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Field Report

Forest-dwelling African wild dogs in the Bale Mountains, Ethiopia

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Abstract

Ethiopia harbours several relict populations of African wild dogs *Lycaon pictus*, but most data is anecdotal. Wild dogs are known to occur atypically in the montane wet forest of Harena in the southern slopes of Bale Mountains National Park, southeastern Ethiopia. A questionnaire-survey of 90 Harena forest residents investigated the local people's knowledge and attitudes to wild dogs. Wild dog sightings were reported throughout Harena forest, between the lower forest boundary at about 1,400m asl and an upper altitudinal limit of 2,400m, although dogs have been found as high as 4,000m in Afroalpine grassland. A declining trend in sightings was implied and only one large pack of 30 wild dogs may occur in the area. This is consistent with a maximum of about 1,500km² of suitable forest in and outside the National Park, supporting a reasonable density of suitable mid-size mammalian prey. Wild dogs in Harena

are threatened by encroachment and loss of suitable forest habitat, a decline in prey species through competition with livestock, persecution by pastoralists, disease and occasional road casualties. Conservation action is needed to increase awareness, reduce the rate at which habitat is being lost and protect the prey base.

Introduction

African wild dogs are Endangered (Sillero-Zubiri et al. 2004), with most populations threatened throughout their sub-Saharan range (Woodroffe et al. 1997). Wild dogs have declined across their range; they are now extinct in 25 of the 39 countries in which they were formerly recorded, with the total population estimated to be 5,750 individuals in not more than 1,000 packs (Woodroffe et al. 2004). Wild dog packs typically have very large annual home ranges (150-2,500km²), leading to low population densities, requiring large areas

of suitable habitat and are hence highly susceptible to local extirpation.

While Ethiopia harbours several relict dog populations (Malcolm and Sillero-Zubiri 2001), most data is anecdotal and surveys are needed to assess status and conservation outlook. Malcolm and Sillero-Zubiri (2001) reported wild dog presence in eight areas, with dogs possibly resident only in four protected areas (Bale Mountains, Mago, Omo and Gambella National Parks), and the south eastern lowlands. Wild dogs are fully protected in Ethiopia, but the only dog population with minimal protection is that in the Bale Mountains National Park (BMNP), where it inhabits montane wet forest in the Hareenna forest (Figure 1). Wild dogs are known in Ethiopia as Takula (Amharic) and Yeyii (Orominia).



Figure 1. Group of wild dogs along the Rira-Delo Mena road in the Hareenna Forest.

There are no other African wild dog populations known to be resident within wet forest, nor at such high altitude. Hareenna forest comprises Afro-montane forest with rather broken canopy and numerous but small and wet clearings above 1,400m. It is the second-largest wet forest in Ethiopia. Its boundaries are ill-defined but most of the forest is included within the Mena-Angetu National Forest Priority Area and BMNP. The forest is suffering from accelerating forest loss and degradation, especially along the southern boundary, including extensive forest-fires in 2000. Previous wild dog records in Hareenna (Malcolm and Sillero-Zubiri 2001) include several sightings between 1,500-4,000m (Table 1).

The aim of this survey was to assess the conservation status of wild dogs in Hareenna by gathering data on abundance, recent population trends, pack size, evidence of breeding and prey preference. We also collated information on wild dog-human interactions, including predation on domestic livestock, human settlements within the forest, local community attitudes to wild dogs, and any direct threats from humans.

Table 1. Past opportunistic sightings of wild dogs in Hareenna.

Date	Location	<i>n</i>	Remarks	Source
August 1986	Road, near Katcha, 1,900m	1	Road kill	BMNP
April-May, 1987	Katcha clearing, 2,400m	2	Several records	BMNP
January 1990	5km south of Katcha	1	Dead	
January 1990	Near Shisha River	~20		BMNP
June 1995	Sanetti Plateau, 4,050m	1	Dead	BMNP
October 1996	Hareenna Forest, beside road	3		J Hornbuckle
1998	Hareenna Forest, beside road	pack		EWCP unpubl.
June 1999	South of Katcha, 1,975m	12	Photograph	G Dutson

Methods

We used a questionnaire (adapted from the one used elsewhere by C. Sillero-Zubiri), open discussion and Participatory Rural Appraisal techniques to investigate local residents' knowledge of and attitudes to wild dogs. The survey targeted people resident in and around the forest, people visiting the forest and drivers using the Goba to Delo Mena road through the forest (Figure 2). The interviewers aimed to ask questions in an open, non-leading style and to encourage discussion and open conversation. However most respondents were reluctant to spend this length of time with the interviewers and preferred to give short direct responses. Respondents were most cooperative after a communal address and discussion with a parish gathering. People were then interviewed individually, away from other interviewees. A cross-section of ages were interviewed. Older men were more interested, forthcoming and knowledgeable, so there was a major interview bias towards these older men. Women were interviewed only in public markets and usually in the company of a female co-surveyor. The Goba-Delo Mena road is used regularly by a few small public transportation trucks and intermittently by a small number of other vehicles. All drivers encountered in Delo Mena were interviewed.

