

HTAMANTHI WILDLIFE SANCTUARY: LAST FOOTHOLD OF RHINOS IN MYANMAR

by U Thein Lwin

Of the three species of Asian rhinos -- two-horned Sumatran rhino (*Dicerorhinus sumatrensis*), one-horned Javan rhino (*Rhinoceros sondaicus*) and Indian rhino (*Rhinoceros unicornis*) -- the Sumatran rhino was the predominant species inhabiting Myanmar. Recognizing the conservation value and the threatened status of the rhino, it was promulgated as a completely protected animal under the Wildlife Protection Act, 1936.

The origin of the Sumatran rhino goes back to about 40 million years ago, and this species has the longest evolutionary history of rhinos. During the tertiary period, a number of rhino species related to the Sumatran rhino that existed in Central and Western European forests migrated to Southeast Asia. At present, it is estimated that there are between 700-1000 Sumatran rhinos in the Asian countries of Myanmar, the Malay Peninsula, Borneo, Bangladesh, and Sumatra.

Unprecedented indiscriminate killing of rhinos for medicinal uses of the horn and skin, and the fragmentation of habitats are serious threats to the Sumatran rhinos, despite its once wide distribution. The natural habitats of Sumatran rhinos extended from Borneo, Sumatra, through Myanmar to Bengal and Assam. The shrinkage of forests, aggravated by the unscrupulous killing for a lucrative trade, have caused the decline of the rhino population. Due to the divergence of the ecology of Sumatran rhinos, it ranges from lowland forests to high altitude rain forests of 6,000 feet, which it inhabits in sporadic small populations. Large, extensive conservation areas are crucial to help ensure the survival of Sumatran rhinos. Being

smaller and lighter in size than Javan rhinos, the Sumatran rhino is able to inhabit higher elevations as well as lowlands with new secondary forests.

Status of Rhinos in Myanmar

From the distant past up until about 40 years ago, the Naga Hills, Kachin State, Northern Sagaing Division, Northern Shan State and Tanintharyi Division were inhabited by Sumatran rhinos. For a long time the conservation program in Pidaung Wildlife Sanctuary in Kachin State, Shwe-U-Daung Wildlife Sanctuary and Htamanthi Wildlife Sanctuary retained large undisturbed habitats that had been designated as rhino refuge areas to protect this threatened species. In 1959, a rhino survey mission comprising Mr. Oliver Milton and Mr. Richard D. Estes of the Wildlife Conservation Society, New York, and U Mg Galay had reassessed the status of Sumatran rhinos through trekking and sightings in vast areas of the Upper Chindwin River Basin (which was later proposed as the Htamanthi Wildlife Sanctuary) and the Saramati Mountain ranges. According to their findings, the Sumatran rhinos were assumed to be extinct.

In 1991, the situation of the Sumatran rhino was reported by the Forest Department personnel stationed at Hkamti and Homalin Townships. The report indicated that two adults and one calf were frequently sighted by the local hunters and rattan/bamboo collectors near Yebawmi Village between the waterhead of the Uru River and Indawgyi Lake on full moon and waxing days. There was further evidence of the surviving rhinos by the sighting of newly

printed rhino tracks. For further verification and assessment of the rhino situation with wildlife inventory techniques, the Wildlife Conservation Society was contacted. Between 23 February and 23 March 1994, Dr. Alan Rabinowitz and Dr. George Schaller, accompanied by U Uga and U Thein Aung of the Wildlife Conservation and Sanctuary Division of the Forest Department, investigated the possibility of the presence of Sumatran rhinos and the relative abundance of other big mammals at Htamanthi Wildlife Sanctuary.

No rhinos were observed during their mission; however, a total of 32 records of rhino sightings between the years 1971 and 1993 were gathered through questionnaires given to local hunters, rattan/bamboo collectors and Forest Department staff. The mission reported that a viable population of rhinos had existed until the early 1980s. Subject to poaching for the lucrative trade and to habitat destruction, it is now believed to be on the verge of extinction. According to local reports, perhaps 2-3 rhinos may still be in the northeast corner of Htamanthi Wildlife Sanctuary.

Htamanthi Wildlife Sanctuary

Htamanthi Protected Areas, situated between the Ura and Chindwin Rivers at Northern Sagaing Division, was designated as a Wildlife Sanctuary in 1974 to protect the large mammals in general and Sumatran rhinos in particular. The sanctuary has an area of 830 square miles, the largest protected area in Myanmar, and straddles Hkamti and Homalin Townships.

