

# Some Wild Animal Trade at the Environs of Shwesettaw Wildlife Sanctuary during Pagoda Festival

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**Abstract:-** The study of wildlife trade was made on around protected areas, the festival place in Shwesettaw Wildlife Sanctuary, Myanmar. The study period was lasted from December 2017 to April 2018. A total of twenty nine wild animals were found during the period of Shwesettaw Pagoda festival. Among them, Mammals was represented by sixteen individuals including one Primates, six Carnivoa, one Proboscidea and five Artiodactyla, two Rodentia and one Largomorpha were observed. Aves revealed one species of Peafowl, and Hornbill, five species of Parakeets, two species of Owl and one species of Hawk-eagle. In Reptilians, Burmese Star Tortoise and two pythons were observed. Wild animal species were sold as traditional medicine, food and pet in the festival period. Mammalian species were traded as the most common species in the use of traditional medicine and food. Avian species were sold as pet. Parts of wild animal including skulls, skins, scales, horns, antlers, molars, tasks, skeletons, penis and meat of mammalian species were sold in the markets of study area. In the category of the current IUCN Red List, studied species are one Critically-endangered, four Endangered, five Vulnerable, four Near Threatened and 15 were Least Concern.

**Keywords:-** Wild Animals, Trade, Mammalian Species, Birds, Reptiles.

## I. INTRODUCTION

The demand for wildlife has increased and the scale and extent of wildlife trade may have enlarged. As the world's population grows, improving living standards, and globalization have led to a rise in demand for wildlife. In the absence of strong regulatory protected programs, these demands will be destroying the nature [1].

The challenge of international illegal trade in wildlife is extremely harmful for people and biodiversity and it has been linked to other illegal markets and fear networks. Illegal wildlife trade at all stages, source, intermediary, and destination are often difficult, ineffective, and not systematic and there is a persistent lack of obligation and responsibility [2].

Myanmar, the largest country in South East Asia, presents a great variety of different habitats and ecosystems supporting a rich biodiversity. With about half (48%) of mainland covered by forests, about 250 mammal species, more than 1,000 birds, 370 reptiles and 7,000 plants are recorded in Myanmar, including 39 species of mammals, 45 of birds, 21 of reptiles and 38 of plants which are globally threatened, more species could be added since new discoveries continue to be made every year [3].

Although Myanmar has wildlife conservation and protected area management, the trade in Myanmar wildlife has not stopped. Moreover, wild animals and their parts are sold for local needs and international markets. Thus; there is a need to acquire basic information on the status of wild animals of conservation concern.

➤ *The objectives of this study were*

- to study the current situation of wildlife trade in the study areas
- to investigate the local and commercial use of wildlife
- to assess the degree and level of threats to species traded according to wildlife production laws.

## II. MATERIALS AND METHODS

The study of wildlife trade was made on around protected areas, the festival place Shwesettaw Wildlife Sanctuary. The study area lies on the northern edge of the central plains of Myanmar (Latitude 20° 3' - 20° 19' N, Longitude 94° 22' - 94° 42' E) and covering an area of 552.70 square kilometer. The study period was lasted from December 2017 to April 2018.

Some wild animals were found during the period of Shwesettaw Pagoda festival during each visit, photographs were taken the animals and animals parts displayed and interviewed the shopkeepers. Photographs that illustrated the typical morphology of the species were used to determine species. Live animals were identified according to [4]; [5]; [6]; and [7]. The recorded species were also listed with International Union for Conservation of Nature and Natural Resources [8].

### III. RESULTS

➤ *Wild species displayed at shops in Shwesettaw pagoda environ*

During the study, a total of twenty nine wild animals representing 20 families, 13 orders and three classes were observed. The Class Mammalia was represented by sixteen individuals including one Primates, six Carnivores, one Proboscidea, five Artiodactyla, two rodents and one LARGOMORPHA. Aves revealed five Parakeets, two species of Owl, one species of Peafowl, Hornbill and Eagle and one species of Tortoise and two Pythons represent the class Reptilia.

