

# ***BUSHMEN AND HERPETOFAUNA: NOTES ON AMPHIBIANS AND REPTILES TRADED IN BUSH-MEAT MARKETS OF LOCAL PEOPLE IN THE NIGER DELTA (PORT HARCOURT, RIVERS STATE, NIGERIA)***

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## **Summary**

*Observations are reported on the amphibians and reptiles traded in local bush-meat markets amongst the tribes of the Niger delta, south-eastern Nigeria. In all, eighteen species were recorded, of which four were amphibians and fourteen were reptiles. Some species were traded for their skins or for animistic cult purposes, but in most cases they were traded as food. In fact, wildlife represents the main source of protein for the support of rapid local population growth in fragile and poor environments. Some of the traded species are vulnerable or even threatened, not only at the local level of the Niger delta region but also at a more general, continental level. Among these vulnerable taxa may be noted Conraua goliath, Crocodylus niloticus, C. cataphractus and Osteolaemus tetraspis.*

## **Résumé**

*Les bushmen et l'herpétofaune : note sur les amphibiens et les reptiles vendus dans les marchés bushmen, dans le delta du Niger (Port Harcourt, Rivers State, Nigéria).*

*Nous avons étudié les amphibiens et les reptiles vendus dans les marchés des populations locales (Delta du Niger, Nigéria du Sud-Est). Globalement, nous avons relevé 18 espèces différentes : 4 d'amphibiens et 14 de reptiles. Quelques espèces sont vendues pour la peau ou pour les rites animistes, mais la plupart sont vendues comme nourriture. En effet, les animaux sauvages représentent la source protéique principale pour les populations locales, surtout pour les gens qui habitent dans la forêt et dans les petits villages. Quelques espèces vendues sont vulnérables ou même menacées, pas seulement au niveau du Delta du Niger, mais dans toute l'Afrique. Parmi ces espèces vulnérables ou menacées nous signalons Conraua goliath, Crocodylus niloticus, C. cataphractus et Osteolaemus tetraspis.*

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## **Key Words**

*Herpetofauna, Ethnology, Bush-meat markets, Niger Delta, Rivers State, Nigeria.*

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## **Mots clés**

*Herpétofaune, Ethnologie, Marchés de gibier, Delta du Niger, Rivers State, Nigéria.*

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## The people

The Niger Delta territory is inhabited by a complex mosaic of ethnic groups. Among the most important ones, we can cite Igbos, Calabari, Ijaw, Akwa-Ibom, Ikwerres, Ogoni, Orobu...

The richest ethnic group in terms of economic conditions is that of the Igbo people, which is not autochthonous of this area, but migrated in the Rivers State for business reasons. Igbo people is a semi-banthou ethnic group widespread in the Port Harcourt area, accounting complexively for about 18 % of the whole human population of Nigeria (Marengo and Riganti, 1995). Igbo tribes inhabit a wide territory in southern Nigeria, including the provinces of Benin, Ogoja, Onitscha, Owerri, Warri, and Port Harcourt. They are organized in 33 subtribes. The Igbo live in most cases in independent towns or villages under a paramount chief and a chief for each quarter. The extended family groups live together in the same quarter. Marriage is prohibited between members of the same extended family and between near relations. Marriage by exchange, although much rarer than in the recent past, is still relatively common. Descent is patrilinear, but women have wide liberty and rights. Age classes and secret societies flourish. Igbo economy is essentially based on commercial activities, oil palm plantations and, especially in the Port Harcourt area, oil-related activities. Inhabitants

of major urban centres are mostly Christian, whereas Animism is still widespread in the smaller villages, especially among aged unscholarized persons. Igbos were terribly damaged by the "Biafra War" (1967-1968), when, due to the terrible famine following the fights, they suffered enormous losses in terms of human lives.

Main proteic sources of Igbo and other local tribes living in forested zones are given by wildlife, that is normally exchanged in local bush markets. Therefore, the examination of these markets is of remarkable interest under the ethnozoologist point of view.

## Results and discussion

The complete list of amphibians and reptiles observed by us in local markets is presented in Table 1. Although mammals and birds were the most frequently traded vertebrates in local markets (Ajayi, 1971; Martin, 1983; Ojonungwa, 1986; Akani *et al.*, unpublished observations), amphibians and reptiles were occasionally found, especially in small villages along the main rivers (Sambreiro, Orashi, and Niger itself).

On the whole, we recorded 18 different species, 4 were amphibians and 14 were reptiles.

Frogs were traded frequently, but only specimens of *Xenopus*, *Dicroglossus*, *Ptychadena*, and *Conraua* were observed by us in local markets. In general, frogs were

traded for food reasons (edible frogs represent very good meals for Igbos as well as for western European human populations), but a single Goliath frog *Conraua goliath* was traded for animistic religion reasons. This giant frog is very rare in the Niger Delta area and is extremely threatened in the rest of its central African range (IUCN, 1996) and thus its eventual trading should be carefully monitored by Environmental Institutions in Port Harcourt.

