Conserving the Endangered Botha’s Lark (*Spizocorys fringillaris*) and its threatened grassland habitat

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1 Introduction

Thanks to the funding provided by the African Bird Club, the Endangered Wildlife Trust (EWT) has been able to focus efforts to conserve the vital habitat for the uncommon Botha’s Lark (*Spizocorys fringillaris*). This species is Endangered according the IUCN Red List (BirdLife International 2016) with numbers decreasing and population numbers estimated to be between 1,000 and 2,499.

![Figure 1. A specimen of a Botha’s Lark (photo: Hugh Chittenden)](image)

2 Project update

The EWT has been actively interacting with landowners by making them aware of the Biodiversity Stewardship process to encourage them to commit to protect their properties under formal protection such as ‘Protected Environment’ or ‘Nature Reserve’. A property is can be formally declared as a protected area under South Africa’s National Environment Management: Protected Areas Act (57 of 2003).

This reporting period has also seen the exciting introduction of the Botha’s Lark Custodian Programme. Landowners who committed to continuing to conserve the species on their land received a sign board that they can place on their farm as recognition of their efforts and commitment to conserve the vital habitat for this species. These are truly the custodians of this species, which incidentally occurs almost exclusively on private farmland.

Several awareness activities also took place over the last reporting period. The aim of the activities was to make people aware of Botha’s Larks, reasons for its importance within the ecosystem, and habitat that needs to be protected.
The EWT has made use of distribution modelling software to model possible areas where Botha’s Larks could occur. Two staff members from the EWT visited sites identified by the model to verify the habitat details.

Mauritz de Bruin (EWT Field Officer) appeared on the Kyknet Television channel’s ‘Ontbyt’ programme aired in South Africa to create awareness on the conservation of grassland for the benefit of Botha’s Larks.

3 Activities completed

3.1 Update (the largely unsubstantiated) population estimates and survey to identify current AOO of Botha’s Lark

Several surveys have been undertaken across the species expected range to confirm presence or absence. A key field trip was conducted in March 2018 to a property west of Verkykerskop where Botha’s Lark was thought to occur. Three Botha’s Lark individuals were confirmed on the property. This confirmed a predicted new site based on the model outputs. Our revised distribution models and field data will contribute to revising the AOO of the species.

3.2 Generate an ecological niche model to contribute to our understanding of the EOO and potential new AOO

The EWT team has been using Botha’s Lark sighing data collected by the team to model the potential habitat needed for these larks.

The EWT specialists travelled to part of the north-eastern Free State (Harrismith and Memel districts) to ground-truth points identified by the Botha’s Lark computer model as potential distribution sites for Botha’s Lark. Although the team saw no Botha’s Larks during this survey, they made note of potential habitats that are available for these larks. We have also consolidated other sighting reports from citizen scientists (where validated) to inform the model.

3.3 Increase landowner awareness for effective management of Botha’s Lark habitat

3.3.1 Designate areas to be managed for this species

During this reporting period, there has been significant progress with proposing privately owned farms for protection with the use of Biodiversity Stewardship, a process that has been used to successfully protect sensitive grasslands in South Africa. The proposed Protected Environment located between
Wakkerstroom and Volksrust (where work has been done in previous reporting periods) in Mpumalanga is still pending approval at the time of this report.

With the majority of Botha’s Lark occurring on privately owned farms, landowner commitment is vital. Evans (1999) notes that less than 1% the global population is found in protected areas, which places pressure on landowners to ensure that Botha’s Larks will survive for generations to come.

The EWT team, together with two of BirdLife South Africa’s team members, have been working in partnership to conserve an area in the north-eastern Free State province, close to Van Reenen (a town on the border of the Free State and KwaZulu-Natal). A meeting with the landowners in this area took place in September 2018 and this was the first landowners’ association meeting held. The area was formerly known as the Wilge Stewardship Initiative Project but the attendees felt the name “Upper Wilge Stewardship Initiative” was more appropriate. The area is depicted in Figure 2 and Figure 3 and is at present approximately 30,000 hectares in size. The EWT and BirdLife team met with an additional eight landowners following the meeting and discussed the Biodiversity Stewardship process. Although the team did not receive signed letters of intent from these farmers, the majority of them are interested in holding further discussions. A chairman was elected at the landowners meeting and a subsequent meeting with the chairman saw the drafting of a constitution for this protected environment. The team also discussed the management plan for this region at this meeting that will be completed in the upcoming months.

As the proposed Protected Environment mentioned above falls within the Harrismith district, the team notified landowners present at the Harrismith Farmers’ Union meeting about the process taking place.

Figure 2. Map showing the proposed Upper Wilge Stewardship Initiative project
Additionally, work continued in the area located to the west of Verkykerskop that will be proposed for Biodiversity Stewardship. Four letters of intent for declaration were received during the reporting period from landowners in this area. This area not only provides critical habitat for Botha’s Larks but also for other important threatened species such as Sungazers (*Smaug giganteus*) and Blue Cranes (*Anthropoides paradiseus*). Maps of the area are shown in Figure 4 and Figure 5.

