A Survey of the Karamoja Apalis *Apalis karamojae* and a first nest record in Iriiri Eastern Uganda

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Introduction

Karamoja Apalis *Apalis karamojae*, an East African endemic whose distribution has been described by Urban *et al.* (1997), Stevenson and Fanshawe (2002) and Carswell *et al* (2005). There has been no documentation of nest record of the species (Urban *et al.*, 1997). However, the food and voice calls and song have been recorded by Shaw *et al.* (2004) and a nest with two eggs was located on the Wembure steppe, Tanzania, in August 2004 (N. Baker, pers comm.).

During a recent Bird Population Monitoring (BPM) survey on 31st January and 1st February 2011, conducted by members of ***Nature***Uganda in the Iriiri Region of eastern Uganda approximately 70 kilometres west of Moroto town, at a grid reference of 02° 07¹ N 034° 13¹ E, the team was fortunate to record six individuals of the Globally Vulnerable and Range Restricted Karamoja Apalis *A. karamojae* in an area of dwarf Acacia scrub *Acacia drepanolobium*. This sighting was totally unexpected as 23 previous counts had been carried out in the same area, once in 1985 and annually since 2004 and this is the first occurrence (D. Pomeroy, pers. comm). According to Carswell *et. al,* (2005), the few Ugandan records of this species are of specimens collected from Mt Moroto in 1962 and Mt Napak in Nov 1919 and sight records from Kidepo Valley National Park Byaruhanga *et al.* (2001), most recently in 1998. This may therefore be an extension of the range of this species unless the sighting was only due to a local movement.

Methods

Between 23rd and 27th October 2011, we covered Iriiri areas as much as possible. The main aim was to find out if there is a viable population within the Iriiri areas and to highlight the threats that are posed to this population. The survey was done primarily in the area of dwarf Acacia scrub and surrounding areas. Up to 16 1km transects, 200 m apart traversing through four sites were established (Bibby *et al.* 1998). The areas found to hold the species in Jan/Feb took priority. Impeded drainage I, 8, Iriiri Acacia, 4, Impeded drainage II and Grazing area had 2 transects each. This however, covered areas beyond the Bird Population Monitoring site boundaries. We also used playback from a tape of the Tanzanian population and observed the response of the birds. An attempt to catch the birds was made by placing two 12 m nets between likely looking rides of *A. drepanolobium* in an area that we had located two individuals.

Results and discussion

The results presented include records from the BPM regular surveys, opportunistic visits and our designated surveys. On the 31st January and 1st February 2011, six individuals were recorded, a visit on 28th July 2011 recorded a pair within an hour and Achilles Byaruhanga was able to take a few photographs of the bird (Fig. 1) while our October survey recorded 9 individuals (Table 1) including a pair at an occupied nest. (Fig. 2).

Table 1. Summery of birds recorded in four apparently suitable areas (see appendix for details)

Survey and sites	*Impeded drainage I*	*Impeded drainage II*	*Grazing Area*	*Iriiri Acacia*	*Number of transects/nests*
	Number of birds recorded				
BPM regular surveys	3	**-**	**-**	3	**2**
Opportunistic visit	2	**-**	**-**	**-**	**1**
October surveys	9	0	0	0	**16**
Total number	**14**	**0**	**0**	**3**	**19**
Nest record	1	0	0	0	**1**
Response to call	**0 of 5**	**-**	**-**	**-**	**2 pairs and an individual**

Our October survey was centred on the Iriiri area at the southern end of Karamoja, below Mt Napak, Eastern Uganda. All surveyed areas had habitats that were thought could hold the species. However, we found them in only four out of 16 transects and recorded nine birds in total (Table 1). They appeared extremely localised and were only found in an area of seasonally flooded grassland with the Whistling Thorn *A. drepanolobium* the dominant shrub. We sampled suitable areas both 30 kilometres east (Impeded drainage II) and 30 kilometres west (Grazing Area) of our base at Iriiri to gauge distribution, but both of those were unsuccessful. The surrounding transects were drier and are used by the Karamajong for occasional farming, charcoal production and grazing, these factors might be affecting the birds distribution.

