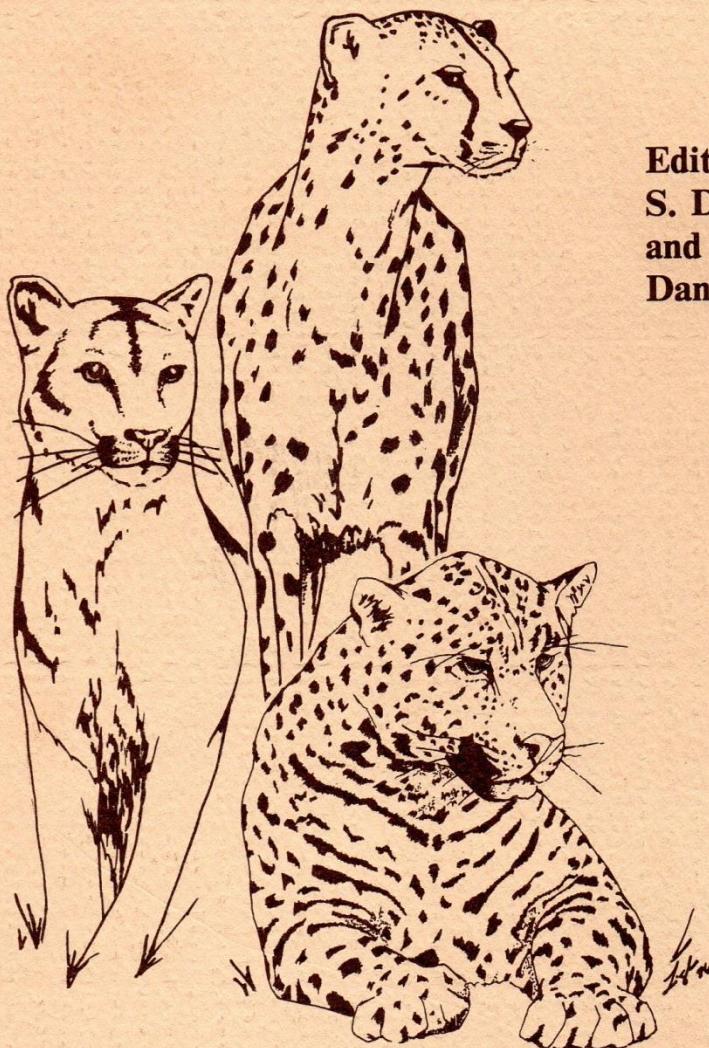


CATS OF THE WORLD:

Biology, Conservation, and Management



Edited by
S. Douglas Miller
and
Daniel D. Everett

THE STATUS AND DISTRIBUTION OF THE CATS IN BANGLADESH

MOHAMMAD ALI REZA KHAN, Department of Zoology, University of Dhaka, Dhaka-2,
Bangladesh¹

ABSTRACT:

Bangladesh is on the transition zone between the Indian and Indochinese subregions of the Orient. It has many varied habitats and 8 species of cats: leopard cat *Felis bengalensis*, jungle cat *F. chaus*, marbled cat *F. marmorata*, golden cat *F. temmincki*, fishing cat *F. viverrina*, clouded leopard *Neofelis nebulosa*, leopard/panther *Panthera pardus* and tiger *P. tigris*. Until the mid-1900s they were distributed over about half of the country. Now they are isolated into small pockets and very rarely occur outside of forests, which cover 8 per cent of the country. All species have become rare although jungle cat and fishing cat are still found in the thickets beyond the limits of the forests.

Key words: Bangladesh, cats, distribution.

INTRODUCTION

About a century ago all cats, except the forest-dwelling ones: clouded leopard, golden cat, and marbled cat, were evenly distributed over the entire country (Mitra 1957, Husain 1974). Even during the 1940's the cats had fairly wide distribution in the country. Indiscriminate hunting, poaching and large scale habitat destruction, including conversion of the forested areas into agricultural lands have virtually wiped out cats from most parts of Bangladesh. This paper highlights the past and present status and distribution of the cats that once existed in Bangladesh.

