## Kaziranga completes a hundred years

**Dr. Anwaruddin Choudhury** 

The author has described Kaziranga game sanctuary as a show piece of Assam and the North East India. It is, in fact, the pride of India as a whole. Its centenary celebrations were held recently. As the author has pointed out, Kaziranga was declared as reserve forest as early as 1908 during British days. Independent India upgraded it to game sanctuary and later to National Park in 1974.

One horned rhino is a most endangered animal. Its scientific name is "Rhinoceros unicornis". "More than 60 percent of the world population of this species are concentrated in this park, signifying its global importance", as the author says. In 1908 only a few dozens of this animal were found. Their number has now increased to 1600. This is a mater of great credit to those engaged in the upkeep of this National Park.

A senior civil servant of Assam and noted conservationist, Dr. Anwaruddin Choudhary has given an absorbing account of how the sanctuary has fared during the past 100 years.

The sanctuary is, no doubt, maintained with care and devotion. A visit to Kaziranga is most enjoyable experience. The facilities provided are of high order. Many visitors from the country and abroad visit the sanctuary every year.

— Editor

Kaziranga, the show piece of Assam as well as North-East India, has completed a hundred years of its existence as an area of conservation. It was in 1905, that this area of tall grass was notified as a proposed reserved forest with the ultimate intention of preserving its dwindling rhino population. Today, it is like a living laboratory, unique in India, where in a single sweep of the eye, one could see hundreds of living creatures at any time of the year. A visit to the famous Kaziranga National park, a World Heritage Site, is always memorable.

In 1908, Kaziranga was declared as a reserved forest. Lady Curzon is believed to have played a major role in getting this wilderness declared a protected area when she failed to see a single rhino save for some footprints. In 1916, Kaziranga was upgraded to a game sanctuary and in 1950, to a wildlife sanctuary. In 1974, it was declared as the first National Park of Assam. The park covers an area of 472.5 sq km which includes the original notified area of 428.7 sq km and the 1st addition of 43.8 sq km which was included in 1996. The northern boundary of the park is marked by the Brahmaputra river while the hills of Karbi plateau lies towards south.



Kaziranga is the largest unspoilt grassland area left in the North-East India. The tall grass and reeds, also called the elephant-grass or the wet savanna grassland, grow up to a height of over five metres during rainy season. Overall, two-thirds or about 65% of Kaziranga are grassland. Of the remaining, about 7-8% are waterbodies such as beels (ox-bow lakes and depressions) and channels while the rest is woodland.

The animal that has made Kaziranga famous and which is also most endangered by poaching is the Indian one-horned rhino *Rhinoceros unicornis*. More than 60% of the world population of this species is concentrated in this park signifying its global importance. It is believed that in 1908, only a few dozen rhinos were left in Kaziranga. The first census by using direct-count method from elephant-back was carried out in 1966 when 366 animals were counted. Today more than 1600 are found. Kaziranga is among the best examples of the success of conservation movement in India. The poaching is done for its horn, which is of course not a true horn but compressed hair and other fibrous keratins. The highest death toll was in 1992 when 49 animals perished. Sharp rise in price of rhino-horn, increase in demand in East and South-east Asian markets and also in Yemen and easy availability of fire-arms were the main reasons behind this spurt in poaching. Because of large monetary involvement, the poachers are taking risk of their lives. Every year a few are killed during encounters with Forest personnel, but still the pressure is on. The maximum number of poachers died in a single year was 12 in 1994.

Kaziranga has large elephant *Elephas maximus* population, which is mainly seasonal descending to the plains of the park from the Karbi plateau at the beginning of winter, ascending again at the advent of the floods. However, due to large-scale habitat destruction in Karbi Anglong many pachyderms have started to remain in the park which is, of course, not a good sign. The elephant population recorded during census increased from 349 in 1966 to more than a thousand in 1994 and also now it is a thousand plus. For the rare and endangered Asiatic wild water buffalo *Bubalus arnee*, Kaziranga is among its most important habitat in the world. Their population increased from 471 in 1966 to around 1500 now. Tigers and diseases such as anthrax, rinderpest and foot-and-

mouth are the main enemies of this large bovine. There was a general belief that many of the buffaloes in Kaziranga are contaminated due to hybridization with domestic animals, but I found it to be incorrect. This is because domestic males are usually not kept in the fringe areas as these are killed by wild bulls. Even if a domestic bull strays in, it has no chance to compete with wild bulls for access to females. In fact, it is some wild bulls, which regularly come out of the park and mates with the domestic females. Therefore, the gene flow is mostly one-way and is unlikely to affect any substantial wild population. There were instances of some domestic buffaloes going feral in the fringe areas, but these had little chance of long-term survival against a large Tiger-population. The wild herds also keep to themselves and do not mix up with the grazing domestic buffaloes. In recent years we hardly hear of any domestic buffalo being allowed to go feral by its owner as it is too valuable to him.