Among mammalia, one Primate was Rhesus Macaque (*Macaca mulatta*), six Carnivores were Sun Bear (*Helarctos malayanus*), Smooth Otter (*Lutrogale perspicillata*), Large Indian Civet (*Viverra zibetha*), Tiger (*Panthera tigris*), Leopard Cat (*Prionailurus bengalensis*), Jungle Cat (*Felis chaus*), one Proboscidea was Asian Elephant (*Elephas maximus*), five Artiodactyla were Wild Boars (*Sus scrofa*), Sambar (*Cervus unicolor*), Red Muntjac (*Muntiacus muntjak*), Red goral (*Naemorhedus bileyi*), Banteng (*Bos javanicus*), two Rodents were Porcupine (*Hystrix brachyuran*) and Squirrel (*Callosciurus erythraeus*) and one LARGOMORPH was Burmese Hare (*Lepus peguensis*). Among avian species, Green Peafowl (*Pavo muticus*), Great Hornbill (*Buceros bicornis*), five parakeets, *Psittacula alexandri*, *P. eupatria*, *P. finschii*, *P. krameri*, *P. roseata*, two Owls were Oriental Scops owl (*Otus sunia*), Brown Fish Owl (*Ketupa zeylonensis*), Changeable Hawk-eagle (*Nisaetus cirrhatus*) were found in the shops during study period. The reptilian of Burmese star Tortoise (*Geochelone platynota*), Burmese Python (*Phython molurus*), Reticulate Python (*P. reticulatus*) were commonly encountered (Table 1).

➤ *Parts of wild animals in trade*

Parts of wild animal including skulls, skins, scales, horns, antlers, molars, tusks, skeletons, penis and meat of mammalian species were sold in the markets of study area. Skins of mammals and reptilians, especially the skin of Leopard Cat and Reticulated Python were advertised.

Wild animal species were sold as traditional medicine, food and pet in the markets. Mammalian species were traded as the most common species in the use of traditional medicine and food. Avian species were sold as pet.

Wildlife products were sold mainly as the traditional medicine, skulls of Pythons, skins and sole of Asiatic Elephant and skins of Pythons, skeletons of Tiger, Elephant and Python, horns of Muntjak and Goral, tusks of Wild Boar, penis of Otter were found. Fresh meat of wild animals sold as food was found in food stalls, fried food shops and fresh meat shops. Mammals were the most common being sold as meat. Meat of Muntjak and Sambar deer was sold as food. Bird species were sold as live individuals for pets in Shwesettaw pagoda market (Table 1).

➤ *The conservation status of the recorded species in the study areas*

All the species recorded were found to be variously categorized under IUCN (2017). Under the current IUCN Red List, Burmese Star Tortoise was Critically-endangered, Tiger, Asian Elephant, Banteng and Green Peafowl were listed as Endangered (EN), Sun Bear, Sambar, Red Goral and Aves of Great Hornbill and Burmese Python were Vulnerable (VU), four species of Parakeets, *Psittacula alexandri*, *P. eupatria*, *P. finschii* and *P. roseata* were Near Threatened (NT). Rhesus Macaque, Smooth Otter, Large Indian Civet Cat, Leopard Cat, Jungle Cat, Wild Boars, Red Muntjac, Porcupine, Squirrel, Burmese Hare, Rose-ringed Parakeet, two Owls, Changeable Hawk-eagle and Reticulate Python were Least Concern (LC) (Table 1).