STUDY AREA

Bangladesh is a deltaic flood plain of the recent origin and has an area of about 143,996 km² between 20°34' to 26°38' North latitude and 88°01' to 92°40' East longitude. There are 3 types of forest: mangrove (Sunderbans), moist deciduous (Sal) and semi-evergreen/evergreen. These cover from 8-9 percent of the country. However the area of habitat suitable for wildlife is considerably less than this since the Forest Department statistics include both the natural and planted vegetation within the country's forests (Green 1978, Olivier 1979, Gittins 1980). It is well known that tea, coffee, and rubber plantations and other monocultures discourage wildlife. Green (1978), Gittins (1980) and Gittins and Akonda (1982) have said that natural forests, still available to the wildlife, may cover only 5000 km².

A variety of plant species including *Heritiera fomes*, *Excoecaria agallocha*, *Nypa*

¹ Present address: Curator, Al Ain Zoo & Aquarium, P.O. Box 1204 Al Ain, Abu Dhabi, U.A.E.

fruticans, *Phoenix paludosa*, *Hibiscus tiliaceus*, *Avicennia* spp., and *Sonneratia apetala* cover more than 80 per cent of the Sunderbans mangrove forest, located in the South-West corner of Bangladesh (Fig. 1). The Sal forest is dominated *Shorea robusta*, locally called "sal." Other major species include *Dillenia pentagyna*, *Adina cordifolia*, *Terminalia* spp., *Albizia* spp., *Lannea coromandelica*, *Trewia polycarpa* and *Streblus asper*. The Sal forest extends from the center of the country to the northern border in a rather scattered fashion. The semi-evergreen/evergreen forest is present along the eastern border, mostly in Chittagong, Chittagong Hill Tracts, Sylhet and the recently created Bandarban districts. These areas have slightly undulating hills, ranging in height from 100 to 1000 m above mean sea level. The evergreen forest consists mainly of deciduous species, including *Dipterocarpus* spp., *Artocarpus* spp., *Swintonia floribunda*, *Tetrameles nudiflora*, *Sterculia* spp., and *Hopea odorata*. They range in height from 30 to 50 m and form the canopy. The second story forms a closed canopy and is predominated by evergreen species: *Syzygium* spp., *Mesua ferrea*, *Quercus* spp., *Amoora* spp., *Burseara serrata*, *Calophyllum* spp., and *Palaquim* spp., and ranges in height from 15 to 30 m. The understory consists primarily of bamboos—*Melocanna bambusoides*, *Bambusa nutan*, *B. tulda*, *B. vulgaris*, *Teinostachyum griffithi*, *T. dullooa*, *Oxytenanthera auriculata* and *Dendrocalamus longispathus* and canes—*Daemonorops jenkinsianus*, *Calamus latifolius*, *C. guruba*, *C. tenuis* and *C. flagellum*.

The vegetation along the coastal belt includes *Sonneratia apetala*, *Avicennia* spp., *Acanthus ilicifolius*, *Pandanus odoratissimus*, *Caesalpinia* spp., *Agealitis rotundifolia*, *Oryza coarctata* and *Ipomoea pes-caprea*. At least 20 percent of about 68,000 villages of Bangladesh still support woodlots, village groves and bamboos. In the countryside the most prevalent species are *Mangifera idica*, *Artocarpus heterophyllus*, *Syzygium cumini*, *Diospyros peregrina*, *Psidium guajava*, *Tamarindus indica*, *Anthocephalus chinensis*, *Albizia* spp., *Bambusa* spp., *Musa* spp., *Barringtonia racemosa*, *Crataeva nurvala*, *Trewia polycarpa*, *Cassia* spp., *Phoenix sylvestris*, *Borassus flabellifer* and *Cocos nucifera*.

METHODS

The information in this paper is based largely on my own experiences of the last decade and information available from the District Gazetteers of pre- and post-1947. At that time India was partitioned into Pakistan and India, and Bangladesh was still a part of Pakistan. In addition some recent works have also been consulted (Mitra 1957, Husain 1974, 1981, Hendrichs 1975, Khan 1982 a, b). I interviewed over 50 elderly (50 to 75 years) and knowledgeable villagers to obtain information about the occurrence of cats in their areas. These villagers easily recognized the tiger as "striped species," leopard as "spotted," fishing cat as "baby tiger" and jungle cat as simply a species similar to the domesticated variety.