Tourists in Kazinanga Montd Heritage Site. Kazinanga is the wost visited tourist destination in NE India.

Kaziranga is also among the most important habitat for Tiger, the majestic big cat, as well, with more than 80 of them. At a time when alarm call has been sounded throughout its range due to declining population, this is undoubtedly a sign of great hope. Large prey base, absence of poaching for bone, diversion of poachers' attention towards the Rhino and adequate protection are the main reasons for such a healthy status of tiger population.

For the endangered Swamp deer or Barasinghas, Kaziranga now has the only viable population in North-Eastern India with about 450 individuals. This species is in need of urgent conservation attention. Hog deer, Sambar and Barking deer or Muntjak are the other deer species of the park. The Wild pig, Gaur or India bison (small isolated population), Rhesus macaque, Capped langur, Hoolock gibbon (India's only ape), Slow loris, Leopard or panther, Jungle cat, Leopard cat, Fishing cat, Jackal, Hog-badger,

Common otter, Smooth Indian otter, Chinese pangolin, Malayan giant squirrel, Chinese porcupine and the Gangetic dolphin are other noteworthy mammals.

Among reptiles, the Gharial is on the verge of extinction with only an occasional sight record. A few exceptionally large specimens of Water monitors still survive in Kaziranga. I observed such a huge creature basking in the afternoon sun in Baguri Range area. It was at least 3m long with a robust body somewhat resembling that of a Komodo dragon. Eleven species of turtles have so far been recorded in Kaziranga including rarer ones such as Kachuga sylhetensis.



Kaziranga is a birders' delight with more than 480 species of avifauna. Winter is special for the park as large number of migratory waterfowls throng the lakes and marshes, locally called beels all over the area and many altitudinal migrants also descend from the hills. Some notable beels with excellent birdwatching opportunities are Sohola, Koladuar, Mihi, Borbeel (Arimora), Dunga and Borbeel (Baguri). Among the migratory waterfowls, there are the Rosy pelican, Black stork, Lesser White-fronted goose, Greylag and Bareheaded geese, Ruddy and Common shelducks, Spotbill and Mallard, Gadwall and Wigeon, Red-crested and Ferruginous pochards, and innumerable smaller waders. Some notable resident and locally migratory waterfowls are the Spottedbilled pelican and the Black-necked, Greater adjutant, White-necked and the Lesser adjutant storks. I had the opportunity to observe the rare Great white-bellied heron on a few occasions. One of the largest pelecanries of the Spottedbilled pelican is in Kaziranga. For raptors, Kaziranga has sizeable breeding populations of the Pallas's and Grey-headed fish eagles. The Greater spotted eagle, King vulture and the Osprey are some other noteworthy species. An early morning drive in Kaziranga always ensures sighting of large number of Swamp partridges or Francolins, Red junglefowls and Kaleej pheasants. For the globally endangered Swamp partridge, Kaziranga has one of the largest concentrations. The Bengal florican, the rarest bustard of the world, is encountered in the grasslands. Two

species of Hornbills, the Giant or the Great pied and the Indian pied are also not uncommon. In Bagser, the Wreathed hornbill is also found.

Since bulk of Kaziranga is in the floodplains of the Brahmaputra river, monsoon flood is an annual phenomenon. From May-June to September-October, bulk of the area reels under water causing much hardship to the animals. In the past, the animals used to move to the rolling country of the south between the floodplains and the Karbi plateau. Gradually, the rolling country came under tea plantation and settlement forcing the animals to climb the high plateau. During floods, many animals either get injured or even crushed by speeding buses and trucks while trying to cross the highway. There are instances of Rhinos, Hog deer, and even Tiger being crushed or injured by such vehicular traffic.

The Forest department has built a number of earthen platforms inside the park, which are a retreat for a large number of animals during the floods. The most devastating floods were in 1988 and 1998, when 48 and 39 rhinos respectively perished within a span of a few days. The Hog deer and Wild pig were also among the worst sufferers with a few thousand lost in just one year in 1988. However, floods are also a blessing in disguise as the beels are cleared of aquatic weeds such as the exotic Water hyacinth.