The geophysical features extend from the lowlands to the Tin-Moe-Nwe Mountain Range, rising up to 1,763 feet. Being annexed with appendages of Khakaborazi Mountain and the Naga Hills, Htamanthi Wildlife Sanctuary is traversed by tempestuous streams and valleys. The presence of a diverse array of species and ecosystems at Htamanthi marks it as an important site for biodiversity conservation in Myanmar. The intact predominant tropical evergreen and semi-evergreen forests of

Htamanthi harbor much of the flora and fauna of Myanmar in general and large mammals and medicinal plants in particular. The presence of a viable population of mammal species such as elephants, tigers, gaurs and deer in Htamanthi Wildlife Sanctuary make it likely to be the last foothold of wildlife in Myanmar. The unique naturalness and grandeur of the sanctuary provides potential sites of major attractions with lush forests and abundant wildlife that will attract nature lovers and eco-tourists. The unspoilt natural forests of Htamanthi, hosting a diverse array of flora and fauna, are unparalleled among the other protected areas in Myanmar. The moderate climate in summer will also make it a popular holiday resort, offering a chance for camping and hiking.

Forest Types and Plant Composition

Htamanthi Wildlife Sanctuary is predominantly covered with lush evergreen and semi-evergreen forests associated with bamboos, climbers, epiphytes, rattans and medicinal plants. Epiphytic plants are in abundance and include dicots, monocots, ferns, fungi, lichens, algae and bryophytes. The herbaceous ground flora is generally dense, diverse and includes creepers, vines and herbs. Deciduous forests of teak and Ingyin (*Shorea siamensis*) are found at the southeast part of the sanctuary. The untouched high evergreen forest of Upper Chindwin will be a future potential timber resource.

Among the 44 recorded woody species, some of the commercially important species are *Dipterocarpus alatus*, *Dipterocarpus gracilis*, *Dicarspermum fruticasum*, *Pinus kesiya*, *Flacourtia cataphracta*, *Morus laevigata*, *Terminalia chebula*, *Acrocarpus fraxnifolius*, *Gmelina arborea*, etc. The diverse array of medical plants (132 species), ferns, mushrooms, shrubs, herbs and rare orchids signify the Htamanthi Wildlife Sanctuary as a unique biounit. As well as being of value for biodiversity conservation, Htamanthi could become an important source of medicines and other forest products.

Evergreen trees host large numbers of epiphytes, including ferns and orchids. The ground vegetation includes *Acacia cocinna*, *A. pinnata*, *Bauhinia polycarpa*, *Spatholobus listeri*, *Butea parviflora*, *Mansonia gargei*, *Carum carvi*, *Crotalaria tetragona*, *Smilax prolifera*, *Pericampylus glaucus* and *Piper attenuatum*.

Bamboo and Rattan

Some commercially important bamboo and rattan include *Dendrocalamus longispathus*, *D. giganteus*, *Oxytenanthera nigrociliata*, *Cephalostachyum pergracile*, *Thyrosostachys oliveri*, *Bambusa longispiculata*, *Calamus guruba*, *C. floribundus*, and *Clinogyne dichotoma*.

Fauna

Htamanthi Wildlife Sanctuary contains an abundance of mammals, reptiles, butterflies, birds and microorganisms and will be a biological reservoir and field site for the study of biological species, some of which have not been identified yet, and some endemic species.

The presence of a diverse flora and fauna of scientific and educational value will constitute a natural laboratory and a site for recreation and education.

Conservation Issues

The remaining Sumatran rhinos in Htamanthi are unlikely to survive if the destruction of habitats and unscrupulous hunting is not prevented. The experiences of India, Indonesia and Nepal indicate that effective protection from poaching and habitat restoration can result in an increase of the rhino population. The large mammals such as elephants, tigers

and gaurs, which are encountering substantial human activities such as rattan cutting and poaching, will meet a similar plight to that of the rhino if proper protected area management and wildlife protection actions are not taken immediately.

More importantly, public awareness about wildlife conservation education is a prerequisite to gaining the support of the local community that lives nearby. To help protect the sanctuary, the needs of the local community must be addressed to provide socio-economic assistance and benefits to promote their livelihood. The credence in the medicinal value of rhino horn, blood, skin, and hoof will persist among people in the future and lead to indiscriminate killing for trade. Thus, punitive action must be imposed on professional hunters and traders to save the threatened species on the verge of extinction in Htamanthi Wildlife Sanctuary.

Recently, sightings of White-winged wood ducks (assumed to be extinct in Myanmar) were reported from wetlands close to Htamanthi Wildlife Sanctuary, prompting calls for an action plan to protect and conserve this threatened bird. Effective action by the Forest Department, with the collaboration and participation of the local community and authorities, can help protect the large mammal species in general and the rhino in particular. Htamanthi Wildlife Sanctuary, the last stronghold of biodiversity in Myanmar, is a nationally and internationally important genetic resource and deserves affirmative protective measures and support from the people.

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