

Conservation in Benin— with the help of the European Economic Community

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In 1985 the European Economic Community embarked on a major nature conservation project in Benin, the first time that the EEC has become involved in this way in a national park in Africa. The project is centred on Pendjari National Park in the north of the country, whose lands are a vital barrier against the spread of the desert from the north. The park is being reorganized, poaching is being controlled and the future looks brighter, not only for Pendjari but for the neighbouring lands also.

Benin, a small, elongated country covering only about 120,000 sq km, lies with its neighbour, Togo, in the Dahomey Gap. This remarkable ecological barrier totally separates the two great African forest blocks: that of the West, which is heavily degraded in Ivory Coast and Liberia, and that of the East, where, except in Nigeria, the situation is better, the forest extending through Cameroon, Gabon, Congo and Zaire. The Dahomey Gap has limited the dispersion of a whole series of forest animals, for example the duikers *Cephalophus jentinki* and *C. zebra*, which occur only west of the divide. At the coast there is no rain forest, despite the latitude, because dry winds blow southwards down the long corridor between the forest zones. The country is still spared from desertification, even in the extreme north, although the threat is there in the long term. Rainfall is low, and there is a transition from the humid coastal savannah in the south to the dry Sahel in the extreme north.

The south of the country is densely populated, but as one moves northwards into the immense spaces of the Sahelian savannah, people become fewer and the extreme north is almost empty.

Almost no large wild animals survive in the south. The cane rat *Thryonomys swinderianus* is a useful protein source and in the near future it may be bred for consumption. There are interesting

mangrove swamps, but these are limited in extent, and the manatee *Trichechus senegalensis* seems extinct there now.

In the centre of the country, the Guinean savannah of the Kouffé Mountains is thinly peopled. The fauna can be surprising in the gallery forests—elephants, colobus monkeys and various antelopes survive there, but the chimpanzee seems to be extinct.

It is the north of the country that is most interesting to the zoologist. Immense tracts of savannah, practically empty of humans, enjoy protected status: Pendjari National Park (2750 sq km), W National Park, Benin (5020 sq km), Pendjari Hunting Reserve (1800 sq km), Atakora Hunting Reserve (1220 sq km), and Djona Hunting Reserve (1880 sq km). This block of land, 12,670 sq km (Figure 1) in total is extended to the north by the Arly National Park (Burkina Faso), W National Park (Niger and Burkina Faso) and their associated areas. The protected zones of these three countries constitute a unique entity in West Africa, with a total area of almost 23,000 sq km.

The Benin sector of the W National Park consists of a vast belt of savannah cut by several water-courses. Animal population densities appear relatively low, the antelopes concentrating in the valleys during the dry season. The park is, above all, known as a refuge for elephants. This immense park, practically devoid of facilities, is

Oryx Vol 23 No 1, January 1989



The roan antelope is common in Pendjari National Park (Jacques Verschuren).

threatened by the influx of wandering cattle driven by herders from Mali, Burkina Faso, Niger and other places. Tourism is very restricted and concentrated on the Koudou Falls at the entrance to the park.

The Pendjari National Park was officially created in 1961 (Figure 2). Its management is actually the responsibility of the *Ministère du Développement Rural et de l'Action Cooperative*. Unfortunately, this has, until very recently, had limited resources at its disposal, and as a result poaching was only partly controlled. Even though there was no accurate census between 1974 and 1985, observers reported that the larger animals decreased noticeably during that time. A census was carried out in 1987 and the results are given in Table 1.

The main attraction of Pendjari is the roan antelope and sightings are certain, which is rare in other national parks. The Pendjari is the best in

