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Vocalizations of European Honey Buzzards Pernis apivorus in southern Africa

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Abstract

Contrary to some sources, the European Honey Buzzard *Pernis apivorus* is not silent in Africa. This study documents 41 instances of the species vocalizing on the continent, mainly from southern Africa. Thirty instances involved single birds and 11 involved two European Honey Buzzards together. Vocalizations were recorded equally in adults and juveniles. More females were recorded calling than males but females are known to greater outnumber males in southern Africa. All calling males were accompanied by another European Honey Buzzard. Twenty-two instances involved birds calling in flight, 12 of birds perched and one instance (of two juveniles together) involved birds calling both in flight and when perched. Thirty-four instances involved the typical flight (contact) call and seven were judged as alarm calls. All instances involving two birds together involved flight calls. Of the seven instances of alarm calls, four were associated with the presence of other raptors and two with drongos. The birds appeared to call especially in late summer: 22 instances from December onwards and only ten before December. Calling associated with two birds together and accompanied by aerial displays has not been described in Africa before and may be suggestive of either early pairing of the adult birds prior to migration or breeding activity locally in Africa. Vocalizations involving young birds though may be more social as opposed to sexual in nature. The large increase in records of European Honey Buzzards in South Africa in recent years, if this represents an increase in the abundance of the species in the region, likely increases the chances of conspecific interaction and hence calling. It also raises the possibility of breeding, especially in more-temperate South Africa.

Keywords: European Honey Buzzard, *Pernis apivorus*, vocalizations, Africa Received: 25 March 2021; Accepted: 12 May 2021

Introduction

Most popular sources describe the European Honey Buzzard *Pernis apivorus* as being silent in Africa (Brown 1982, Brown et al. 1982, Steyn 1985, Kemp and Kemp 1998, Hockey et al. 2005, Newman and Newman 2010, Sinclair and Ryan 2010, Oberprieler 2012, Chittenden et al. 2016). A few though state it to be largely silent (Clark and Davies 2018; Sinclair et al. 2020). Most sources do not even describe the call of the species.

The calls of nesting birds on their Palearctic breeding grounds are reported as a mournful whistle 'glee to', 'glee-ah' or 'glee-oo', alternatively a long-drawn 'glee-wheeeoo' or multi-syllabled 'goo-glee-ee-ee-oo'. (Gensbol 1984, Ferguson-Lees and Christie 2001, Svenson 2009, Beaman and Madge 2010, Vinicombe et al. 2014). These calls are given in flight and when perched, as contact calls between pairmembers. The length, strength and pitch of the calls vary with emotional state. These calls are also uttered in the face of intruding raptors and during human disturbance at nests. The long, drawn out call is included in two southern African digital apps: Gibbon (2011) and Sinclair et al. 2020, e.g. the former presents a recording of an adult bird in flight, Pafuri, Kruger National Park.

This study documents instances of vocalization by European Honey Buzzards on their African wintering grounds, largely by canvassing observations from observers familiar with the species.

Methods

I asked a wide diversity of observers whether they had heard European Honey Buzzards calling in Africa. Most were based in southern Africa, but some had experience of the species in other parts of Africa. I circulated my query via various digital internet resources, including by email, SMS, Facebook Messenger, Facebook and WhatsApp. Some individuals in turn posted my query on additional digital platforms. I used Google as another search method using the keywords 'European Honey Buzzard, Africa, voice, vocals, calls'. I also searched for video clips and sound clips on YouTube. Some individuals who are noted researchers on the species were contacted directly. I contacted a number of leading raptor researchers listed by the Global Raptor Information Network (GRIN; www.globalraptors.org), and also reached out to other experts who were not listed but who I know personally.

Results

I received 70 responses of which 41 involved instances of calling by European Honey Buzzards in Africa (Appendix 1) and 29 were from observers who had observed the species but without having heard any vocalizations (see Acknowl-edgements). Of the instances of European Honey Buzzards

vocalizing, six had videos accompanying the observation, five had digital sound recordings, 13 had photos, and the remaining 24 records had no such additional material (Appendix 1). Thirty-five instances came from South Africa (Gauteng - 16, Mpumalanga - 7, Western Cape - 5, Limpopo - 4, KZN - 2 and Free State - 1), three from Namibia, and one each from Zimbabwe, Angola and Ghana.

Of the 41 instances of calling, 30 involved single birds and 11 involved two European Honey Buzzards together (Appendix 1). Where calling involved two birds together it was not determined whether the calling came from one or both birds and this uncertainty in reflected in the numbers presented below.

