

Reynolds, E.A.P., 1954. Burma rhino. *The Burmese Forester*, 4 (2): 104-108.

In this article I would draw particular attention to the rhinoceros which is rapidly becoming extinct. As far back as 1850, or thereabouts, the late Rev. F. Mason recorded that "The common single-horned rhinoceros is very abundant. Though often seen in the uninhabited banks of large rivers, such as the Tenasserim, they are also fond of ranging the mountains." It is not so long since this was written; and yet now, after a lapse of just a century, this species of rhino is so scarce that one could almost count the surviving individuals on one's fingers. It has become, without doubt, one of the rarest large mammals in the world. Legislation was therefore necessary to preserve it together with a few other animals as 'completely protected'; which may only be hunted under a special license. Such licenses are in fact seldom given, except for scientific purposes. The wild Birds and Animals Protection Act covers this contingency. Rhinoceros of both sexes are completely protected throughout the year, and may not be hunted except under Special License; nevertheless, it would appear that it is not illegal for persons to be in possession of rhinoceros blood for medicinal purposes, and this affords an unfortunate loophole in the Law. There is a wide-spread belief in the aphrodisiac properties of rhinoceros horn, and the tonic properties of rhinoceros blood; and this belief has proved the undoing of rhinoceros in Burma. Unlicensed firearms in the hands of poachers have accelerated the decrease of the species.

The rhinoceros belongs to the class Mammalia, order Ungulata, family Rhinocerotidae. Its foot has three toes only, shaped like a shamrock. It possesses one or two horns behind the nose, and has a variable dentition, and a complex molar system. Some rhinoceros have thick coats (coat of mail), and some thin skins with folds. The hide varies in different species, some being tessellated and some tuberculed. The Sumatran rhinoceros found in the Shwe-U-Daung Game Sancturats, and in the Malay countries, is about the size of a good village buffalo, with rather a harsh black skin, covered with bristly hairs. This species of rhinoceros possesses two horns, the anterior horn is fairly long, and curves slightly backwards, while the posterior horn is generally short. The ears are less widely separated at the base than in other species, and are filled with black hair. The tail correspondingly longer, is tipped at the end. It is estimated that the gestation period is about 30 weeks - it may be more.

There were possibly more than three or four species of rhinoceros in Burma, of which *Rhinoceros sondaicus*, the lesser one-horned variety, known locally as Kyan-hsin, is one; and *Dicerorhinus (Rhinoceros) sumatrensis* the two-horned variety is another. The *Rhinoceros indicus*, the great Indian rhinoceros, as well as *R. sondaicus* is known to have inhabited the northern portion of the Arakan and Tenasserim areas. The *Rhinoceros indicus* is however mainly confined to India and Pakistan. There is reason to believe that the ear-fringed two-horned rhinoceros (*Rhinoceros crossii*) was also found at one time in the hills of Arakan.

Rhinoceros are known to be aggressive and charge on provocation to the extent of 'treeing' the huntsman and patiently awaiting his descent. Some appear to have a distaste for jungle fire, which they charge and trample. They are, however, like other wild animals, very afraid

of man, and will, on the slightest danger, retreat into impenetrable haunts. They love frequent mud baths, rolling themselves for hours with lazy contentment in mud wallows as would a common village buffalo. These mud wallows are found on banks of streams in low terrain, and even on mountains heights above 5000 feet. Rhinoceros are apt sometimes to wander out of the sanctuaries, and they fall an easy prey to poachers. They are curiously fastidious about their latrine arrangements; and usually dump their droppings in one place. It is by these 'dumps' and by a string of their favourite wallows that would-be poachers track them. In the Mong Mit Division, there is a popular belief that in the month of wazo (July), all rhinoceros in the Shwe-u-Daung congregate and meet at one particular 'aing' called the 'Wazo Aing' but this belief has not been tested out as yet. It is believed that there are fire-eating, or fire-attacking rhinoceros. Bad omens are associated with their killing; female rhinoceros are fond of tossing large branches or small logs which come in their way and sometimes this injures the young calf at heel, which accounts for the slow rate of increase.

The rhinoceros must once have had a considerable range in Burma, but due to poaching, they have now taken sanctuary in fairly inaccessible terrain far away from civilization. The Forest Department has, as far as possible located their haunts, and fenced them in so to speak, by forming game sanctuaries out of their natural habitat.

Briefly, the following are the sanctuaries.

The Shwe-u-Daung Game Sanctuary lies in East Katha and Mong Divisions (Mong Mit State) and is 81 square miles in extent, of which 46 sq. miles lies in the Shan State. It was previously constituted for the protection of *Rhinoceros sumatrensis* (double horned variety), elephant, bion, saing, sambur, serow, barking deer, pig, tiger, leopard and bear. The terrain rises from about 500 feet to over 6200 feet above sea level. The main object of the sanctuary is to form a retreat and breeding place for *Rhinoceros sumatrensis*, and at the same time afford protection to the greatest number of indigenous fauna and flora. A secondary object is to make the sanctuary reasonably accessible to those desiring natural history. During my hot weather tour of the sanctuary in 1948, I estimated that there were probably 4 to 5 individuals of this rare species living in the area. A legend that the mountain 'Nats' (spirits), 3 in number do not countenance shooting or poaching in the sanctuary is probably one of the chief deterrent factors in keeping these animals alive, though, during the Japanese occupation, poaching by unscrupulous persons was common.

The Pidaung Game Sanctuary near Myitkyina, 279 square miles in extent. It is not a rhinoceros preserve, but the rhinoceros are known to migrate there from the Uyu Drainage. Game in this sanctuary suffered heavily during the last war.