Conservation in Benin

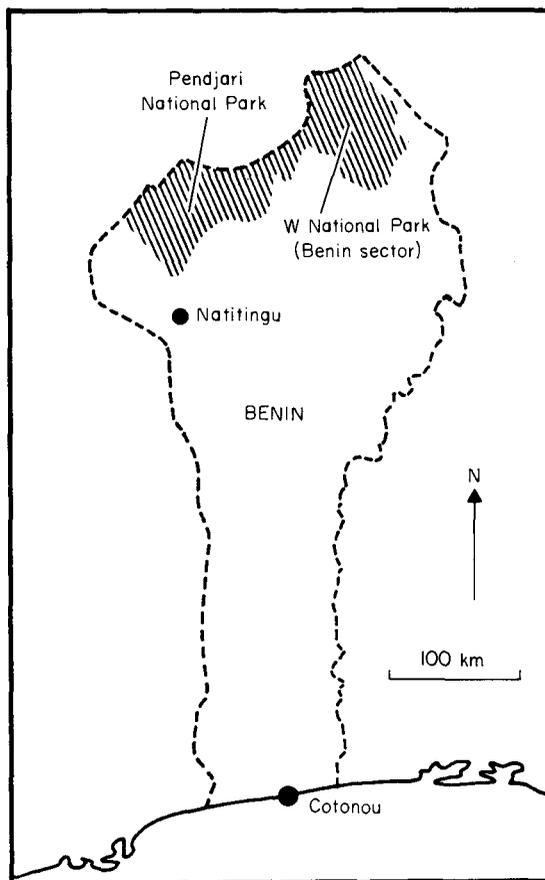


Figure 1. General map of Benin, with the protected area in the north.

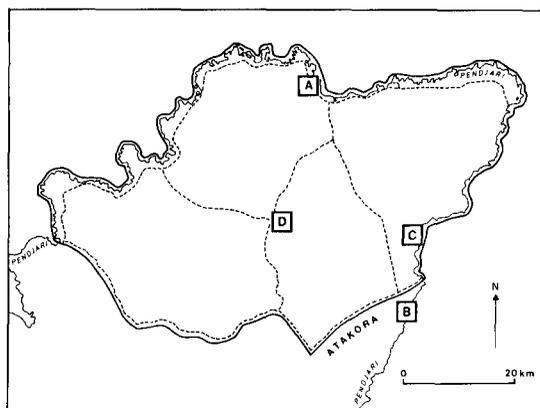


Figure 2. Detailed map of Pendjari National Park: A, Pendjari camp research and tourist-headquarters. B, Upper Pendjari river 'headwater' to be included in the park. C, Bondjagou forest—the most northerly semi-rain forest in West Africa. D, Bali pool.



The Pendjari River marks the border of Burkina Faso (on the left) and Benin (on the right) (*Jacques Verschuren*).

Africa for these antelopes, with herds of more than 40 individuals and a high proportion of immature animals. Baboons *Papio cynocephalus* and monitor lizards are numerous, but hyena are quite rare. Crocodiles have become very uncommon as a result of poaching. Cheetah, *Acinonyx jubatus*, appear to have increased since 1985.

The most important sector of the park is, without doubt, the long meandering valley of the Pendjari, which, seen from the air, looks like a green snake in the savannah. The river banks are a typical 'dry season holding area', where the animals take refuge at the height of the dry season or when the harmattan blows. The valley is fringed by superb stands of *Borassus* palms. Up-river it is surrounded by one of the most northern peri-Guinean forests, the forest of Bondjagou. The Pendjari River is the most northerly permanent watercourse in Africa at this longitude, with the exception of the Niger, where local drying out becomes more pronounced every year. This barrier at the south of the desert is vitally important ecologically.

Tourism is well organized in Pendjari, which is at present open from December to April/May. Several hundred kilometres of track cross the park; there is a hotel at one of the entrances (Porga) and a good tented camp near the old Pendjari Hotel. On the other hand, the town of Natitingou, the capital of Atacora Province and with excellent facilities, is very near.

Table 1. Census results in Pendjari National Park, March 1987

English name	Scientific name	Total no. individuals
Elephant	<i>Loxodonta africana</i>	850
Buffalo	<i>Syncerus caffer</i>	2000
Roan antelope	<i>Hippotragus equinus</i>	1250
Hartebeest	<i>Alcelaphus buselaphus</i>	1300
Topi	<i>Damaliscus lunatus</i>	170
Kob	<i>Kobus kob</i>	c. 6000
Waterbuck	<i>Kobus ellipsiprymnus</i>	c. 700
Hippopotamus	<i>Hippopotamus amphibius</i>	280*
Warthog	<i>Phacochoerus aethiopicus</i>	c. 3000

