CARNIVORA HERPESTIDAE Id code: amd110

Crossarchus ansorgei

Thomas, 1910

(Eng)Angolan Ansorge's cusimanse(Fre)Mangue d'Ansorge

Taxonomic notes

Two subspecies are generally recognised: *C. a. ansorgei* (Angola, northern escarpment zone) and *C. a. nigricolor* (Zaire basin, south of the river) (Colyn & Van Rompaey, 1994; Kingdon, 1997).

IUCN threat category

Data Deficient (DD) as C. a. ansorgei (Angolan cusimanse) in Angola.

Available information

Little is known on either the ecology or the distribution of this cusimanse, as shown by Van Rompaey & Colyn (1992) in their review of the species' biology. Some information on diet, habitat and habits in former Zaire is given by Colyn (1984). Data available on its occurrence are discussed in depth by Colyn & van Rompaey (1990); Crawford-Cabral (1989) adds some detail to its presence in Angola. According to the authors mentioned above, its discontinuous distribution does not seem to be due to lack of information but to environmental barriers and fragmented suitable habitat. Colyn et al. (1987) discuss conservation issues, particularly problems of coexistence with humans. General information on the species' ecology are found in Kingdon (1997) and in Stuart & Stuart (1997). Status,



threats, and distribution are analysed in Schreiber et al. (1989); the authors also give some information on its ecology, particularly on its habitat requirements.

Known extent of occurrence

This cusimanse, sympatric with *C. alexandri* (Colyn & Van Rompaey, 1994), inhabits the high forest zone south of the Zaire River and west of the Lualaba River in former Zaire, but there is also one specimen collected from the southernmost portion of the Dembos forest, north of the Cuanza river in Angola. The distribution map (Fig. 3.3.6.a) reflects these boundaries; it was drawn out from a map in Van Rompaey & Colyn (1992), updated following river boundaries in Colyn & Van Rompaey (1994), and revised by Dr. H. Van Rompaey (20 May '97), who suggested considering possible or even extinct the relict isolated population in North Angola. *C. ansorgei* is expected to occur down to the Kasai river, but no collecting has been done there (H. Van Rompaey, pers. comm.).

Categorical-discrete (CD) distribution model

Known only from high deciduous forests, it appears to dislike swamp forest and to avoid disturbed and cultivated land (Van Rompaey & Colyn, 1992; Schreiber et al., 1989; Kingdon, 1997).

Based on these environmental preferences, the following scores were assigned (Fig. 3.3.6.b) (Tab. 3.3.6.a):

<u>Score</u>

- 1 Primary and secondary forests.
- 2 Degraded forest and forest mosaics, swamp forests.
- 3 Savannas and croplands.

	suitable		moderately suitable		unsuitable		Total	
OCCURRENCE	km ²	%	km ²	%	km ²	%	km ²	%
certain	396 325	68	126 993	22	48 887	8	572 205	98
possible	52	0	3 838	1	6 914	1	10 804	2
Total	396 377	68	130 831	22	55 801	10	583 009	100

Tab 3.3.6.a: Cumulative size (km²) of areas pertaining to each environmental suitability class within the Extent of Occurrence.

	Number Patches (NP)	Mean Patch Size (MPS) km ²	Patch Size SD (PSSD) km ²	Largest Patch Index (LPI) %	Mean Shape Index (MSI)	Area-Weighted Mean Shape Index (AWMSI)
suitable	44	8 998	57 780	73.71	1.53	15.77
moderately suitable	413	315	3 102	11.51	1.31	8.14
Total AO	24	21 923	104 161	99.11	1.68	11.33

Tab 3.3.6.b: Area of Occupancy fragmentation indexes.

Probabilistic-continuous (PC) distribution model

The output of the probabilistic-continuous (PC) distribution model is shown in Fig. 3.3.6.c.

Validation

No occurrence of the species within the four sample areas.

Comments and conservation issues

The species' EO is separated into a relatively large portion (98%) where its occurrence is considered certain, and a very small fragment (less than 11 000 km²) where no sightings or news about the species have been reported since 1908. The AO within the main portion of the distribution range consists in a relatively small number of suitable areas of variable size, interspersed with on average smaller, moderately suitable fragments (Tabs 110a and 110b). The unsuitable patches account for about 10% of the total EO. This pattern, confirmed by the PC model, appears to reflect the influence of human encroachment within the forest zone, which may have contributed to isolating the Angolan portion, probably smaller than drawn. The model's outputs confirm the role of the Zaire River as an effective barrier to this species' dispersion, showing large suitable areas northeast of the EO. About 6% of the main AO is included in existing protected areas; further research is urgently needed to assess the status and conservation options for the species in the possible Angolan range, as already recommended by the IUCN.

OCCURRENCE	SUITABILITY CLASS	inside	outside	Total
certain	suitable	4.02	63.96	67.98
	moderately suitable	1.23	20.56	21.78
	unsuitable	0.66	7.73	8.39
possible	suitable	0	0.01	0.01
	moderately suitable	0	0.66	0.66
	unsuitable	0	1.19	1.19
Total		5.91	94.09	100

Tab 3.3.6.c: Percent of environmental suitability classes within EO (as obtained from the categorical-discrete distribution model) inside and outside the protected areas.

References

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