Baobab Blitz Information Pack

Welcome to the Baobab Blitz! Thank you for participating in this citizen science project in order to help us discover what is pollinating baobab trees in South Africa.

Instructions
Be set up at your baobab tree before dark (approximately 5:30pm). This will allow you to fill out the sections that require light, including the number of other baobab trees surrounding yours and land use characteristics.   Observing visitors to your baobab should be from 6pm to 11pm on either (or both) November 18th and November 19th. If you wish to continue observing past 11pm, we have included optional observing points on the datasheet. Fill out as much of the information on first page as possible before it gets dark. Counting the number of flowers open per night should wait until later after they've opened! Below are guides for each section.

What you will need:
- Torch (with extra batteries)
  - Red torch, if possible
- Chairs
- Cold drinks
- Cell phone camera (to take a photo of your tree and flower on that tree) or a normal camera that you can upload the photo.
- GPS or Smart phone to record your location (lat and long) or the farm name and where the tree is located.
- Clipboard with pen (extra one just in case)
- Datasheets, see attached via email **(see BB Datasheet)**
- Watch or phone (to record time)
- Other recommendations:
  - Table
  - Insect repellent

If you are observing both nights, please fill out separate datasheets for each night, including all of the information on the first page. If it is the same tree, some of this may be copied from the previous night (such as most of the tree characteristics and landscape characteristics).   If you have multiple trees that your group is observing within visible distance from each other, please make an additional note of that on the datasheet as well as indicating the approximate distance between.

Datasheet Guide
Contact information:
Please include this so that we can get in touch with questions.

About your group:
This information gives us a picture of who is participating in this event! If you wish, include pictures of your Baobab Blitz experience that we can share with others.

About your night:
Knowing what the night was like will help us to understand what is coming to visit the trees. For example, rainy nights may mean that pollinators may not come to visit the trees. They'd rather stay dry too!

Temperature: if you have a device on which you are able to take temperature, record the temperature when you start observing (beginning) and when you stop observing for the night (end).

About the tree:
This section gathers information about the tree itself.

GPS coordinates: include the latitude and longitude of the tree if possible. You can use a GPS or iPhone (the compass app). If you do not have a device with GPS, you can locate the tree on Google Maps later and include farm name.

Photos of tree and flower: include a picture of the full tree if possible. Also include a picture of one opened flower on the tree. See below for an example of opened and closed flowers (Figure 1, 2).

Figure 1. The bud on the right is cracked on the bottom, indicating that the flower will open that night while the bud on the left should

Figure 2. An open baobab flower. Photo © Sarah Venter

Browse line: this is the height about the ground at which most of the lowest branches stop. In order to give some reference, 2m is the approximate height of a kudu and 3m is a giraffe.

Is this tree male or female? Do your farm workers refer to this tree as a male tree? If so please will you indicate this on the data sheet. Or if you know the history of the fruit production on the tree (before predation by baboons), please include whether it produces a lot of fruit or few fruit per year. If you don't know then just say "Don't know".

How many flowers in total opened? Count and record the number of open flowers that bloom on the tree while you are observing the tree each night. This should be done after the flowers have completely opened (*at 8pm*).

About the landscape:
This section helps give us an idea of what the surrounding landscape looks like.

Baobabs in 360˚ circle: While standing as close to the base of the tree, count the number of other baobabs visible from your position. Include all of the baobabs within the 360˚ view of the tree.

Visiting pollinator information:
Now that we have discussed all of the valuable information that needs to be included about the observers, tree, and surrounding landscape, we finally get to the exciting part!

Torch use: Do not leave strong torches aimed at the tree all night as this may deter pollinators! We recommend using red torches in preference to others as they are less disturbing to both bat and moth pollinators. If you want you can be inventive and create your own by using red ceolphane.   No worries if you don't have a red light, a diffuse white light can be used. Additionally, being noisy and sitting directly under the tree could also deter pollinators!

When you begin observing, record the time that you started on your datasheet and begin in the appropriate time interval. Each pollinator visit to the tree will be tallied in the appropriate columns. For example, when you see a moth within the branches of the tree that is one tick for *Moth visitor to tree*. Each time there is a visit to the flower (i.e. see the animal touch the flower in any way), that goes in *visitor to flower* under the appropriate animal or insect. When you have other visitors, please describe them in the comments section for that interval of observing.

If you leave the tree for a snack or break and miss observing during an interval, put a slash through that line of the datasheet. When you have zero pollinators that visit during a time interval, please put a zero.

As you get more comfortable, you may wish to differentiate between the moths that come. For example, hawkmoths tend to be faster flying moths than other species. You may wish to include how many fast flying and slow flying moths in your comments.

Similarly, there are differences in bats. We are interested in fruit bats visiting trees, not their smaller insectivorous cousins. Below are some ways to tell them apart.

Fruit Bats:

- Eat fruit and nectar
- Larger that insectivorous bats (usually)
- Do not echolocate
- Our ears can detect their metallic "ping ping" calls.
- Forage for many hours throughout the night.
- Should land on the flower to drink the nectar from behind the petals.

Insectivorous bats:

- Eat insects
- Use echolocation
- Call is above most peoples hearing
- Usually smaller and faster flying than fruit bats.
- Tend to forage most just after sunset and again before sunrise
- Will not land on the flower, but might fly fast through the tree chasing an insect.

As always, you should be vigilant of your surroundings in the bush and watch for things like scorpions crawling around at night.

Thank you again for taking part in our Baobab Blitz! We hope you have a wonderful night out under the trees.