LAGOMORPHA
LEPORIDAE

Id code: amd252

Lepus victoriae

Thomas, 1893

(Eng) African savanna or Whyte's hare
(Fre) Lièvre de Whyte ou à oreilles de lapin

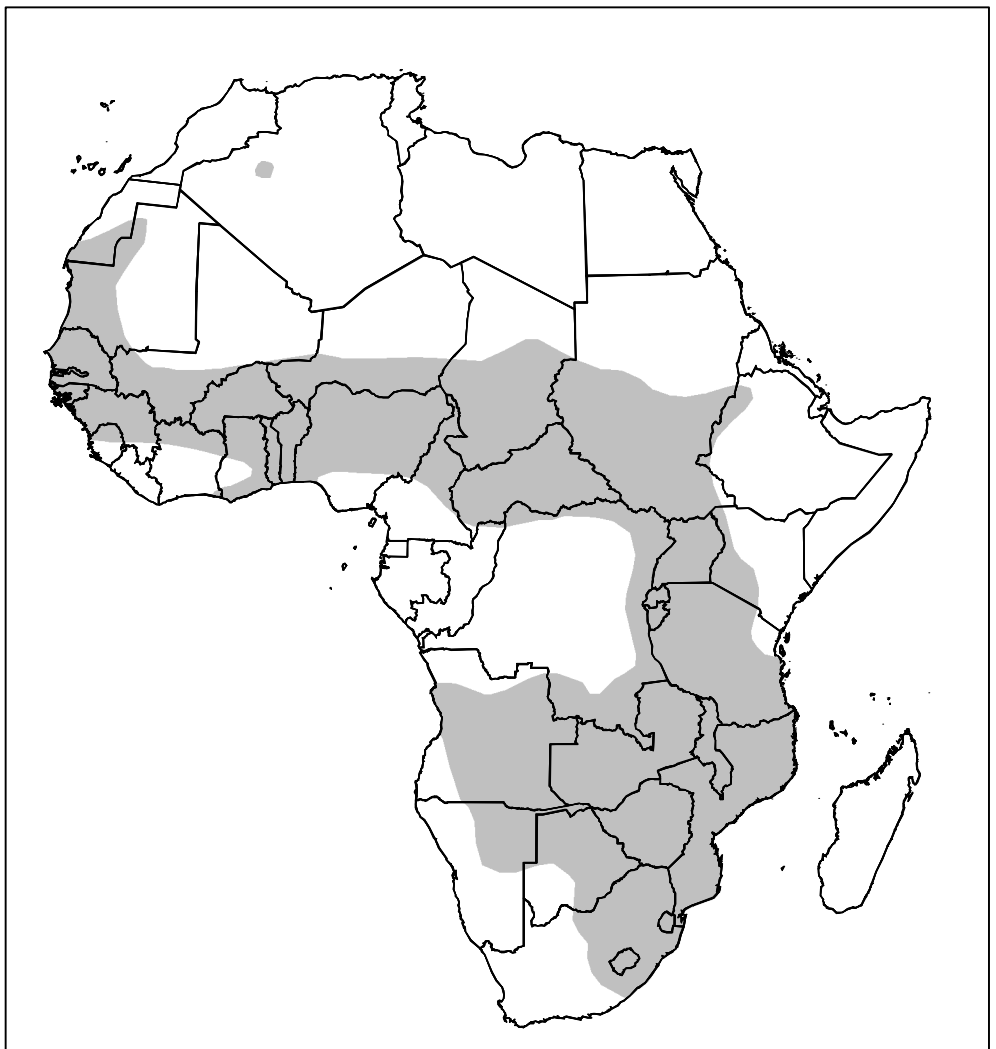

Fig. 11.1.6.a: Known extent of occurrence.

Taxonomic notes
The genus *Lepus* is very confusing taxonomically, and its classifications is still debated (Chapman & Flux, 1990; Wilson & Reeder (1993). According to Chapman & Flux (1990) and Wilson & Reeder (1993), *L. saxatilis* and *L. victoriae* are regarded as distinct species, the former being limited to South Africa and Namibia, the latter ranging over most of the African continent and including the forms ascribed by some authors (e.g. Azzaroli-Puccetti, 1987) to *Lepus crawshayi* and *Lepus whytei.* It must be noted, however, that *L. saxatilis* and *L. victoriae* are regarded by several authors (e.g. Skinner & Smithers, 1990; Kingdon, 1997) as conspecific under the name *L. saxatilis*; it has also been suggested that both forms could turn out to be merely subspecies of the Indian hare, *L. nigricollis* (Chapman & Flux, 1990; Robinson & Dippenaar, 1983).

IUCN threat category
Lower Risk, least concern (LR: lc).