Traded reptiles were essentially snakes, used for food, skin, or animistic religion reasons. It is interesting to note that vipers of the genus *Bitis* are frequently traded (our observations and personal communication of interviewed persons, see fig. 2), despite their distribution is scattered within the Niger Delta territory, and their populations are usually sparse. Conversely, olive grass snakes *Psammodphis phillipsi* were not traded at all, despite they are abundant in suburbia and cultivated areas. Rock pythons *Python sebae* were used for skin-industry practices. However, in the Port

Harcourt area the pythons are more rarely traded than in other regions of Africa, especially in the eastern countries (i.e. Kenya and Tanzania). Other species occasionally traded were *Python regius* (fig. 3) and *Calabaria rheinardti*, which are relatively common within the studied region (cf. Butler and Reid 1990).

Crocodiles were occasionally traded for food and skin reasons (fig. 4). This is important, as crocodiles are increasingly rarer year-by-year in the Niger Delta, and are protected by law at either Federal or State level.

It is interesting to note that the various herp species traded varied remarkably depending on the various village districts and, to be more precise, on the different types of animistic cults. For instance, some villages consider pythons as dgyu-dgyu, and thus impede their hunting. The same is true for cobras (*Naja melanoleuca* and *Naja nigricollis*), Nile monitors (*Varanus niloticus ornatus*), and terrestrial turtles (*Kinixys belliana*).

**Table 1 :** List of amphibians and reptiles observed in several bush-meat markets within the provinces of Port Harcourt and Aba (Aba State). The locality of observation is also presented.

| SPECIES                         | N° OBS. ANIMALS    | LOCALITY            | SCOPE OF TRADING  |
|---------------------------------|--------------------|---------------------|-------------------|
| <i>Crocodylus niloticus</i>     | 1 female           | Rumuehuo            | Food - Skin       |
| <i>Osteolaemus tetraspis</i>    | 1 female           | Odukiri             | Pet               |
| <i>Osteolaemus tetraspis</i>    | 2 males            | Elem Sangama        | Food              |
| <i>Kinixys belliana</i>         | 1 sex undetermined | Aba                 | Food              |
| <i>Kinixys belliana</i>         | 1 sex undetermined | Otari               | Dgyu-dgyu animism |
| <i>Pelusios castaneus</i>       | 11 adults          | Kreigeni            | Pet - Food        |
| <i>Pelusios castaneus</i>       | 5 adults           | Otari               | Pet - Food        |
| <i>Pelusios castaneus</i>       | 3 adults           | Bonny Island        | Food              |
| <i>Varanus niloticus</i>        | 1 male             | Aba                 | Food - skin       |
| <i>Varanus niloticus</i>        | 2 males            | Port Harcourt       | Food - skin       |
| <i>Varanus niloticus</i>        | 1 male             | Ahoadia             | Food - skin       |
| <i>Varanus niloticus</i>        | 1 male             | Elem Sangama        | Food - skin       |
| <i>Bitis gabonica</i>           | 1 male             | Azumini River Cross | Food - skin       |
| <i>Bitis gabonica</i>           | 1 (head only)      | Aba                 | Dgyu-dgyu animism |
| <i>Bitis nasicornis</i>         | 1 female           | Port Harcourt       | Food              |
| <i>Dendroaspis jamesoni</i>     | 1 male             | Udegu (Ahoadia)     | Food              |
| <i>Naja melanoleuca</i>         | 1 male             | Rumuji              | Food              |
| <i>Boiga blandingii</i>         | 1 male             | Aba                 | Food              |
| <i>Boiga blandingii</i>         | 1 male             | Rumueme             | Food              |
| <i>Python sebae</i>             | 1                  | Udegu (Ahoadia)     | Skin              |
| <i>Python sebae</i>             | 3 males            | Port Harcourt       | Skin              |
| <i>Python regius</i>            | 1 female           | Sagbama             | Skin              |
| <i>Python regius</i>            | 2 sex undetermined | Ahoadia             | Skin              |
| <i>Python regius</i>            | 1 sex undetermined | Bukuma              | Skin              |
| <i>Xenopus tropicalis</i>       | Many specimens     | Rumuji              | Food              |
| <i>Conraua goliath</i>          | 1 female           | Aba                 | Dgyu-dgyu animism |
| <i>Ptychadena</i> sp.           | Many specimens     | Aba                 | Food              |
| <i>Ptychadena</i> sp.           | Many specimens     | Port Harcourt       | Food              |
| <i>Ptychadena</i> sp.           | Many specimens     | Rumuji              | Food              |
| <i>Ptychadena</i> sp.           | 3 females          | Rumuji              | Food              |
| <i>Dicroglossus occipitalis</i> | 5 males, 4 females | Elem Sangama        | Food              |

In general we conclude that trading for food reasons is an important phenomenon to be monitored accurately in local villages, whereas the decrement of the animistic practices in connection with the better life conditions of the human population seems to be in favour of the conservation of several species, such as Goliath frogs and various snakes. In any case, some of the traded species are vulnerable or even threatened, not only at the local level of the Niger Delta region, but also at the general continental level. Among these vulnerable taxa, we should notice *Conraua goliath*, *Crocodylus niloticus*, *C. cataphractus*, and *Osteolaemus tetraspis*.

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