

Book Reviews

La Vie Sauvage au Sahara (Wildlife in the Sahara)

by Alain Dragesco-Joffé. 1993

Delachaux et Niestlé, Lausanne

ISBN 2-603-00871-4

The wildlife of the Sahara has been little studied and there is only meagre knowledge of the life and status of the animals of this vast intimidating area. Mere survival in the severe climate is a problem for wildlife and people. Nevertheless, many species, humans included, have adapted to the conditions, but, as in most parts of the world, wildlife is suffering from human pressure. French naturalist Alain Dragesco-Joffé decided in 1982 to concentrate on documenting Saharan wildlife. The result of 10 years intensive work has now been published in a spectacular coffee table book,

packed with first-hand observation and laced with breath-taking photos of mammals, birds and reptiles.

Cat specialists will turn immediately to accounts of cheetah, sandcat, wildcat and caracal. All are informative, but the cheetah steals the show in a chapter subtitled "A Cat lost in Hell".

Dragesco-Joffé found signs of cheetah almost everywhere while ranging over 275,000 km² in Niger's Aïr Mountains and the plains of the Talak and the Azaouakor, and in the sandy wastes of the Ténéré. Numbers were small, except in the Ténéré, but even there he estimated the density to be only one cheetah per 194 km², compared with an average of one per 30 km² in East Africa.

Several fine photos support Dragesco-Joffé's comment that the Saharan cheetah *Acinonyx jubatus hecki* seemed to be very different from those of the rest of Africa, both in size and coat

colour. He found them smaller and more stocky. Two adult male cheetahs he measured were only 65 cm in height at the shoulder and measured 1.69 m and 1.70 m respectively (including the tail of 65 cm), while sub-Saharan cheetahs of East and southern Africa average 80 cm at the shoulder, and up to 2.30 metres in length, including the tail of 80 cm.

A photo of a running cheetah shows unusually large ears and a pronounced muzzle (See cover photo of this issue).

He noted that cheetahs in open regions had little contrast in their coats, which blended with their habitat. The coats were light beige with ochre, instead of black, spots. Furthermore, the black line between the eye and the mouth, and the black rings at the end of the tail, characteristic of ordinary cheetahs, were very muted in the Saharan cheetah, even non-existent. On the other hand he noted that cheetah living around mountain chains (Aïr Massif, Tiguidit cliffs), where black rocks prevail, had much more contrasting coats and darker spots.

Dragesco-Joffé estimates that between 300 and 500 cheetahs remain in the Sahara, most of them in Mali, Niger and Chad, with others probably north of the Hoggar, in Algeria.

Saluki hounds are used by local people to hunt cheetahs. Dragesco-Joffé notes that the Saharan cheetahs suffer from heat stress and are likely to collapse when chased. But even if not molested, the cheetahs appeared unable to tolerate human presence: they disappeared from one area soon after people settled there.

After the cheetah, the attention of the reader is drawn to the beautiful little sandcat *Felis margarita*, the subject of further striking photos, including a series showing its technique when attacking a horned viper *Cerastes cerastes* and finally biting its head off. Dragesco-Joffé says the sandcat is found throughout the Sahara and appears to be rather more diurnal in its activity than the wildcat *F. silvestris libyca* (also beautifully photographed). Prey included gerbils *Gerbillus gerbillus*, young cape hares *Lepus capensis*, and varana lizards *Varanus griseus*. Sand cats were seen to cover the remains of prey with sand and return later to feed. While sand cats can live for long periods without drinking water, Dragesco-Joffé's Toubou guides surprised one at dawn drinking camels milk from a gourd.

As with cheetahs, Dragesco-Joffé found that the coats of wildcats were well adapted to the habitat: reddish-grey in the red clays of the Ighazer, and yellowish in the sands. They are almost exclusively nocturnal, preying on gerbils, birds and reptiles. They appeared to be neither rare nor threatened in the southern Sahara.