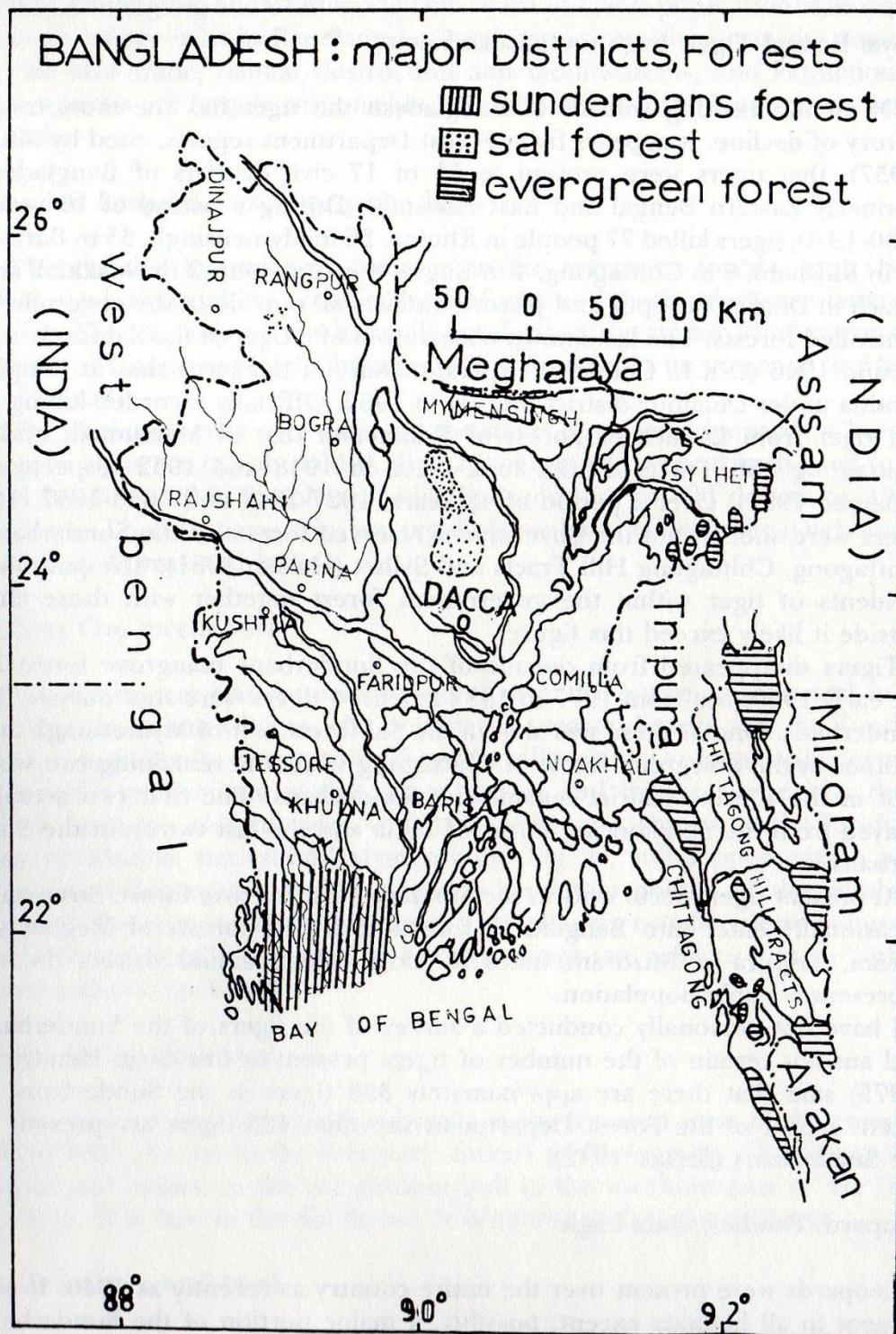


Fig. 1. Major districts and forest types in Bangladesh.