The EWT team decided to include some of the properties in the Upper Wilge Stewardship Initiative that were previously identified for proposed Eeram-Verkykerskop Protected Environment. This decision was based upon two of these landowners having additional properties in the geographical area of the Upper Wilge Stewardship Initiative section, and to avoid confusion with these landowners being part of two Protected Environments. Surrounding farms were also added to this region (that were previously within the proposed Eeram-Verkykerskop Protected Environment). This change is shown in Figure 6.
Figure 4. Map showing the area where landowners have shown their commitment to be part of the Eeram Verkykerskop area proposed for stewardship.

Figure 5. Location of the Eeram Verkykerskop area in South Africa.
There has also been progress in an area located between Memel and Verkykerskop to declare a nature reserve with the name "Witkoppen Nature Reserve". The EWT team has been informed about the occurrence of Botha’s Larks in the vicinity. The location is shown in Figure 7 and Figure 8.
Figure 7. Map of the area that will be proclaimed a nature reserve that will be known as the Witkoppen Nature Reserve

Figure 8. Location of the Witkoppen Nature Reserve in South Africa
3.3.2 Raise awareness of and involve owners in non-detrimental management practices

Botha’s Lark custodian boards have been awarded to landowners with properties in the Harrismith district of the Free State and in the Wakkerstroom district of Mpumalanga. The custodian board is valid for a five-year period and these landowners all signed a commitment to continue conserving Botha’s larks on their property for this period. An example is shown in Figure 9.

![Figure 9. The EWT’s Bradley Gibbons (right) with the landowner, Pikkie Uys, shortly after he received his Botha’s Lark Custodian board](image)

3.4 Identify and confirm factors contributing to population declines in order to promote better management

3.4.1 Factors contributing to population decline

Botha’s Larks require a specific habitat type that is at risk from development. Many areas have been transformed for agricultural expansion, urbanisation and mining. The EWT has been monitoring all development applications and registering as an interested and affected party for developments that may pose a threat to Botha’s Larks.

The EWT team learnt about a mining application within the proposed Wakkerstroom/Volksrust protected environment. The mining company notified interested and affected parties that a mining permit was issued that allows them to start prospecting. However, upon examination of the documents, we realised that the permit has already expired and that there is information missing.

A number of mining applications around Groenvlei have been also been received by the team and letters of concern have been written in collaboration with the landowners in the area.
The team was asked to survey an area to confirm that there are no threatened species on a farm in the Standerton district (Mpumalanga). A new poultry holding facility is proposed to be built and the EWT team confirmed that the habitat is not suitable for Botha’s Larks and therefore the development poses no risk to them.

The EWT has been informed of another application by Rhino Oil and Gas and the application area includes Van Reenen (the entire area for the proposed Upper Wilge Protected Environment) and a small section of the Drakensberg of KwaZulu-Natal. The EWT team was also present at the Rhino Oil and Gas public participation meeting held in Memel that was for the new application that includes areas near Memel to the north, Clarens to the west and Estcourt to the south. This application area includes the hotspot for Sungazers as well as other biodiversity such as cranes and Botha’s Larks.

The EWT team has been in contact with residents of Wakkerstroom and the environmental assessment practitioner in connection with the proposed pipeline in Wakkerstroom. The team held a meeting with the Wakkerstroom Heritage Association representative to discuss the way forward. There is limited information about this potential new pipeline, but whatever route the pipeline will take, it will have negative implications for the grasslands in the area, and possibly the water supply.

3.4.2 Identify potential mitigation measures and develop an abbreviated conservation plan

The EWT team has been actively involved with awareness activities to ensure people are aware of the threats that Botha’s Larks face. The team represented the organisation at a large agricultural show known as the NAMPO Harvest Day 2018 in Bothaville, Free State. The team interacted extensively with schoolchildren and other agricultural stakeholders. On day 1, the team engaged with 266 people (162 adults and 104 learners), 350 on day 2 (240 adults and 111 learners), 442 on day 3 (312 adults and 130 learners) and 298 on day 4 (210 adults and 88 learners). This proved to again be a successful show and we obtained useful information from the landowners such as records of threatened species and encouraged people to conserve the habitat.

The EWT engaged with several farm workers and community members in areas where Botha’s Larks are found between Wakkerstroom and Amersfoort (Figure 10). Although this was a brief visit, the EWT emphasised the benefit of sustainable land use management.
The team attended the SASOL Techno X Expo held for a week in August in Sasolburg, Free State province. This was certainly a highlight for 2018. Records indicated that 19 487 learners attended the Expo together with their teachers. Members of the public from surrounding areas also visited the Expo. Individual groups visited the EWT stand for lessons, and the EWT team had an opportunity to discuss their own projects during the presentations (Figure 11).

Landowners are encouraged to abide by the *Grazing and Burning Guidelines* developed by SANBI (2014) that enables them to manage their farms sustainably for the benefit of biodiversity including Botha’s Lark.

A Botha’s Lark Management Plan has been developed with the aim to give it to landowners to provide them with information to use for improved land management for this species.
4 Conclusion

Very little is known about Botha’s Lark and the EWT is continually learning more about this endangered species. The EWT anticipates to continue protecting this species through expanding formal protected areas, with the help of landowners and communities and reversing the trend of the decreasing population numbers. This is only possible through the generous support from the sponsors of this project, such as the African Bird Club.

5 References