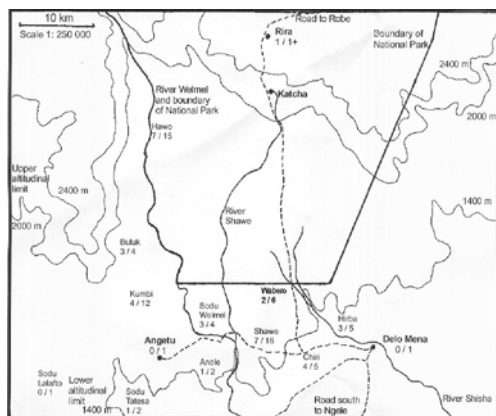


Figure 2. Map of Hareenna Forest, with Park boundaries. Survey locations with number of wild dog observations and interviewees.

Results

In total 90 residents (of which only seven were women) of 20 kebeles (parishes) were inter-

viewed as well as eight regular bus drivers crossing Hareenna. Wild dogs were reported throughout Hareenna, from the lower forest boundary at about 1,400m up to 2,400m. To the north, the forest is bordered by the high mountains of the Sanetti Plateau, and dogs have been reported as high as 4,000m in Afro-alpine grassland there (Table 1). Interviewees however, indicated that dogs very rarely reach this altitude, and only rarely visit the Katcha clearing at 2,400m. Rarely dogs were reported outside closed forest and at small forest clearings. To the south, there were very few wild dog records ranging outside the forest boundary, which runs west-east approximately along the road to Angetu from the Goba-Delo Mena road. The east and west extent of the forest range was not visited.

Wild dog numbers were believed to be declining by 25 interviewees and increasing by seven interviewees. Cross-checking questions suggested that wild dogs were in a general long-term decline, with the possible exception of the areas of North Shawe and Chiri. Most wild dog reports were during the dry season (especially December-March). This may probably be because people take their livestock, especially cattle, into the forest in search of shade and grass, and they may therefore be more likely to encounter wild dogs. Wild dogs sighting were reported every dry season from North Shawe and Chiri.

All eight Goba-Delo Mena drivers were familiar with wild dogs, seeing them up to ten times annually, with most drivers making the return journey twice a week. The drivers reported stable (3), increasing (1) or decreasing (2) numbers of wild dogs. Most wild dogs were seen between the Shawe and Shisha rivers, with occasional records above the Shawe river.

The number of wild dogs reported in each pack varied from one to over 40 (Figure 3). It is difficult to know how accurate these estimates are, and there was no obvious geographical or numerical trend to suggest more than one pack. Packs seen on the main Goba-Delo Mena road appeared to be smaller, but other members of the pack may have been off the road. There were repeated observations of a group of seven (three reports) and 11 (two reports). The two reports of 40 wild dogs were both from three years ago in Shawe. A

pack of 30 had been seen as recently as one month previously in both Anole and Wabero. The most recent record was of a large pack seen one week previously near Shawe. One man reported that wild dogs breed at Hora Dhoke and Girrsa. Packs containing pups and juveniles were reported widely. There are some indications of two centres of pup sightings: the far west in Buluk and Kumbi, and the far east in Shawe, Chiri and Wabaro.

Most interviewees reported that wild dogs preyed on livestock and bushbuck *Tragelaphus scriptus*, with a few also reporting grey duiker *Sylvicapra grimmia*, greater kudu *T. strepsiceros*, bush-pig *Pomatochoerus larvatus* and warthog *Phacochoerus africanus*. There was a wide variation in the estimation of numbers of livestock killed by wild predators annually in each kebele, varying between seven and 500 cattle killed annually, with the highest estimates from Shawe kebele. Where specified, spotted hyaenas *Crocuta crocuta* were considered as the primary predator, with fewer animals lost to lions *Panthera leo*, wild dogs, golden jackals *Canis aureus* and leopards *P. pardus*. The highest estimate of losses to wild dogs was of eight cows and 17 goats in a year in Anole kebele. Most livestock were left to graze freely during the day and brought back to a fenced compound at night but they were actively guarded during the day if lions or wild dogs were known to be present. Many interviewees, especially bordering the forest, reported that predation by wild predators was less of a problem than crop destruction by warthog, giant forest hog *Hylochoerus meinertzhageni* and olive baboon *Papio anubis*.

At least two interviewees reported that wild dogs would attack people, although there were no first-hand reports of attacks on humans, other than a rabid wild dog in Kumbi kebele which bit one person, who later died. However, there was a similar report from the same area involving a golden jackal and the identity of this animal needs resolving. Rabid jackals were also reported from Kumbi, Melka Arba and Shawe, and there were reports of rabies in domestic dogs and livestock in nine kebeles. No other clearly identifiable diseases of domestic dogs or wild carnivores were reported.

