, so we were all able to spend the day at this intriguing reserve. Also, some of us got to sleep in an old train which I found rather cosy.





Our annual **Kloofendal Nature Reserve** bat walk was held in December. We only managed a crowd of 18 people which I think is due to not using the best advertising channels. But, it is a special venue and a smaller group is easier to handle and more intimate.

The first outing of 2018 was to **Serendipity Trails** near Mookgophong, in January. One of my favourite destinations, there is a lot of nature to see there. We visited the previous year and were surprised to find no cave bats in what appeared to be appropriate habitat. This time we tried another camp near a kloof and were pleased to find our cave species.

The same month we held an epic bat walk at the **Pretoria Botanical Gardens** to 225 people. This is really the limit that the venue can handle, but we still managed to pull it off, albeit with hard work. It is satisfying to educate so many people at once though.



Early February saw another bat walk, this time at the **Johannesburg Zoo**. Here Erna was so successful at advertising that we had to move the talk from our normal Elephant Hall to something not quite fit for the purpose; next to the lion enclosure! With 105 people it was a challenge met with a patchwork of tarpaulins and umbrellas to keep the audience out of sun and rain that appeared imminent. And it went quite well, the heavy rain only arriving when we had finished, as if by agreement.

I would like to point out that Sharron did much of the organizing of this event and still gave a talk to children at a birthday party, that morning. That is unstoppable Sharron - who knows where she gets the energy...

Mid-February, yet another bat walk, at a brand-new venue, the **Colbyn Valley Nature Area** in Pretoria. While the lecture room was well suited to giving a talk, there was too much light to catch any bats. Fortunately, that same light helped give the people a really good show as we all watched Yellow House bats foraging. The walk was attended by 90 people, which is a rather good number for a first time event.

Somehow, we always leave our best outing for last. This time it was an April trip to the **Golwe-Vhurivhuri Picnic Campsite** in Venda, which is not far from Pafuri. Golwe apparently means cold water since the site is next to a stream in a secluded forested valley. While Vhurivhuri is the nearby village, if I understand it correctly. And shockingly near it is; I think that will likely account for the lack of any large mammals in the area. Nevertheless, it is a stunning site and still well worth a visit. Especially for birders, being about the only place in the country where you can reliably find the Africa Broadbill (in season).

There is much to see, botanically and otherwise – particularly bats. With about 14 species found over four days, the diversity of Golwe rivals our other special destinations of Pafuri and Ratho. Amongst these was the rare Lesser Woolly bat, which none of us had ever seen before and had never been found on any GNoR BIG outings to date.



The year rounded off with a **radio interview** given by Kate MacEwan, this time to the university station Voice Of Wits. I didn't manage to listen but expect it went better than mine.

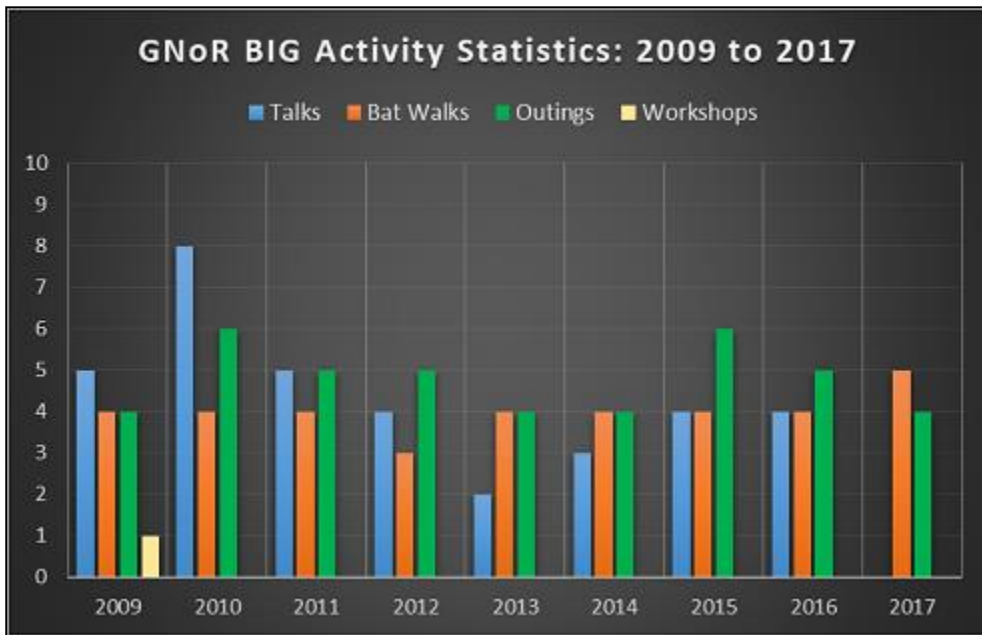
The activities for the year July 2017 to July 2018 are summarised below:

<b>Activities for 2017/2018</b>	
Aug 17	: <b>Radio interview</b>
Sep 17	: -
Oct 17	: <b>Wag n' Bietjie (Bela Bela)</b>
Nov 17	: <b>Bat Walk Modderfontein (72)</b> <b>Komma Nader (Thabazimbi)</b>
Dec 17	: <b>Bat Walk Kloofendal Nature Reserve (18)</b>
Jan 18	: <b>Serendipity (Mookgopong)</b> <b>Bat Walk Pretoria Botanical Gardens (225)</b>
Feb 18	: <b>Bat Walk JHB Zoo (105)</b> <b>Bat Walk Colbyn Valley (90)</b>
Mar 18	: <b>Golwe-Vhurivhuri (Venda)</b>
Apr 18	: <b>Radio interview</b>

So, that was our year: typically productive, with an event on average every month.

