

# Notes on the Status of Black Rhino in the Ngorongoro Crater

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The first written account of Black Rhinoceros in the Ngorongoro Crater, dates back to 1892 when German explorer Oscar Baumann visited this part of Northern Tanzania. Baumann is credited as the first European to actually see the Crater (Organ & Fosbrooke, 1963) but he only spent about ten days in the present day Conservation Area. On 19 March 1892, Baumann and his party "*shot one wildebeest and three rhinos*" in the vicinity of the Ngoitoktok Springs; Baumann was apparently not a hunter, but shot the rhino to provide meat for the Maasai who were at the time starving due to the decimation of their cattle to rinderpest. On 21 March, Baumann and his group "*halted in a pleasant acacia forest near the lake. The plain around us was again populated by numerous rhinoceros amongst which there were magnificent snow-white specimens, one of which I shot. In the afternoon, Mzimba went hunting for the first time in his life and shot a rhinoceros. Several others in my expedition . . . also shot these beasts*" (Organ & Fosbrooke, 1963). So it was, that a non-hunter accounted for at least seven Black Rhino in a few days, and this gives us an idea of how common the species might have been at the turn of the century. The beginning of the end had arrived for the rhinos, however, as immigrant hunters brought weapons to the region; Count Teleki had killed 99 Black Rhino in 1886 alone, on a journey from Mount Kilimanjaro to Lake Rudolf (Turkana) and 'a group of Indian Army officers, Capt. Willoghby and two others, hunting around the eastern slopes of Kilimanjaro, killed 66 rhino in four months' (Organ & Fosbrooke, 1963).

Indiscriminate hunting of rhino no doubt continued until the 1960s, when concerns began to be expressed for the survival of wildlife. In 1964 a Canadian biologist named John Goddard came to Tanzania to undertake a survey of Black Rhinoceros in three study areas, namely Ngorongoro Crater, Olduvai and Tsavo. Using individual recognition features (especially the distinctive pattern of snout wrinkles), Goddard estimated 108 rhino on the floor of the Crater and a further 70 in the vicinity of Olduvai. Goddard also calculated average home ranges at about 16km<sup>2</sup> (Goddard, 1967), and observed that the resident rhino appeared to recognise and know each other, but that 'strangers coming into the Crater to obtain salt, were subjected to attacks (Moss, 1976). The population appeared to be high and healthy - notwithstanding the impact of the early hunters, but the 1970s saw a massive increase in commercial poaching as the market for rhino horn exploded. By 1982, the Crater population was 'no more than 25 and continued poaching, perhaps of no more than one or two rhinos a year, reduced this to as few as 10 or 12 rhinos by 1990' (Heyworth, 1995). By March 1995, there were 15 Black Rhino surviving in the Crater, but the population is slowly recovering and today there are about 20 individuals in the greater Ngorongoro Conservation Area.

The successful conservation of Black Rhinos in this large wilderness is due largely to the strong presence of NCAA rangers (several rhino have been fitted with transmitters in their horns, so that the population can be monitored by satellite) and the co-operation and goodwill of the local Maasai

people. In 1998, two Black Rhino from the Addo National Park in South Africa were introduced into the Crater, to add genetic diversity to the small population.

### Distribution in the Crater

Black Rhino are most active at night, and since we are unable to drive in the Crater after dark, their movements are not fully known to us. Rhinos spend most of their day resting, when they are then often obscured by tall grass. Nevertheless, the bowl of the Crater offers excellent and fairly predictable rhino viewing. During the wet season (April to May) the rhino avoid areas which become waterlogged, and are most commonly encountered around the Sopa Road and the Ngoitoktok Springs. They also favour the area between the Munge River and Lake Makat. In the dry season (June to March) the rhinos are most frequently seen in the vicinity of the Lerai Forest and the southern shore of Lake Makat - an area we refer to as 'Shamba la Faru' ('Rhino Farm').

### Observations during 1999

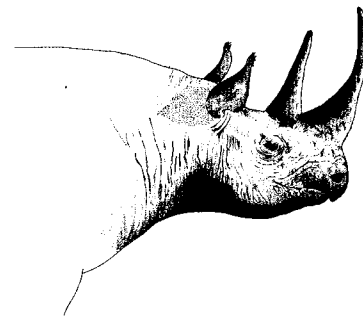
Of the four male Black Rhino resident in the Crater, two are dominant bulls and occupy home ranges; these two individuals were observed fighting in the months of March, May and August (they are easily told apart as one has the tip of its tail missing, and the other has distinctive tufts of hair on its ear). The other two bulls are not mature. In June, seven Black Rhino were seen together at 'Shamba la Faru', as females and young males of the same family. A group of the same size (possibly the same individuals) was seen at this same locality in October. A pair of Black Rhino were seen mating at 11h00 on 15/2/99 near the Ngoitoktok Marsh; the male stayed on top of the female for about ten minutes, in two sessions. On 5 September, a female was seen with a tiny calf, estimated at two weeks of age. The baby was suckling while the mother browsed. No interaction with Lion or Spotted Hyena were noted in 1999, although both are potential predators of the calves.

It has proved difficult to determine the precise diet of the rhinos as they often feed in long grass, where their food plants (herbs and saplings) are obscured from view. A detailed study in the 1960s showed that various species of legume (e.g. *Indigofera*) make up the bulk of the rhino's diet on the Crater floor (Goddard, 1968). Species confirmed to be eaten are *Solanum incanum*, *Justicia betonica* and *Datura stramonium*; these three species are colonisers of disturbed soils and *Datura* is an exotic weed from Central America.

Mud bathing takes place at the hottest time of the day, either at the lake shore or in small mud pools. The rhinos which have been bathing at the saline lake often go white in colour, while those that bath elsewhere become dark brown or grey; this has led some guests to mistakenly surmise that the Crater contains both Black and White Rhino!

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