Where the age of the birds was recorded, vocalizations were recorded equally in adults and juveniles, i.e. five adults and five juveniles were heard calling where single birds were involved, and where two birds together were involved, two involved two adults, two involved two juveniles and one involved an adult and a juvenile. Females form more than 90% of the South African population (Howes et al. 2019) and this was borne out by 6-7 females being recorded calling but only 1-3 males. All calling males were accompanied by another European Honey Buzzard. Where such information was recorded, 22 of the 41 instances involved birds

calling in flight, 12 of birds perched and one instance (of two juveniles together) involved birds calling both in flight and when perched. Of the 41 instances, 34 involved the typical flight (contact) call and seven were judged as alarm calls. All instances involving two birds together involved flight calls. Of the seven instances of alarm calls, four were associated with the presence of other raptors (including Western Osprey *Pandion haliaetus*, Black-winged Kite *Elanus caeruleus* and Ovambo Sparrowhawk *Accipiter ovampensis*) and two with Fork-tailed Drongos *Dicrurus adsimilis*. The birds appeared to call especially in late summer: 22 instances from December onwards and only ten before December.

Figure 1a and 1b shows photographs of two calling European Honey Buzzards engaged in typical aerial display and calling behavior. The photographs were taken by Richard McKibbin on 7 January 2020 at Zimbali Coastal Resort, Ballito, KZN, South Africa. This combination of calling and flying raises the possibility of this species breeding in South Africa. However, the bird on the right of both photos would appear to be an adult male, as evidenced by its greyish head and dark-tipped primaries, and the bird on the left a juvenile, possibly a male, as suggested by its streaked underparts, dark secondaries and wide dark tips to the outer primaries (sex and age details drawn from Ferguson-Lees and Christie 2001).

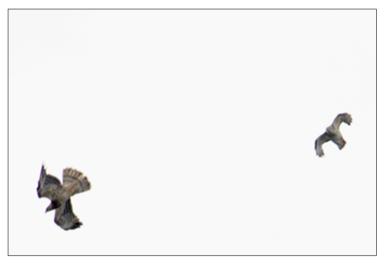


Figure 1a. Two adult European Honey Buzzards calling in flight (Photo: Richard McKibbin).



Figure 1b. The same two adult European Honey Buzzards as shown in Figure 1a calling in flight (Photo: Richard McKibbin).

Discussion

There has been a roughly five-fold increase in records of the European Honey Buzzard in South Africa between the first and second Southern African Bird Atlas projects (Howes et al. 2019; Figure 2; see: www.sabap2.adu.org.za).

The results of this largely southern Africa survey show that the European Honey Buzzard is not silent in Africa. It is not a very vocal species outside of its breeding grounds but it can be quite vocal at times, especially when apparently stressed or when another European Honey Buzzard is nearby. Calling has been recorded when two birds are present and when birds are seemingly alone. Calling does not seem to be associated with any specific sex or age. It has been heard calling in flight and when perched.

The reasons for calling while not breeding are probably varied and include alarm, conspecific interaction, and possibly territoriality (supported by display flights and vocalization in flight). It has been recorded calling in social interactions with other European Honey Buzzards and in alarm.

Rob Bijlsma and Rob Simmons independently suggested that vocal interactions may represent attempts at breeding. At least 27% of vocalisations were apparently aimed at conspecifics (11 of 41 instances) and it is possible that some of the vocalizations heard from apparently solitary birds were actually aimed at conspecifics not visible to the observers. Most calls were given in flight, behaviour typical of flight displays recorded while breeding in the northern hemisphere. However, the situation shown in Fig. 1, where an apparent adult male is shown in a vocal and display interaction with a juvenile (and possibly a male juvenile) would not be congruent with breeding and is an example perhaps of how such interactions could be misinterpreted.

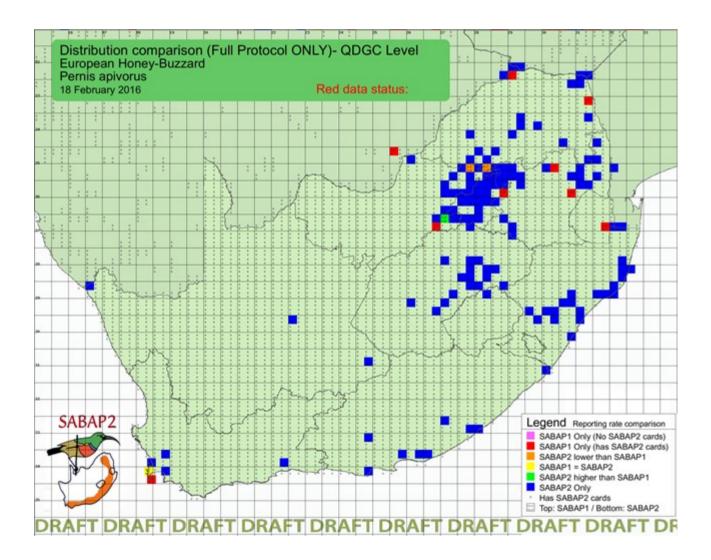


Figure 2. A comparison between the distribution of the European Honey Buzzard in South Africa between the first and second Southern African Bird Atlas Projects.

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Appendix 1. Summary of all records received of European Honey Buzzards vocalizing in Africa with full supporting details.

