NATURAL HISTORY NOTES

Natural History Notes features shorter articles documenting original observations of amphibians and reptiles mostly in the field. Articles should be concise and may consist of as little as two or three paragraphs, although ideally will be between 500 and 700 words. Preferred contributions should represent an observation made of a free-living animal with little human intrusion, and describe a specific aspect of natural history. Information based on a captive observation should be declared as such in the text and the precise geographical origin of the specimen stated. With few exceptions, an individual 'Note' should concern only one species, and authors are requested to choose a keyword or short phrase which best describes the nature of their observation (e.g. Diet, Reproduction). The use of photographs is encouraged, but should replace words rather than embellish them. Contributions are accepted

BITIS GABONICA (Gaboon Adder): UNUSUAL MORTALITY. The Gaboon Adder is most often associated with rainforest habitat but it is now known that it is well represented in wetlands, grassland, and cultivated areas throughout various parts of it's range (e.g. see Phelps, 1989; Luiselli & Akani, 2003; and Mallow et al., 2003).

Apart from Central and West Africa the Gaboon Adder has a fragmented range in eastern and southern Africa and north-eastern KwaZulu-Natal represents it's most southerly distribution.

Since 1983 I have made an occasional study of the Gaboon Adder in this part of it's range, which includes the St Lucia Wetland complex and the Dukuduku Forest. The Zulu translation of Dukuduku means 'place of hiding' which was on the premise that they represent a previously unreported observation, and may be edited prior to acceptance. Standard format for this section is as follows:

SCIENTIFIC NAME (Common Name): KEYWORD. Text (there are no constraints on how information is presented but the date, time, and locality – with full map coordinates if possible – must be included, as should precise details on the nature of the observation with some discussion of its significance, and references to pertinent literature). If the information relates to a preserved specimen, its catalogue number and place of deposition should also be given. REFERENCES. Then leave a line space and close with name and address details in full.

rather apt because although the Gaboon Adder is not uncommon in the area it was difficult to find. This was partly overcome by the use of refugia in the form of plywood boards measuring a metre square. This method, including opportunistic sightings and night road searches, resulted in recording 112 individuals over a two year period. It is of interest to note that at least on two sites within the area, a large open forest clearing and a cultivated area, the Gaboon Adder was sympatric with the other large member of the genus, the Puff Adder, *Bitis arietans*.

One site was a large expanse of sand forest which extended northward from the St Lucia Estuary. Although much of the forest was virtually impenetrable there were numerous large clearings which yielded good results. Gaboon Adders were also found in the dune system just above the shoreline and here they were easier to find due to the sparse vegetation, although they were never more than a short distance away from thick cover.

In September 1984 I received a message from a colleague stating that a number of Gaboon Adders had been found dead along the shoreline. The area was a section of coastline where the dunes banked down steeply at an acute



angle away from the forest. During a walk along the bottom of the dunes I found the remains of four Gaboon Adders over a distance of about a kilometre. All were adults and in various states of decomposition, two were just remains of skeletons, and the remaining two were just a matter of weeks old. Talking to local people later that day it was confirmed that this appeared to be a regular occurrence

The Gaboon Adder is the largest viper in the world and can weigh as much as eight kilograms. Although snakes are amongst the most agile creatures it seemed that the very bulk of an adult Gaboon Adder meant that it could not negotiate the loose steep sand to gain the safety of cover, and therefore would be exposed to the full force of the African sun and certain death. It is not certain but the snakes must have slid down the dunes by accident as it is difficult to imagine that they would visit such an exposed situation voluntarily.

During May 1984 I actually found a live adult at the bottom of a dune, an adult female measuring 120 cm. Luckily it was late afternoon and the snake had not been there that long as its 'slide' marks could still be seen clearly on the face of the dune. Large members of this genus are well known for their caterpillar mode of locomotion, and just out of curiosity I placed the snake at the bottom of the dune facing upwards. Sure enough the Gaboon Adder started to 'caterpillar it's way up the dune, Adult female Gaboon Adder, *Bitis gabonica*, on frontal dunes. KwaZulu-Natal, South Africa. Photograph by author.

reaching just about halfway, about two metres, and then slid ungracefully to the bottom.

This represents a rather unusual natural hazard, and although the Gaboon Adder is a protected species in South Africa, there appears little can be done to alleviate the problem.

I last visited the area during October 2003 and found two more corpses at the bottom of the dunes, but the good news is that I also observed a good number of live ones in the dunes and the forest beyond.

REFERENCES

- Luiselli, L. & Akani, G. C. (2003). Diet of sympatric Gaboon Vipers (*Bitis gabonica*) and Nosehorned Vipers (*Bitis nasicornis*) in southern Nigeria. *African J. Herpetol.* 52(2), 101-106.
- Phelps, T. (1989). *Poisonous Snakes*. London: Blandford Press.
- Mallow, D., Ludwig, D. & Nilson, G. (2003). True Vipers: Natural History and Toxinology of Old World Vipers. Malabar, Florida: Krieger Publishing Company.

TONY PHELPS. Reptile Research & Imagery, Wooloomooloo, 2 Grosvenor Road, Swanage, Dorset. BH19 2DD.