Sr. No.	Common Name	Scientific Name	parts of animals	IUCN
1	Malayan Sun Bear	<i>H.malayanus</i>	Gall-bladder	VU
2	Smooth Otter	<i>L.perspicillata</i>	penis	VU
3	Tiger	<i>P. tigris</i>	Skeletal parts	EN
4	Asian Elephant	<i>E.maximus</i>	Skeletal parts	EN
5	Sambar	<i>R.unicolor</i>	Meat	VU
6	Banteng	<i>B.javanicus</i>	Horns	EN
7	Green Peafowl	<i>P.muticus</i>	Live bird	EN
8	Great Hornbill	<b><i>B.bicornis</i></b>	Live bird	VU
9	Red-breasted Parakeet	<i>P. alexandri</i>	Live bird	NT
10	Alexandrine Parakeet	<i>P. eupatria</i>	Live bird	NT
11	Grey-headed Parakeet	<i>P.finschii</i>	Live bird	NT
12	Blossom-headed Parakeet	<i>P.roseata</i>	Live bird	NT
13	Burmese Star Tortoise	<i>G.platynota</i>	Live animal, shell	CR
14	Burmese Python	<i>P.molurus</i>	Skin, skeletal parts	VU

Table 1. Threatened species, observed parts and their conservation status in the studied area

Note: CR-Critically Endangered species; EN-Endangered species; Vu-Vulnerable species

#### IV. DISCUSSION

During the study, a total of 29 wildlife species were recorded, comprising 16 mammals, 10 birds and three reptiles in Shwese-taw pagoda festival.

Among mammals, one primate, six carnivores, one proboscidea, five ungulates and three rodents were observed. Animal parts were sold for medicinal purpose such as skeletons of macaque, tiger and elephant, tusks of wild boar, horns of muntjac, goral and banteng were sold. Fresh meat of wild animals, especially muntjacs and sambar, sold as food was found in food stalls, fried food shops and fresh meat shops.

Schipper *et al* [9] reported that as a minimum a quarter of mammal species are globally threatened in South and Southeast Asia. Overexploitation and habitat loss are the two principal threats to mammal survival globally. According to IUCN, 90 percent of large mammals are threatened by overhunting in Southeast Asia. Many globally threatened mammals including tiger, Asian elephant, banteng, and four species of otter are all severely threatened by over exploitation, and need species-focused conservation interventions.

Ten avian species including Green peafowl, Great hornbill, five parakeets, two owls and Changeable hawk-eagle were found in the shops during study period. Green peafowl was listed as Endangered, Great Hornbill was Vulnerable and four species of parakeets were Near Threatened in IUCN Red List.

Myanmar has the great diversity of bird species in Southeast Asia, with at least 1,096 avifauna species including 6 endemic and 46 species listed in the Red List. Although some species have not been listed they may be present in decrease numbers. Among the 45 globally threatened bird species in Myanmar, eight species were Critically Endangered, 12 Endangered and 26 were vulnerable species [10].

Holmes discussed that there is a great need implementation in conservation efforts for avian species. Birds are the most important group of terrestrial vertebrates and they occupy a wide range of habitats in the world. As such wide-range habitat, birds contribute to a variety of important ecosystem [cited by 11].

The reptilian of Burmese Star Tortoise (*Geochelone platynota*), Rock Python (*Python molurus*), Reticulate Python (*P. reticulatus*) were commonly encountered in the study area. According to IUCN, Burmese star tortoise was listed critically Endangered; Rock python was Near Threatened and Reticulate python was listed Least Concerned. The Burmese Star Tortoise is a medium-sized tortoise endemic to the dry zone of central Myanmar. In Shwese-taw wildlife sanctuary, tortoises were collected by local villagers for subsistence and commercial purpose. *G. platynota* was sold as food and traditional medicines

[12]. Stuart *et al* [13] reported that all the giant python were slaughtered to supply the world markets for folk medicines, for pet and for food. Leather goods and skins of Burmese python and reticulated python are sold at a local shop at Mandalay, Myanmar.

#### V. CONCLUSION

On the whole, although Myanmar is considered the last forestation of biodiversity in the mainland Southeast Asia, with the prevailing condition of illegal trade in wildlife going on in earnest and wide spread trade will surely bring down the population in a not far future. Strict measures there are needed to be implemented in order to safeguard the sustainability of our living assess especially the wildlife for the future generations to come.

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