Photographic evidence of Jentink’s duiker in the Gola Forest Reserves, Sierra Leone

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Introduction

The forest ungulate Jentink’s duiker (Thomas, 1892, Cephalophus jentinki), is endemic to the western portion of the Upper Guinea forest region (Ivory Coast, Liberia and Sierra Leone) and is one of the rarest duikers in Africa (Davies & Birkenhager, 1990). The paucity of information on the size of the population, the small extent of their range, and the seriousness of threats from habitat loss and hunting that they have faced in the last twenty years have led to their recent upgrading from vulnerable to endangered by IUCN (2008). Their ecology is not well known but they are thought to be mostly confined to remote primary forests, although they may use secondary forests on a seasonal basis (Davies and Birkenhager, 1990; Newing, 2001).

Although Jentink’s duiker has been confirmed by direct sightings in Liberia (http://www.edgeofexistence.org) and the Ivory Coast (Newing, 2001), only indirect evidence of its existence has been documented in Sierra Leone (Davies and Birkenhager, 1990, Wilson & Wilson, 1990). All these reports pre-date the 10 years of civil war that Sierra Leone underwent from 1991 to 2001. During this time, the forests of southeast Sierra Leone were used extensively by rebels (Richards, 2005) and since then activities such as mining, slash and burn farming, and illegal logging have recommenced. Given the very limited earlier evidence from a country whose mammal fauna was otherwise well known (Grubb et al., 1998), and these more recent trends, some conservationists have concluded that Jentink’s duiker may well already have been extirpated in Sierra Leone (R. Mittermeier, personal communication).

Methods

The Gola Forest Programme, a partnership between the Government of Sierra Leone, the Conservation Society of Sierra Leone and the Royal Society for the Protection of Birds, is working to protect the forest and as part of the research and monitoring programme, camera traps are being used to document animal species found in the forest. We report here the first photographic evidence of Jentink’s duiker in Sierra Leone.

Results and discussion

During three events, the cameras recorded one or two individual Jentink’s duikers in Gola West and one individual in Gola East (Fig. 1). The first event, in Gola West (two photos) was on 20 July 2008, 5:16 am (Fig. 2), and the second event (two photos) was on 21 August 2008 at 4:29 am (not shown). It is not possible to tell from the images...
whether the same animal was involved. For the first and second events, ten cameras were deployed in ten different grid squares for a minimum of 39 nights per square. We calculated the minimum number of trap nights using the last photograph recorded because the cameras stopped working on unknown dates during the time period. In total there were four photographs from two events in this square.

The third event occurred in Gola East on 14 October at 12:10 am (Fig. 3). Here, nine cameras were deployed for a minimum of 34 trap nights per square.

These photographs are the first direct evidence of Jentink’s duiker in Sierra Leone and confirm that it occurs in the Gola Forest. Given that these photos were taken in some of the most degraded areas of the Reserves, bordered by agricultural land and community bush, it seems that this species is tolerant of forest disturbance and some hunting pressure and it is not confined to remote or primary habitats as elsewhere (Newing, 2001). On this basis, it can be expected to occur throughout Gola West and Gola East (250 km²). Whether Jentink’s duiker is found in less disturbed parts of the Gola Forest Reserves is unknown but research is currently underway to verify if this is the case, and it seems likely.
This species was poorly known in Sierra Leone and may have suffered adversely from logging, agricultural clearance and hunting in recent years, so it is encouraging that a population has been found in Gola Forest. The Gola Forest reserves are due to become a National Park in 2012 and the Gola Forest Programme is currently providing effective protection of the forest, so the future of the Gola population is currently secure.

Acknowledgements

We thank the partners of the Gola Forest Programme, the Royal Society for the Protection of Birds (RSPB), the Conservation Society of Sierra Leone (CSSL) and the Sierra Leone Government for continued support. We gratefully acknowledge funding from the European Union, FFEM, Conservation International, and the RSPB. Our research assistants Mohamed Sullay and Mohamed Swaray provided invaluable field support.

References


(Manuscript accepted 3 March 2009)

doi: 10.1111/j.1365-2028.2009.01137.x