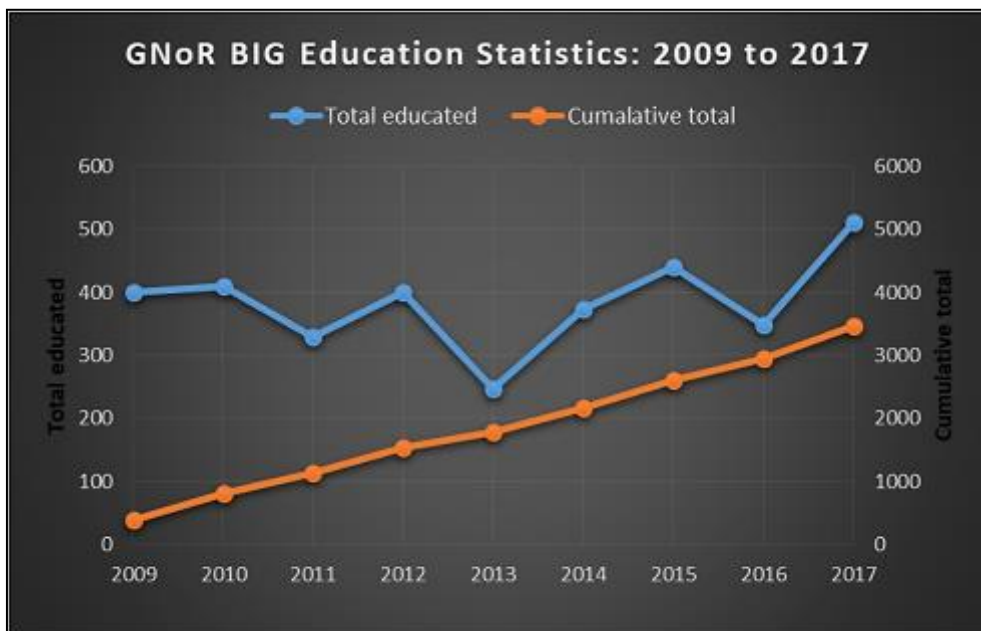
I like to compare our performance with previous years with respect to our main functions which are to educate the public, explore the world of bats, have fun doing so, and hopefully help conserve bats in the process.

These are the statistics for the past nine years since I've been collecting them:



You may note that for the first time we gave no talks (excluding Sharron's). However, we ran an extra bat walk which more than made up for this. Also, we have not held a workshop for many years now and it is our intention to do so, but we haven't found the time to arrange it yet.

Below, shows the numbers of people educated by estimating the number of people in the audience at every event:



So, on average we educate about 350 people per year, but this year we jumped to 510 people, a real achievement.

Looking at other aspects such as **membership**, the outlook is less positive. The current membership total is about 35. But if we add those 'not in good standing', the total is probably about 40. So we definitely need a drive for members to renew subscriptions.

I have been saying for years that our **website** needs a facelift. It has served us hugely but is starting to look dated, with a bunch of old photos and other stagnant content. Thus, we are currently in the process of revamping the site.

Our **Facebook** site also spends long periods with little activity although Adri and Erna have taken some time to inject some life into it. Although valuable, it takes some effort and dedication to keep a site like that active, and few of us have the time or the inclination, amongst our other demands.

**Newsletters** on the other hand, remain of good quality. Newsletter Editor Trevor Morgan does a fantastic job and I think the last issue was particularly impressive.

But, we still only manage to produce two per year and I doubt we will exceed this number in the future. So officially, I would have to set the quota as two per annum, as long as they continue to be informative and interesting.

We handled many **queries from the public** as usual. Normally something interesting crops up, such as the guest house owner outside Mookgophong who last year informed us of a colony of bats in his roof that turned out to be Midas free-tails. This year surprisingly few contacts of interest were made.

A challenge that remains is that of sharing useful information that we acquire with the wider batting world where it can assist with conservation. We were on a good streak for a while submitting short observations to online journal African Bat conservation News. But that has now become an unreliable medium and it seems the publishers struggle even more than we do to produce timely editions. So, I will have to seek alternatives.

Another regular issue is that of poor outing attendance. This year that was not the case and there were good numbers at all of our outings.