With the increase of population of most of the major species and also to provide safe corridor for movement of animals (especially Elephants) between Karbi plateau and the park, seven additions to the national park have been proposed. Of these, only one, i.e., the first, could be materialised so far. The sixth addition is the largest with 376 sq km of riverine stretches of the Brahmaputra river and was added in 1999. However, it is yet to be materialised fully due to court litigation. Creation of North Karbi Anglong Wildlife sanctuary in the year 2000, for which I had personally lobbied with the Karbi Anglong Autonomous Council, will help future conservation. The success came when Mr. Jotson Bey, the then CEM of the Council was convinced when I met him at Diphu in December 1998. However, unless the sanctuary is properly managed, its benefit to wildlife and the community living nearby will be a far cry.

Kaziranga is surrounded by 23 villages and at least four tea gardens with around 30,000 population towards south, east and South-west. Depredation by Wild elephants, Rhinos, Hog deer and Wild pigs in the form of crop raiding and by Tigers in the form of cattle-lifting are not uncommon. Since Kaziranga does not have a protective buffer zone, the man and animal are face to face right on the park boundary while majority of the villagers still have enough love for Kaziranga, a handful of them are poachers or their accomplices (provide shelter and act as local guide). However, some poor families are the worst sufferers because of depredation. Timely payment of compensation, which should be adequate, and a more active role by the crop protection squads where the villagers are also involved, seem to be the only solution.

A railway was proposed along the southern boundary of the park in mid-1980. The survey and mapping for the project were completed but due to opposition from environmentalists (I wrote three articles in leading media/journal), it was modified and corridors were provided under the line to allow animals. However, after further opposition, the project was finally shelved and thus Kaziranga could be saved from a grave danger. But we are to be watchful as some might try to reopen it again.

In the northern fringe, erosion by the Brahmaputra river has already destroyed a portion of the park land including some fine wildlife habitat, may be around 50 sq km. One after another problems surface in the fringe in the form of development; although the threat from the railway could be averted, the same could not be done in case of an oil refinery that is coming up at Numaligarh. Any accident in the refinery or willful discharge of

effluent will seriously affect Kaziranga especially during the floods when bulk of the park reels under water. The widening of NH 37 into a four-lane one is the next major threat that haunts the park. This could be diverted through north bank or through Doboka-Manja-Silonijan-Golaghat (also avoiding Nambor sanctuaries).

With poachers in constant pursuit of the Rhinoceros, the anti-poaching staff of Kaziranga are also alert round the clock. It is virtually like a continuous war between the Forest staff and the poachers. The input of anti-poaching infrastructure is much more in rhino-bearing areas such as Kaziranga than other protected areas. Kaziranga has about 110-120 (fluctuating) anti-poaching camps, which also include two floating camps on the Brahmaputra river. There are country-boats, motor-boats, departmental elephants, motor vehicles and motorcycles to help anti-poaching network. Some 800 personnel, including Forest Guards, Game Watchers, Home Guards and Forest Protection Force patrol the park. However, poachers are usually better armed and many of them use carbines and SLRs. The park is divided into four ranges, Kohora (Kaziranga or central), Baguri (western), Agoratoli (eastern) and Burhapahar for smooth administration.

Over the years poaching has come down to a great extent. From 49 in 1992, the number of poached rhinos have come down to 40 in 1993, 14 in 1994, 25 in 1995 and only one in 2004. This is undoubtedly an exception in a sea of disappointment and should serve as an inspiration for all other protected areas across India. The dedication shown by the field officials and their staff in defending Kaziranga, a World Heritage Site, often with acute resource crunch, is of the highest order. The support from different NGOs, especially the Rhino Foundation for Nature in NE India has greatly helped in boosting up the morale of the field staff.

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Kaziranga remains closed to the visitor from May to September. In case of late monsoon, the park may remain inaccessible in October also. However, during closed season also, a large number of wildlife can be seen from the National Highway and from the Mahi Miri Watch Tower. From Guwahati International Airport, the park is 217 km. Elephant-rides are available. There is a good network of motorable roads. A cruise on the Brahmaputra river is also exciting. Government accommodation and privately-owned hotels are available. Walking is not advisable in the park. The entry fees, including that of camera and vehicle, are reasonable. Best time: November to April. Visibility better from February to April due to burning of the grass.