

## Project Update: January 2019

In November 2018, I submitted preliminary research to the African Journal of Ecology: "Insights into the impacts of traditional honey hunting in Zambia." I am currently awaiting the reviews.

In October 2018, I presented this research at the 32nd Meeting of the Scandinavian Association of Pollination Ecologists attended by over 70 delegates, during which I formed contacts and gained important perspectives on my work.

- Samples from 50 woodland species have been collected for the development of a pollen library.
- Diurnal effects on pollinator abundance and diversity were studied to establish optimal sampling periods and time of day for floral observations.
- Floral observations for over 10 woodland species were conducted during the flowering season (August–November) working towards establishing tree-pollinator networks.
- Phenology data on numerous woodland species has been collected since July 2018.
- Field assessments of traditional beekeeping and honey hunting impacts were conducted between July–November.
- Socio-economic survey to be completed mid-April 2019.



Figure 1: Images show the flowers of some of the locally abundant miombo species in and around West Lunga National Park for which floral observations have been done: A) flowers of *Isoberlinia angolensis*, a species characteristic of miombo woodland; B) *Pericopsis angolensis* (also known as Mubanga) flowers; C) *Baphia masaiensis* flowers being visited by a honeybee; D) powerfully scented *Pod mahogany Afzelia quanzensis* flower; E) *Markhamia obtusifolia* flowers, often visited by carpenter bees; F) flowers of *Brachystegia longifolia*. Miombo is characterised by *Brachystegia*, a dominant miombo woodland genus.



Figure 2: Traditional honey hunting practices are often destructive, usually resulting in the felling of honeybee nesting trees which are usually large mature trees that will take 30 years or more to replace (A-D). Sometimes honeybee nesting trees are left standing with just the entrance to the nesting cavity widened to facilitate honey extraction (E-F). Destructive late dry season fires (G) can often be started by honey hunters, which can negatively impact the flowering of trees during the primary flowering season with knock-on effects for beekeepers and honey production.



Figure 3: Conducting floral observations on flowering trees.