

# RAPTOR REFUGIA

## In search of the Southern Banded Snake Eagle



# Forestry land: a man-made bird sanctuary

Since the environmental awakening in the 1970's, forestry-owned land has gained the reputation of being "green deserts". Artificial mono-cultures, responsible for a sterile environment where nothing thrives except the tree species of choice.

It is a reputation that has stuck, with conservation bodies, environmental organisations, biologists and large proportion of the general public sharing the sentiment that forestry-owned land is nothing more than a biodiversity wasteland – **but is it true?**



## SURPRISING FINDINGS

*"The perception of many lay-birder's is that plantations hold a low level of avian diversity," explains Dr Melissa Whitecross, Birdlife South Africa's Threatened Species project manager: Raptors & Large Terrestrial Birds, "it is a perception which could do with some rebranding".*

Melissa speaks with experience, after being surprised by the bird diversity found within northern KwaZulu-Natal's plantation matrix owned by Sappi, Mondi, SiyaQhubeka (SQF) and a number of private timber producers.

**257 bird species were recorded**, including birds the survey team classified as **"real highlights"**: the Ayre's Hawk-Eagle, Grey Waxbill, Neergard's Sunbird, African Emerald Cuckoo, African Finfoot, Half-collared Kingfisher, Crowned Eagle and the bird that got them searching the plantations in the first place – Southern Banded Snake Eagle.

**All photos courtesy of Birdlife South Africa.**

**Cover photo:** Southern Banded Snake Eagle - Warwick Tarboton

**Left page:** Southern Banded Snake Eagle - Hugh Chittenden

**Right page:**

- 1) Yellow-billed Kite Juvenile - Dukuduku Plantation, KZN
- 2) Ayre's Hawk Eagle Juvenile - Mtubatuba Plantations, KZN
- 3) Martial Eagle - Eastern Shores, Isimangaliso, KZN
- 4) African Cuckoo Hawk - Mtubatuba Plantation, KZN
- 5) Wahlberg's Eagle - Zenith Estates, KZN
- 6) Common Buzzard - Nyalazi Plantations, KZN

Photo 1



Photo 2



Photo 3

Photo 4



Photo 5



Photo 6



Southern Banded Snake Eagle - Hugh Chittenden.

## THE SOUTHERN BANDED SNAKE EAGLE

Southern Banded Snake Eagles, (*Circaetus fasciolatus*), also known as Fasciated Snake Eagles, are classified as **critically endangered in South Africa**.

First sighted in 1850 by Jakob Kaup near Durban, their range has dramatically diminished over the last 150 years with the most Southern sightings now 100km north of this area. It is estimated that there are **only 50 mature pairs left in South Africa**, although the birds' secretive nature makes population estimates reliant on a lot of guesswork.

Found between coastal dune forests and lowland grasslands, Southern Banded Snake Eagles traditionally perch in forest trees and shrubs to hunt for grassland prey, mainly snakes. In more recent times, they are seen using electrical, telephone and railway pylons as early morning vantage points before retreating into the forests to avoid the heat of the day.

## WHY PATROL THE PLANTATIONS?

During 2016/17, Birdlife South Africa (BirdlifeSA) commissioned a survey by Shane McPherson to study these secretive birds. Along with identifying a number of new individuals and the best survey approaches to use, McPherson also made an interesting discovery - **a nest within the Mtunzini plantation owned by Mondi**.

*"This suggests that plantation landscapes could be overlooked areas of potential refuge for Southern Banded Snake Eagles"*, explains Dr. Whitecross. The presence of a nest within the remaining natural forest patches in the plantation indicates that plantations are potentially providing more than just suitable perches, they are also breeding grounds for the Southern Banded Snake Eagle, and other raptors, with all the resources needed to complete their life-cycle: shelter, food, territories and successful breeding sites.

It was the possibility that KZN's northern plantations could be providing Southern Banded Snake Eagles with previously uncharted habitat that resulted in Melissa and her team surveying 22 plantation patches and in the process uncovering a wealth of avian diversity.



The BirdLife South Africa 2018 Southern Banded Snake Eagle survey team: Dr Melissa Whitecross, Sphamandla Junior Gabela and Caroline Howes.