Name	Photo	Sound	Video	No. of EHB	Age	Sex	Position	Call type	Function	Season	Country	Province
M.Mills	No	Yes	No	1	?	?	Flight only	Flight	?	Early summer	Angola	
R.Simmons	No	No	No	1	?	?	Perched only	Flight	?	Early summer	Namibia	
G.Verdoorn*	No	No	Yes	1	?	?	?	Alarm	?	?	RSA	Free State
N.Cillie	Yes	No	Yes	1	?	?	?	Alarm	Interaction with another raptor	?	RSA	Gauteng
R.Montinaro	No	No	No	1	?	?	Perched only	Alarm	Interaction with another raptor	?	RSA	Gauteng
G.Lockwood	No	No	No	1	?	?	?	Flight	?	?	RSA	Gauteng
G.Lockwood	No	No	No	1	?	?	?	Flight	?	?	RSA	Gauteng
C.Van Tonder	Yes	No	Yes	1	Juv	?	Perched only	Alarm	Interaction with another bird	Late summer	RSA	Gauteng
C.Van Tonder	Yes	No	Yes	1	Juv	?	Perched only	Alarm	Interaction with another bird	Late summer	RSA	Gauteng
C.Van Tonder	Yes	No	Yes	1	Juv	?	Perched only	Alarm	Interaction with another raptor	Late summer	RSA	Gauteng
N.Cillie	Yes	No	Yes	1	Juv	?	Flight only	Flight	?	Late summer	RSA	Gauteng
N.Perrins	Yes	Yes	No	1	Juv	?	Flight only	Flight	?	Late summer	RSA	Gauteng
L.Robinson**	No	No	No	1	Ad	F	Perched only	Flight	?	Late summer	RSA	Gauteng
I.Hegyi	Yes	No	No	1	Ad	F	Perched only	Flight	?	Late summer	RSA	Gauteng
R.Montinaro	Yes	No	No	1	Ad	F	Flight only	Flight	?	Late summer	RSA	KZN
Guy Gibbon	No	Yes	No	1	?	?	?	Flight	?	Early summer	RSA	Limpopo
J.Grossel	No	No	No	1	?	?	Flight only	Flight	?	Late summer	RSA	Limpopo
J.Grossel	No	No	No	1	?	?	Flight only	Flight	?	Late summer	RSA	Limpopo
J.Grossel	No	No	No	1	?	?	Flight only	Flight	?	Late summer	RSA	Limpopo
R.Montinaro	No	No	No	1	?	?	Flight only	Alarm	Interaction with another raptor	Early summer	RSA	Mpumalanga
R.Montinaro	No	No	No	1	?	?	Flight only	Flight	?	Early summer	RSA	Mpumalanga
A.Jenkins***	No	No	No	1	?	?	Flight only	Flight	?	Early summer	RSA	Mpumalanga
D.McKenzie	Yes	No	No	1	Ad	F	Flight only	Flight	?	Early summer	RSA	Mpumalanga
D.McKenzie****	Yes	No	No	1	Ad	F	Perched only	Flight	?	Early summer	RSA	Mpumalanga
L.Robinson**	No	No	No	1	?	?	Perched only	Flight	?	Late summer	RSA	Mpumalanga

Appendix 1. Summary of all records received of European Honey Buzzards vocalizing in Africa with full supporting details.

Name	Photo	Sound	Video	No. of EHB	Age	Sex	Position	Call type	Function	Season	Country	Province
J.MacFarlane	No	No	No	1	?	?	Flight only	Flight	?	?	RSA	Western Cape
A.Jenkins	No	No	No	1	?	?	Flight only	Flight	?	?	RSA	Western Cape
P. Ryan	No	No	No	1	?	?	?	Flight	?	Late summer	RSA	Western Cape
M.Whitecross*****	No	No	No	1	?	?	Flight only	Flight	?	Late summer	RSA	Western Cape
M.Mills	No	Yes	No	1	?	?	Flight only	Flight	?	Late summer	Zimbabwe	
R.Bijilsma	No	No	No	2	?	?	Flight only	Flight	Interaction between 2 EHB	Late summer	Ghana	
R.Simmons	No	No	No	2	?	?	Perched only	Flight	Interaction between 2 EHB	Early summer	Namibia	
M.Whitecross*****	No	No	No	2	Ad	F	Flight only	Flight	Interaction between 2 EHB	Late summer	Namibia	
G.Lockwood	No	No	No	2	?	?	Perched only	Flight	Interaction between 2 EHB	?	RSA	Gauteng
D.Human	Yes	No	No	2	Juv	?	Flight only	Flight	Interaction between 2 EHB	Early summer	RSA	Gauteng
A.Branfield	No	No	No	2	Juv	?	Flight and perched	Flight	Interaction between 2 EHB	Late summer	RSA	Gauteng
P.Da Cruz	Yes	Yes	No	2	?	?	Flight only	Flight	Interaction between 2 EHB	Late summer	RSA	Gauteng
P.Da Cruz	No	No	No	2	?	?	Perched only	Flight	Interaction between 2 EHB	Late summer	RSA	Gauteng
R.McKibbin	Yes	No	No	2	Ad+ Juv	1M+1 M?	Flight only	Flight	Interaction between 2 EHB	Late summer	RSA	KZN