STATUS AND DISTRIBUTION

Royal Bengal Tiger, bagh (vernacular name)

Of all the existing wildlife of Bangladesh the tiger has the most tragic history of decline. It appears from Forest Department reports, cited by Mitra (1957), that tigers were present in 11 of 17 civil districts of Bangladesh (formerly Eastern Bengal and East Pakistan). During a period of 10 years, 1930-1940, tigers killed 77 people in Khulna, 36 in Mymensingh, 35 in Barisal, 18 in Rajshahi, 8 in Chittagong, 4 in Bogra, 3 in Dinajpur, 2 in Noakhali and 1 each in Dhaka, Faridpur and Jessore districts all outside of the government controlled forests. The last known observation of a tiger in the Sal forest was around 1946 (D.K.L. Choudhury, pers. comm.); a tiger was shot at Bangabandha under Dinajpur district (Fig. 1) in 1962. Officially recorded killing of last tiger from Lawachara Forest of Sylhet and that of Mainimukh under Chittagong Hill Tracts district took place in 1948 and 1952 respectively (Ahamed 1981). Over a period of 43 years, 1927-1941 and 1948-1957, 424 tigers were shot within the government reserved forests of the Sunderbans, Chittagong, Chittagong Hill Tracts and Sylhet (Husain 1981). The poaching incidents of tiger within the government forest together with those shot outside it likely exceed this figure.

Tigers disappeared from outside of the Sunderbans mangrove forest by the early 1960s but from 1977 to 1982 at least 4 tigers were shot outside the Sunderbans. One of these was shot in the Sal forest belt of Mymensingh and another in the evergreen forest of Chittagong while the remaining two were shot in the Khulna district outside the Sunderbans. The first two actually strayed from the neighboring forest of India and the last two from the Sunderbans.

At present tigers occur only in the Sunderbans mangrove forest. Stray ones occasionally enter into Bangladesh forests from the forests of Meghalaya, Assam, Tripura or Mizoram states in India. These casual visitors do not represent a stable population.

I have not personally conducted a survey of the tigers of the Sunderbans and am not certain of the number of tigers present at this time. Hendrichs (1975) said that there are approximately 350 tigers in the Sunderbans. A recent report of the Forest Department says that 425 tigers are present in the Sunderbans (Sarker 1982).

Leopard/Panther, chita bagh

Leopards were present over the entire country as recently as 1940. It was present in all habitats except, possibly, a major portion of the Sunderbans and the coastal forests. In the early 1970's leopards were seen and killed in the Sal forest (Fr E. Homrich, pers. comm.) and evergreen forests. It has become rare and is now totally absent in the Sunderbans and Sal forest. The

leopard is occasionally found in the tea gardens and evergreen forests of Sylhet, Chittagong and Chittagong Hill Tracts. A viable population of leopards may no longer exist in Bangladesh. Overhunting resulting from the demand of the skin trade, habitat destruction and modifications, and extinction of prey species are largely responsible for the decline of the leopards in Bangladesh.

Clouded Leopard, lamchita/gecho bagh

The clouded leopard was common in the evergreen forests until about 1960. It possibly did not occur in the Sal forest and the Sunderbans mangrove forest. This cat now occurs in small numbers in the undisturbed evergreen forests of Chittagong and Chittagong Hill Tracts and its presence in Sylhet is doubtful.

The skin trade may over estimate the status of clouded leopards. Clouded leopard skins are openly sold in the Chittagong market and each used to be sold for 10 to 20 U.S. dollars, which had gone up to 100 dollars by 1983. However, I believe these skins are regularly replenished from the neighboring forests of Burma and India.

Fishing Cat, mecho biral

The fishing cat was historically found over the entire country and in all habitats, including villages, city boundaries, coastal forests and the Sunderbans. It is gradually disappearing from the villages due to large scale destruction and modifications of the village groves and thickets, especially those along wetlands. Countrysides with tree cover and shrubs, as in Faridpur, Jessore, Khulna, Barisal and Mymensingh (Fig. 1), still support viable populations of fishing cat. It is a common predatory animal of the southern district's forest types and plantations. The villagers usually consider this cat as the "baby tiger" because of its body markings and refer to it as an "infant cattle and poultry lifter."

Leopard Cat, chita biral

The leopard cats occurred historically in the forested areas of the country. I have seen this cat in the evergreen forests of Chittagong, Chittagong Hill Tracts and Sylhet; in the tea gardens and in the northern part of the Sunderbans. It is rare in the Sal forest. It is absent in the coastal forest.