Available information
No specific studies on the species' ecology have been carried out, and literature available on the matter is poor. Some information on the species' ecology and distribution in East Africa is found in Azzaroli-Puccetti (1987), Flux & Flux (1983) and Yalden et al. (1996); these authors report on the habitat in which the species occurs. An account of the information available on the species' biology in Southern Africa is found in Mills & Hes (1997) and Skinner & Smithers (1990). General information on the species' ecology and distribution is found in Kingdon (1997) and Stuart & Stuart (1997). Status, distribution and ecology are discussed in Chapman & Flux (1990).

Known extent of occurrence
The African savanna hare occurs in most of sub-Saharan Africa, ranging from the Atlantic coast of North and West Africa eastwards across the Sahel to extreme west Ethiopia and west Kenya and southwards to east Namibia, Botswana and the western part of South Africa (Wilson & Reeder, 1993; Chapman & Flux, 1990). Over part of its range, it is sympatric with *L. capensis*. An isolated population is recorded in south Algeria, near Beni Abbes. Fig. 11.1.6.a shows the distribution range as obtained from the map in Chapman & Flux (1990).

Categorical-discrete (CD) distribution model
This species appears to prefer scrub or woodland cover with high grasses and montane areas rather than open grasslands (Chapman & Flux, 1990; Flux & Flux, 1983).
Based on these environmental preferences, the following scores were assigned (Fig. 11.1.6.b) (Tab. 11.1.6.a):

Score	
1	Savanna mosaics.
2	Croplands; grasslands, semi-desert vegetation, forest mosaics.
3	Forest, desert.

suitable		moderately suitable		unsuitable		undefined	
km^2	%	km^2	%	km^2	%	km^2	%
8 165 593	67	2 707 368	22	1 196 950	10	46 700	0

Tab 11.1.6.a: Cumulative size (km^2) 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	2 432	3 357	159 660	72.44	1.24	45.53
moderately suitable	7 188	377	10 279	6.01	1.27	16.89
Total AO	556	19 554	458 835	99.61	1.22	19.4

Tab 11.1.6.b: Area of Occupancy fragmentation indexes.

Probabilistic-continuous (PC) distribution model
The output of the probabilistic-continuous (PC) distribution model is shown in Fig. 11.1.6.c.

Validation

% of EO in sample areas	Number of valid plots	Index of Accordance (%)
7.55	239	78.66

Tab 11.1.6.c: Categorical-discrete (CD) distribution model validation parameters.

Comments and conservation issues

The good score of the Index of Accordance (78.66%) supports the following considerations. Most of the very large EO of this species appears to be suitable, with the notable exception of the areas in Mauritania and Morocco. The PC model confirms this pattern. Notable unsuitable areas are also shown in Ghana and eastern former Zaire where further research would be useful to confirm its presence. The suitable areas seem to form an almost continuous network throughout most of the range (LPI = 72.44%) and with the contribution of the moderately suitable areas the network covers the whole AO. However, the high AWMSI also shows that the shape of these areas is very discontinuous and significant interspersion of areas of different suitability levels is widespread. Almost 10% of the total AO is included in existing protected areas.

SUITABILITY CLASS	inside	outside	Total
suitable	6.41	60.98	67.39
moderately suitable	1.56	20.78	22.34
unsuitable	0.47	9.41	9.88
undefined	0.08	0.30	0.39
Total	8.53	91.47	100

Tab 11.1.6.d: Percent of environmental suitability classes within EO (as obtained from the categorical-discrete distribution model) inside and outside the protected areas.

References

Azzaroli-Puccetti M.L. (1987). On the hares of Ethiopia and Somalia and the systematic position of *Lepus whyte*i Thomas, 1894 (Mammalia, Lagomorpha). Atti della Accademia Nazionale dei Lincei. Memorie Sc. Mat, Fis e naturali, Ser 8: n° 19(3a, 1), 1-19.

Chapman J.A., Flux J.E.C. (Eds) (1990). Rabbits, Hares and Pikas: Status Survey and Conservation Action Plan. IUCN/SSC Lagomorph Specialist Group.

Flux J.E.C., Flux M.M. (1983). Taxonomy and distribution of East African hares. Acta Zoologica Fennica: 174, 41-43.

Kingdon J. (1997). The Kingdon field guide to African Mammals. Academic Press, London and New York: Natural World.

Mills G., Hes L. (1997). The complete book of Southern African mammals. Struik Publishers.

Robinson T.J., Dippenaar N.J. (1983). The status of *Lepus saxalis*, *L. whytei* and *L. crawshayi* in southern Africa. Acta Zoologica Fennica: 174, 35-39.

Skinner J.D., Smithers R.H.N. (1990). The mammals of the Southern African subregion. University of Pretoria, Pretoria.

Stuart C., Stuart T. (1997). Field guide to the larger mammals of Africa. Struik Publishers.

Wilson D.E., Reeder D.M. (Eds) (1993). Mammal Species of the World: A Taxonomic and Geographic Reference. Second edition. Smithsonian Institution Press, Washington D.C.

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