## AN ATLAS APPROACH

Since 2007 Birdlife South Africa has been involved in the Southern African Bird Atlas Project (SABAP2) which measures the presence of species across the region in areas known as pentads – 9km x 9km squares. This has provided important information on the presence or absence of bird species over time.

As eight of the suggested survey areas had never been covered and three more had not been atlassed in the past three years, it was decided to survey all birds found in the pentads. From 23 October to 4 November 2018 the full suite of birds seen or heard in each pentad was recorded, the detailed of which can be found below in the Birdlife South Africa Southern Banded Snake Eagle survey report (Oct 2018).

Southern Banded Snake Eagle - Jo Buggs Bulmer



# FORESTRY AS A CONSERVATION LANDSCAPE

*“Conservation efforts globally are shifting towards a landscape-level approach that is more inclusive of all role players and stakeholders within a given focus area.”* Dr Melissa Whitecross.

As a signatory to the Convention of Biodiversity (CBD) multilateral treaty, South Africa has a responsibility to ensure:

- 1. The conservation of biological diversity.**
- 2. The sustainable use of the components of biological diversity.**
- 3. The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.**

To do this, a strategic plan from 2011-2020 was developed by CBD, which includes a series of Aichi Biodiversity Targets with measurable outcomes that signatories are expected to fulfil.

*“These targets recognise that conservation landscapes do not necessarily need to be made up of entirely formally protected areas and can be a matrix of conservation spaces with varied levels of protection for biodiversity,”* says Whitecross.

**Achi Target 11**, *“a geographical defined space, not recognised as a protected area, which is governed and managed over the long-term in ways that deliver the effective in-situ conservation of biodiversity, with associated ecosystem services and cultural and spiritual values”*, is about creating *“other effective area-based conservation measures (OECM)”*. **This is where the forestry industry can help South Africa achieve its Aichi targets.**

30% of forestry-owned land remains unplanted, the majority of which comprises natural corridors of vegetation that form ecological networks in the plantations and link natural patches within forestry-owned land to conservation and formally protected areas outside it.

*“These facilitate the movement of animals between fragmented patches of natural forest which will enhance population viability through increased genetic diversity and maintenance of important ecological processes,”* remarks Whitecross.

Southern Banded Snake Eagle Habitat - Eastern Shores, Isimangaliso, KZN



## GOING FORWARD

*“Birdlife SA recognises that engaging industry role players such as Forestry South Africa, and the companies and individual growers they represent, is an important step in developing a potential OEEM landscape that will benefit the conservation of biodiversity in the northern region of KwaZulu-Natal. While still enabling economically viable activities to take place which create job opportunities for the surrounding communities,”* notes Whitecross.

**It is clear that forestry-owned land is far from a sterile environment, and could harbour countless more common and endangered species as much remains unsurveyed.**

Surveying 1.2 million hectares is no small undertaking, however, with birding clubs and citizen scientists ready to volunteer it is not impossible. *“Annual atlas counts of plantations could provide a great community involvement project for the forestry industry that Birdlife SA would willingly support and assist coordinating. It could be conducted as weekend events which draws teams from across the country in, to come and survey areas that they would ordinarily not visit and provide an opportunity for presentations from forestry and conservation organisations to take place to a captive audience,”* suggests Whitecross.

This could certainly help in reversing the 1970’s mindset, particularly among birders, that forestry-owned land is devoid of biodiversity.

Southern Banded Snake Eagle - WarwickTarboton





# FINAL THOUGHT

*“We, in the forestry industry are delighted that this survey has revealed the presence of the Southern Banded Snake Eagle and a large diversity of bird species in plantation areas. This is not the first study to indicate that plantations, when managed responsibly, can create landscapes and habitats for a wide range of species. It does however, emphasise the importance of sound management of changed landscapes and that when we all work together, there are opportunities for people to earn livelihoods and at the same time to maintain levels of biodiversity essential for a sustainable future.”*

**David Everard - Sappi**  
**Chair of Forestry South Africa’s**  
**Environmental Management Committee**