Golden Cat, sonali biral

Recently I have procured a skin of a freshly killed golden cat from the Chittagong Hill Tracts. It is the first documented record of the occurrence of the golden cat in Bangladesh. I believe the specimen was shot from a

sungrass (*Imperata cylindrica*) covered area of the unclassified state forests bordering the evergreen forest. Mitra (1957) was the first to propose the presence of the golden cat in hilly terrain of Chittagong but no sightings were recorded. It may be present in the evergreen forests and sungrass areas of Chittagong, Chittagong Hill Tracts and Sylhet because of the similarity of habitats.

Marbled Cat, chita biral

Husain (1974) believed that the marbled cat was present in Bangladesh, but there are no collections on record. The evergreen forests of Chittagong, Chittagong Hill Tracts and Sylhet provide potential habitat area for this species.

Jungle Cat, ban biral

The jungle cat is the most widely distributed cat in Bangladesh and is found in the scrub jungle, scattered forests, bamboo brakes, mass graveyards in the villages and in all forests throughout the country. It may occasionally enter into city limits. A specimen was shot in a busy residential area of Dhaka city in 1978. Four specimens were captured for Dhaka Zoo from the villages of Faridpur and JESSORE in 1983. The jungle cat is not abundant in the villages though a viable population survives in the forests. This is due to the continuing loss of woodland groves in the villages.

MANAGEMENT RECOMMENDATIONS

The populations of all species of cats are declining and a few are on the brink of extinction. This decline is most likely due to a combination of overhunting, poaching, poisoning and habitat destruction by conversion to arable lands and human habitations. Systematic denudation of the forests at the current rate will further aggravate the situation, especially in the evergreen forests.

All species of cats were legally protected by the Bangladesh Wildlife Preservation Act of 1973. All 8 species of cats belong to the 3rd schedule of the Act which means that none of them can be legally hunted, killed or captured. But the skins of most species are still being sold openly. Recently, government officials have seized dozens of illegal cat skins and fewer skins are being sold due to increased vigilance of law enforcement authorities.

To conserve the cats, the government must change its present forestry practices. Instead of clear felling operations in the evergreen forests, selective logging, as practiced in the Sunderbans, must be introduced. This change may save the natural parts of the evergreen forests from systematic destruction. Deforested areas should not be planted with a single commercially important tree species, since monocultures do not provide the necessary forest diversity. A variety of species should be planted and the undergrowth of such

plantations which provides food and shelter for wildlife should be encouraged. If clear felling can not be avoided, then corridors of natural forest should be left to allow easy movement between neighboring populations. This will help ensure unhampered gene flow among the fragmented populations.

The skin trade and trading of live cats must be stopped and strictest measures must be adopted against poaching.

LITERATURE CITED

AHAMED, Y. S. 1981. With the wild animals of Bengal. Published the author, Dhaka, Bangladesh 84pp.

GITTINS, S. P. 1980. A survey of the primates of Bangladesh. Report to Fauna and Flora Preservation Society of London and Condor Conservation Trust, England. 64pp.

_____, and A. W. AKONDA. 1982. What survives in Bangladesh? *Oryx* 17:275-281.

GREEN, K. M. 1978. Primates of Bangladesh: a preliminary survey of population and habitat. *Biol. Conserv.* 13:141-160.

HENDRICH, H. 1975. The status of the tiger (*Panthera tigris* Linne 1758) in the Sunderbans mangrove forest (Bay of Bengal). *Saugetierk. Mitt.* 23:161-199.

HUSAIN, K. Z. 1974. An introduction to the wildlife of Bangladesh. F. Ahamed, Dhaka, Bangladesh. 81pp.

_____. 1981. Developmental activities and their impact on the terrestrial fauna of Bangladesh. *Proc. Zool. Soc. Bangladesh.* 1:1-7.

KHAN, M. A. R. 1982a. On the distribution of the mammalian fauna of Bangladesh. *Proc. 2nd Bangladesh Nat. For. Conf.* 560-575.

_____. 1982b. Wildlife of Bangladesh—a checklist. Dhaka University, Bangladesh. 173pp.

MITRA, S. N. 1957. Banglar shikar prani (in Bengali). Govt. of West Bengal, India. 139pp.

OLIVER, R. C. D. 1979. Wildlife conservation and management in Bangladesh. Report to F.A.O., Rome. 148pp.

SARKER, N. M. 1982. Activities of wildlife circle. *Proc. 2nd Bangladesh Nat. For. Conf.* 522-529.