In similar habitat to the wildcats, Dragesco-Joffé found caracals *Caracal caracal*. They kept to rocky areas and did not venture into the sandy wastes. His desert guides said that their numbers had diminished over the past 40 years with increasing dessication. The decline could well have been helped through human persecution because of their depredation on livestock. Dragesco-Joffé was frequently asked to rid an area of the cats, which attacked goats, sheep and chickens. A Tuareg said she lost 10 per cent of her goats every year. But caracals were easily tracked, and people sent their Saluki hounds after them.

This review has concentrated on the cats, but the book should be in the hands of all interested in Saharan, and desert, wildlife. At present it is only available in French, but one hopes an English version will appear before too long. Dragesco-Joffé has been awarded the Prix Nature 1993 established by the Fondation Electricité de France for the best nature book of the year in French.

(Andrew Kitchener of the Royal Museum of Scotland comments: "I do not find the desert cheetah as odd as it first seems. The problems with most species of large mammal is that we have little idea about what variation (whether it is morphological or

genetic) means. To some extent, ideas about variation can only be tested in captivity or by translocation of specimens between habitats. What would one expect for a desert cheetah? It would have very short fur (hence the lack of a mane); the productivity of deserts is low, so we could expect it to be small. Finally, the effect of sunlight on the spotted coat would be a fading of the melanin to produce a pale animal with pale spots. In the translation of Dragesco-Joffé's notes, it mentions that, around mountain chains where black rocks prevail, the coats are more contrasting and have darker spots - exactly what one would expect in a habitat with more shade from the sun. It would be interesting to test whether desert cheetahs that grow up in captivity in Europe grow bigger and have black spots just like other cheetahs. A similar problem has occurred over the Baluchistan black bear *Selenarctos thibetanus gedrosianus*, the type specimen of which had brown fur, probably caused by fading in the sun. A captive animal at London Zoo had black fur!"

NOTE: An English translation of the sections on the four Saharan cats is available on disk or as hard copy. Please send me a disk, if required.

Peter Jackson

The Jaguar

by Rafael Hoogesteijn and Edgardo Mondolfi
Armitore Editores S.A., Caracas Venezuela
(in Spanish, English, French, German and Italian)
ISBN 980-216-103-9

It is not many years ago that I was asked to write an article about the jaguar. It was not easy. Little scientific information was available about the big cat of the Americas. Anecdotal reports by hunters and travellers in jaguar regions, many highly suspect, were almost all that was available. Since then the situation has radically changed. Field research by George Schaller, Peter Crawshaw, Howard Quigley, Alan Rabinowitz, Marcello Aranda and Louise Emmons have transformed the situation.

Now comes "The Jaguar" by Rafael Hoogesteijn, a cattle vet involved with management of ranches in the llanos plains of Venezuela, and Edgardo Mondolfi, a distinguished academic and research scientist, undoubtedly Venezuela's leading experts on the jaguar. Their book could well be called "The Complete Book of the Jaguar". There is certainly no competitor for the title. While understandably basing their report on the jaguar in their home country, the authors range far and wide to draw together the best information possible from the previously named scientists, as well as many others. They draw too on the expertise of researchers on big cats in Africa and South Asia in order to compare big cat behaviour.

With lavish illustrations, which will lead the reader to under-rate the difficulty of seeing a wild jaguar, they cover its biology, habitats, distribution, taxonomy, behaviour, feeding ecology, reproduction and diseases. Those chapters set the scene for a review of the status of the jaguar today and the problems of conservation.

All the cats are predators, of course, and are opportunist in the prey they take. Inevitably, there is a clash with human interests when they attack livestock, leading to almost universal persecution. The big cats, especially, incur human ire, while at the same time being admired and respected. The experience of Hoogesteijn and Mondolfi leads them to declare that jaguar losses are less than livestock owners complain. Many cattle are lost to disease and to theft, but the jaguar gets the blame. Much could be done to reduce predation to what should be an acceptable level. Good manage-