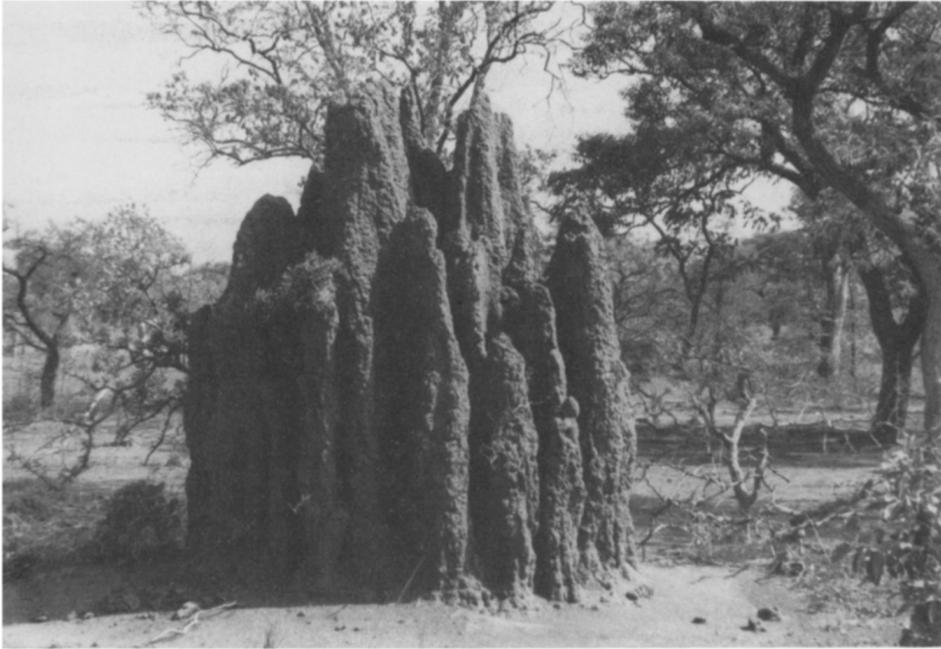
*in Benin and Burkina Faso.

Oryx Vol 23 No 1, January 1989



Above: Waterbuck are found everywhere along the Pendjari River.
Below: Superb stands of *Borassus* palms fringe the river (Jacques Verschuren).





A termite mound, typical of the savannah (Jacques Verschuren).

The avifauna of the park is very varied and abundant and could be important in attracting tourists in the future. It is envisaged that a ringing station will be established. Tourists would also be able to see most of the antelope species present, although not in the enormous concentrations typical of the East African savannah.

Priorities in Pendjari are the suppression of poaching and the inclusion in the park of 200–250 sq km of the Atacora Massif, with the main sources and headwaters of the river, which must be protected.

A new and important element entered conservation in Benin in 1985, when the European Economic Community decided to finance a major protection project, based principally on Pendjari National Park. Its objectives are to protect these stretches of north Benin as a barrier against the risk of desertification, protect the wildlife and reorganize the park. A Belgian consultancy (AGRER) has been charged by the EEC and the Benin Government with responsibility for the technical assistance aspects of the park's rehabilitation. Staff levels have been increased and several foreign specialists have been brought in to work with park personnel. Substantial resources have been employed to reorganize management and put the infrastructure—

bridges, tracks, guards camps—in order. Scientific research has also been recommended. Draconian measures have been taken to limit poaching. One can therefore hope that this international project will enable a potentially remarkable reserve to be saved and that the project will be extended into the surrounding region, certainly in Benin and perhaps in neighbouring countries.

This is an important 'first'. The international organizations (FAO, UNESCO, WWF–IUCN, UNEP), bilateral aid agencies and non-governmental agencies (such as Frankfurt Zoological Society) have often acted effectively in certain African countries, but this is the first time that the EEC, already strongly concerned with European environmental problems, has decided to take direct action at the national park level to help save African ecosystems. This action is strongly appreciated in Benin, which is the first country to receive such support. One can hope that the EEC actions in this domain will also take place elsewhere in the African continent.

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Oryx Vol 23 No 1, January 1989