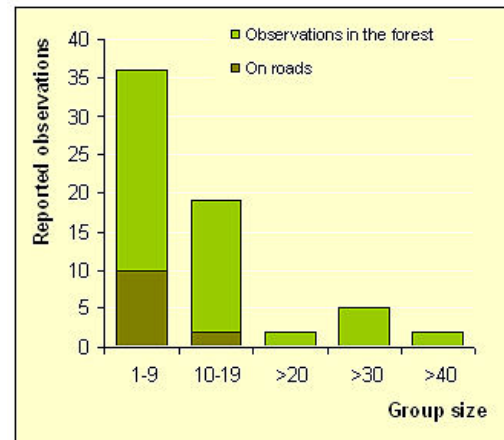


Figure 3. Group sizes of wild dog observations reported by interviewees in the Hareenna Forest main road (n=12) and away from the road (n=40).

There were no reports of people killing wild dogs. They were widely reported to be chased and scared away with sticks and stones by livestock shepherds. Very few interviewees reported any benefit arising from wild dogs, although several believed that they aided tourism to Ethiopia but that this did not benefit their kebele. A number believed that wild dogs chased lions and sometimes also spotted hyaenas away, protecting their livestock.

Discussion

Based on local reports, wild dogs occur throughout Hareenna forest, ranging north up to an altitude of 2,000m with occasional presence up to 2,400m, and south to the forest boundary, which runs along the Angetu road at about 1,400m. Their western boundary is ill-defined. It may be approximate to the western boundary of Angetu woreda and the north-south mountain ridge in Buluk and Hurufa, or it may extend west well in Adaba-Dodola woreda. The eastern boundary is unknown but is assumed to follow the forest boundary. The maximum extent of suitable forest habitat within this area is about 1,500km², plus another 500 km² if the area extends west into Adaba-Dodola. Wild dogs may occur at low population densities in Hareenna because of the atypical habitat, relatively low numbers of wild prey species, and

the abundance of competitors such as lions and spotted hyaenas.

Wild dogs were reported infrequently from most villages. They were reported to be most common in the uninhabited forests north and north-east of Shawe and Chiri. Drivers reported them frequently from the main road between the Shawe and Shisa rivers. As there appears to be a single, albeit large and ill-defined, core range, it is suggested that there is only a single pack of wild dogs in Hareenna. If there are other packs, these are likely to occur to the west in Adaba-Dodola and to the east in the unsurveyed forests north-east of Chiri. There have been occasional records of wild dogs from savanna habitats far to the South-East, toward the Kenyan border. This region is very poorly known but may support a resident dog population (Malcolm and Sillero-Zubiri (2001)). Although their ranges may be contiguous, this survey received no reports of wild dogs from the dry forests and savannahs south and east of Hareenna.

These wild dogs should be treated as a high conservation priority because they may be one of the last remaining packs in Ethiopia, because of their atypical habitat, and because they could be used as conservation flagship for the Hareenna Forest. More information is needed on their population trends and threats and more resources are needed for the conservation of the Hareenna Forest, which is under increasing pressure from pastoralists and immigrant agriculturists. Its conservation needs must be advocated to the relevant government bodies and to its residents.

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References

Dutson, G. 2001. Survey of African wild dogs in Hareenna Forest, Ethiopia. Unpublished report: EWCP, Ethiopia.

Malcolm, J.R and Sillero-Zubiri, C. 2001. Recent records of African wild dogs (*Lycaon pictus*) from Ethiopia. *Canid News* 4.2. http://www.canids.org/canidnews/4/wild_dogs_in_ethiopia.pdf

Sillero-Zubiri, C., Hoffmann, M. and Macdonald, D.W., eds. 2004. *Canids: foxes, wolves, jackals and dogs. Status survey and conservation action plan*. IUCN/SSC Canid Specialist Group. Gland, Switzerland and Cambridge, UK. <http://www.canids.org/cap/index.htm>

Woodroffe, R., Ginsberg, J.R. and Macdonald, D.W. 1997. *The African wild dog. Status survey and conservation action plan*. IUCN/SSC Canid Specialist Group. Gland, Switzerland and Cambridge, UK. http://www.canids.org/PUBLICAT/AWDA_CTPL/wldogtoc.htm

Woodroffe, R., McNutt, J.W., and Mills, M.G.L. 2004. African wild dog (*Lycaon pictus*). in *Foxes, wolves, jackals and dogs: status survey and conservation action plan. 2nd edition* (eds C. Sillero-Zubiri & D.W. Macdonald), pp. 174-183. Gland, Switzerland and Cambridge, UK. http://www.canids.org/species/African_wild_dog.pdf

Yalden, D.W., Largen, M.J. and Kock, D. 1980. Catalogue of the mammals of Ethiopia: 4. Carnivora. *Monitore Zoologico Italiano (Supplement n.s.)* 13:169-272.

Yalden, D.W., Largen, M.J., Kock, D. and Hillman, J.C. 1996. Catalogue of the mammals of Ethiopia and Eritrea: 7. Revised checklist, zoogeography and conservation. *Tropical Zoology* 9:73-164.

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