In general then, GNoR BIG has functioned well again this year. If there is a significant obstacle that remains and will probably always present itself, it is the lack of time. Fortunately, all of us on the Executive Committee have jobs, but this leaves little time to do more than we do. So, if you're wondering why we do not seem to do projects and follow the same pattern of activities every year, that is why – it is as much as we can usually manage. We only have one Sharron...

## **People**

So, the force was strong with us this year again. For this we really have to thank the GNoR BIG Executive Committee. As I point out every year, they are the secret of our success and they all work damn hard.

I can tell you that at all of our hectic events, at some point I would look around and see that everything was getting sorted out and think 'Thank goodness we have such a good team, we would never manage without them'.

In fact, Tamsyn of Friends of Colbyn Valley commented that we were a 'well-oiled machine'.

The Executive Committee for 2017-2018:



Other people who must be thanked:

Lihle Dumalisile from the Gauteng Department of Agriculture and Rural Development who always assists us with Gauteng permits.

Staff at Pretoria Botanical Gardens and Johannesburg Zoo.

Karin & Steve Spottiswoode and the Friends of Kloofendal.

Pat van Nierop for the opportunities at Modderfontein Reserve.

Tamsyn Sherwill and the Friends of Colbyn Valley.

The non-committee GNoR BIG members that are always so helpful: Annatjie Barkhuizen and Reinhard with his kids.

Thanks to Brian Whiting for once again allowing us to use Winchester Marketing as an excellent AGM venue.

And of course, a great thank you to all the paying members of GNoR BIG that enable the group to achieve a lot and contribute towards the conservation of our bats.

Julio Balona, Aug 2018.

## Other stuff

### Amazonian Bats

I am envious of this beautiful poster of the Bats of the Amazon that was produced by Adrià López-Baucells and his team from the University of Lisbon, found on his Twitter account. [https://twitter.com/Lopez\\_Baucells](https://twitter.com/Lopez_Baucells)

This year they also published the first comprehensive Field Guide to Bats of the Amazon, another object I shamelessly covet...

<https://pelagicpublishing.com/products/field-guide-to-the-bats-of-the-amazon-9781784271657-adria-baucells>



### Cooler bats of the USA

As a reminder that it is not only the tropics that harbour wonderful bats, check out this photographic collection of ten of the country's most charismatic chiropterans:

<https://goldrushcam.com/sierrasuntimes/index.php/entertainment/photo-of-the-day/16172-department-of-the-interior-celebrates-bat-week-with-nine-of-the-coolest-bat-species-in-the-united-states>



Number one of the ten: The nectivorous Lesser long-nosed bat covered in pollen.



# #15

The quiz to test your skills on the identification of southern African bats.

The rules are:

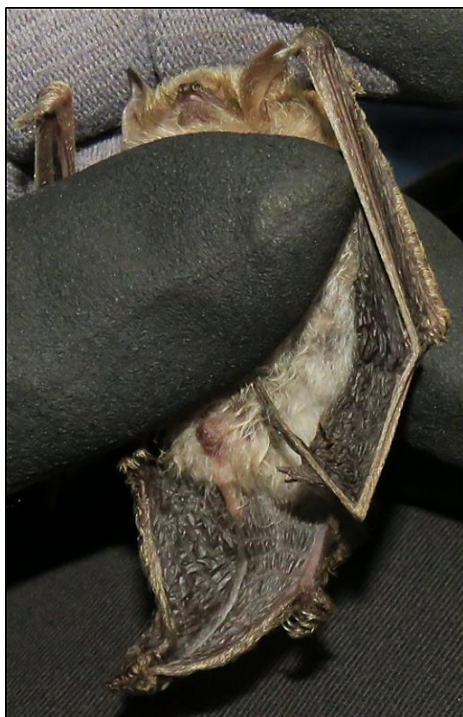
- The mystery bat will be from the southern African region as defined by the countries South Africa, Swaziland, Lesotho, Mozambique, Zimbabwe and Namibia.
- It will not be a species that is a rare vagrant to the region (e.g. Bergman's collared fruit bat, *Myonycteris relicta*), although it could be one that is relatively scarce (e.g. Rüppell's pipistrelle, *Pipistrellus rueppellii*).
- There may or may not be supplemental information provided (e.g. frequency of bat call, geographical location, forearm size, etc.)

\*\*\*\*

### Identification of mystery bat No. 14

#### Identification of mystery bat No. 14

The bat has a membrane from its ankles to the tip of its tail and is therefore one of the vesper family. In order to determine precisely which genus it belongs to we note that this tail membrane has a fringe of hair.



In southern Africa this feature is unique to the Woolly bats (*Kerivoula* sp.).

If this most definitive aspect is not particularly obvious, certain other Woolly bat attributes are visible and can lead to an identification: the mottled markings on the forearm, the funnel shaped ears with a thin tragus and perhaps the light coloured fur and short snout.

There are only two species in this region and the given forearm length of 33 mm allows us to identify our bat as the smaller **Lesser Woolly bat** (*Kerivoula lanosa*).

#### Mystery bat No. 15

Can you deduce the name of the beast below?



Forearm length = 33 mm