The Kahilu Sanctuary in Thaton Division, 62 square miles in extent, was originally instituted for the protection of *Rhinoceros sondaicus* (one horned variety). Doubt exists whether this species still thrives. The pre-war official figure was in the neighbourhood of six specimens. They are fond of eating chilli crops and do some damage to taungyas, when they roam out of range.

The Mulayit Game Sanctuary is in the Thauungya Division. Rhinoceros are known to have wandered there from time to time.

In addition to the above locations, Rhinoceros have been seen during post-war years in the Arakan Division in the neighbourhood of Paletwa and Myohaung, in the Central Pegu Yomas, and in the Bhamo Division. There are indications that rhinoceros also wander between the Upper Chindwin and West Katha Divisions, they are known to exist in the Uyu Drainage. It is also possible that rhinoceros still exist in decreasing numbers in parts of the Shan plateau, especially in the Salween drainage. A rough and reasonable estimate of the possible grand total of rhinoceros existing in Burma is:

Shwe U Daung	5
Arakan	6
Pegu Yomas	5
Kahilu	3
Uyu drainage	5
Tenasserim	5
Other areas	7
Total	36

[protection should be afforded, and education increased.]

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The RHINOCEROS must once have had a considerable range in BURMA, but, due to poaching, they have now taken sanctuary in fairly inaccessible terrain far away from civilisation. The Forest Department has, as far as possible located their haunts, and fenced them in so to speak, by forming Game Sanctuaries out of their natural habitat.

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(a) The Shwe-u-daung Game Sanctuary lies in East Katha and Mong Mit Divisions (Mong Mit State), and is 81 square miles in extent, of which 46 square miles lies in the Shan State. It was previously constituted for the protection of the following species :- RHINOCEROS SUMATRENSIS (double-horned variety), elephant, bison, saing, sambur, serow, barking-deer, pig, tiger, leopard and bear. The terrain rises from about 500 feet to over 6,200 feet above sea level. The main object of this Sanctuary, however, is to form a retreat and breeding place for RHINOCEROS SUMATRENSIS, and at the same time to afford protection to the greatest number of indigenous fauna and flora which can be healthily maintained in it, due account being taken of the balance of nature. A secondary object is to make the Sanctuary reasonably accessible to those desiring to study natural history. During my hot weather tour of the Sanctuary in 1948, I estimated that there were probably 4 to 5 individuals of this rare species living in the area. A legend that the mountain "Nats" (spirits), 3 in number do not countenance shooting or poaching in the Sanctuary is probably one of the chief deterrent factors in keeping these animals alive, though, during the Japanese occupation, poaching by unscrupulous persons was common.

(b) The Pidaung Game Sanctuary near Myitkyina— 279 square miles in extent. It is not a RHINOCEROS preserve, but RHINOCEROS are known to migrate there from the Uyu drainage. Game in this Sanctuary suffered heavily during the last war.

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The deplorably low figure of 36 RHINOCEROS surviving in Burma may even be too optimistic. Certainly, it should afford grounds for serious consideration. The very thought of a mammal so rare and so precious being lost to posterity is just calamitous, and should weigh heavily on our conscience. There is really no reason why the species should not multiply, if left undisturbed in its natural haunts. Equally rare animals, as the *Mythun* and the Tapir of Burma, also need full immunity from poachers. Sympathy is due also to other almost equally precious animals, such as the noble elephant, the bison, saing, serow, goral, hog-deer and *Thamin* (Brow-Antlered Deer) which urgently need protection from the poachers' gun. It seems to be a law of nature that, once any species is reduced below a certain figure, it will no longer increase, but gradually becomes extinct.

The appointment of Game Warden, an Officer of bold vision and outlook, to spearhead game policies, and with a full-time staff, is urgently needed to keep a constant eye on the wild life in the country. Forest Officers, even if they take an interest in the fauna and flora, are unable to devote their time to this important branch. They already have a heavy pressure of forest work. I do believe that wild life could also produce handsome dividends if treated on a proper scientific basis, *i.e.* in terms of sustained yield. Thus, to view it from a fresh angle, an animal census of the wild life in any forest division is an important part of the foresters' job—the wild life produces fur, feather and flesh. In the case of fur, I see no reason why royalty in addition to the licence fees should not be charged on all animals shot, as these form a product of the forest. Well-preserved game parks will certainly draw foreign tourists, not to mention the local public, who are taking an increasing interest in the Zoological and Botanical gardens of Rangoon and Maymyo.

Sound propaganda is needed to educate the masses to a more realistic view with regard to game preservation. Stricter control over the issue of fire-arms is required. As a Buddhist country which abhors taking life, I consider that Burma should lead the world in the preservation of game. It is true that here and there in the vicinity of Pagodas and *Phongyi-Kyaungs*, fish are preserved. That is certainly a highly commendable form of charity. The unsporting hunter with a gun, who does not look to the future yield, but indulges in wholesale slaughter of jungle fowls to quench his insatiable thirst for extermination, does not consider the future yield. He is ruthless after elephant for meat and ivory, without thinking about the enormous damage he does to the economy of the country, as elephants are indispensable for the timber industry.

The formation of the Wild Life Protection Society, or a Natural History Society, would be of direct benefit to the fauna and flora of the country. The "Ludu" (people) should treat the fauna as their own property. They should treat all Game Sanctuaries as natural zoological gardens, in which the animals roam undisturbed. Such natural parks are in existence in Canada, United States of America, Russia, Switzerland and South Africa.

I do believe it is not too late even now to modernize our country in the matter of game preservation based on a biological nucleus, scientific research, and the strict maintenance of sanctuaries, both for fauna and flora. If the necessary precautions are taken, I do believe that there would be a good chance to preserve and increase our dwindling wild life, especially the RHINOCEROS. If, however, rigid control is not undertaken, then I am afraid our rare animals will soon be exterminated and lost to posterity.