Sound recordings of Karamoja Apalis from Southern Tanzania by Phil Shaw, (Shaw *et al.* 2004) proved extremely illuminating. On three occasions we were able to offer playback and found there was no response whatsoever. One bird was approached to within ten metres, playing the tape constantly for over two minutes. It barely turned its head and continued feeding and preening until we were close and it flew off. Evidently, they do not respond to the Tanzanian songs. This was later confirmed when a pair gave a brief burst of song, although similar to other Apalis species it was quite different from the Tanzanian birds, being sharper and faster than in those recordings.

The attempt to catch an Apalis was unsuccessful. However, a pair of Karamoja Apalis within 50 metres of a net was seen. We were astonished to find them entering a nest (Fig. II) situated in *A.drepanolobium* about 2.5 metres above the ground. These birds were calling a double note "Teeeng Teeeng", higher pitched at the beginning. Due to the delicate nature of the nest, constructed of fibres of cotton and cob web, with the entrance near the top of a closed cup, and the fact that we estimate the population to be extremely small and vulnerable (6-8 pairs?) we neither attempted to disturb the nest nor to move the mist nets closer. We would consider the birds to be incubating

eggs or very young chicks judging by the change-over period at the nest.

Conclusion and recommendations

At present the Karamoja Apalis in Uganda remains largely unknown in its distribution and biology. Our attempt to answer some of the mysteries could have instead opened more puzzling assertions. We have however, managed to establish that the range for the Karamoja Apalis in Uganda goes beyond Kidepo, Mt Moroto and Mt Napak areas (and now include Iriiri areas, some 10 km off Mt Napak and ~80 km from Kidepo and Mt Moroto). We are also certain that the calls for the race in Tanzania and those in Uganda are different. The most interesting of it all was a first nest (breeding) record for Iriiri areas and indeed the whole Uganda population. We would therefore recommend (i) a more detailed GIS surveys be completed to discover the extent of the distinctive habitat mainly following drainage lines, so we can better assess the population and evaluate the threats with certainty and (ii) an attempt to capture some birds would be useful to establish DNA sequencing of this population to show if it is divergent from the population in Tanzania.

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Figures and appendices

Fig. 1 Karamoja Apalis - Photo: © Achilles Byaruhanga, ***Nature***Uganda

Fig. 2 Karamoja Apalis nest - Photo: © Michael Opige, ***Nature***Uganda - GPS pt UTM 36N 0637398, 0241856

Appendix I Transects covered with the sites surveyed

Site	Transect	GPS points (UTM) 36N		Birds seen	Activity
Impeded drainage I	T1	0638043	0242086	0	-
	T2	0638001	0241763	0	-
	T3	0637953	0241566	3	F/P
	T4	0637911	0241386	2	F/P
	T5	0637853	0241182	0	-
	T6	0637789	0240949	0	-
	T7	0637713	0240388	1	P/F
	T8	0637701	0239914	3	F/P/C
Impeded drainage II	T1	0651236	0257713	0	-
	T2	0651223	0257515	0	-
Iriiri Acacia	T1	0636917	0234043	0	-
	T2	0637318	0234156	0	-
	T3	0637501	0234095	0	-
	T4	0637816	0233982	0	-
Grazing land	T1	0621810	0220622	0	-
	T2	0621681	0220479	0	-

T= Transect, F = Flying, P = Perched, Calling

References:

Bibby, C., Jones, M. & Marsden, S. (1998) *Expedition Field Techniques, Bird Surveys***.** London: Birdlife International & Expedition Advisory Centre.

Byaruhanga, A., Kasoma, P & Pomeroy, D. (2001). *Important Bird Areas in Uganda***.** Kampala:

East Africa Natural History Society.

Carswell, M., Pomeroy, D., Reynolds, J. & Tushabe, H. 2005. *The Bird Atlas of Uganda*. Oxford: British Ornithologists' Club & British Ornithologists' Union.

Urban E.K, Fry, C.H and Keith, S. (Eds) (1997). *The Birds of Africa Vol. V*. London: Academic Press.

Stevenson, T. & Fanshawe, J. (2002). *Field Guide to the Birds of East Africa*. London, T. & A. D. Poyser.

Shaw, P., Mungaya, E., Mblinyi, & Mbilinyi, M. (2004). *The status and habitat of Karamoja Apalis in the Wembere Steppe, Sukumaland, Tanzania, 2003*. Wildlife Conservation Society of Tanzania: Dar es Salaam.