

# EXPEDITION TO THE NAUNG MUNG AREA OF NORTHERN MYANMAR

- Hkakabo-razi with an area of 1472 square miles in northernmost Myanmar has been designated as a protected area by the Ministry of Forestry since 30 January, 1996. The first expedition team involving professionals from the Forest Department, University and WCS visited this area from 2 March, 1997 to 13 April, 1997.
- The present expedition sponsored by WCS in collaboration with the Forest Department explored the Naung Mung area in Putao District, Kachin State from 24 April, 1998 to 17 May, 1998.
- The objectives of the 2nd expedition were:
  - To study investigate the leaf deer in detail which could only be found in Naung Mung area, Putao District, Kachin State.
  - To study the rare orchids that grow naturally in the forests of Naung Mung area.
  - To study the subtropical forests and avifauna that inhabit the forests of Naung Mung area.
- The team was made up of 11 participants, including 2 scientists from WCS Headquarters, New York, USA, 2 members from the Myanmar Florist Association, 3 from WCS Myanmar Program, 2 from Nature and Wildlife Conservation Division of Forest Department, 1 from the Forest Department of Putao Township and 1 independent member.
- The expedition team was divided into two groups. The first group with two members left Yangon for Putao on 19.4.98 with field supplies for the expedition and the second group with the rest of the team members followed on 24.4.98 by air. At the conclusion of the trip, all team members returned to Yangon by air on 17.5.98. The whole expedition took 29 days.
- Though the team was made up of 11 participants, there were three main study groups taking responsibility for studying three different subjects. Dr. Alan Rabinowitz led the mammalian team that mainly focused on wildlife study with particular emphasis on the leaf deer.
- The orchid group, led by U Kyaw Nyunt and U Saw Lwin, especially focused on the black orchid which is endemic to this region, while searching for other Myanmar orchids yet unidentified in the literature.
- U Thein Aung, staff officer from the Nature and Wildlife Conservation Division took responsibility for studying birds of this area including native birds, birds from other parts of Myanmar and birds of the Himalayan range.
- Detailed findings of the Naung Mung expedition are as follows.
  - **Fauna**
  - **Mammals:**
    - The mammalian team reached Naung Mung on 30.4.98 and spent one week with a view to making a detailed study of the leaf deer. Upon arrival at Naung Mung, the team requested the local hunters that any leaf deer captured with snares whether dead or alive be brought to the

team for scientific study. Hunters who did so were given cash awards. In due course, the team collected three live and nine dead leaf deer during a week long stay in the Naung Mung area. These enabled the team to carry out a detailed examination of the leaf deer.

- During the expedition, the mammalian group managed to record 26 species of wildlife from local people during the interview survey. For further scientific study with DNA techniques and the establishment of a wildlife museum in Yangon, wildlife parts were purchased which included 93 antlers, 80 skulls, 37 skins, 2 fetus of leaf deer, 3 live leaf deer and 2 live turtles. Three live leaf deer and 2 live turtles were purchased with the intention of exhibiting them to the public at the Yangon Zoological Garden.
- Of the 3 live leaf deer, one male died at Babaw on 13 May, 1998 and one female died on arrival at Yangon Zoo on 18 May, 1998 from shock and trauma caused by capturing with snares. The young male that was captured by the hunter after a chase is still alive at Yangon Zoo. It was exhibited at Yangon Zoo with information such as its local name, scientific name and habitat. The scientific name was given as "Muntiacus putaoensis" with the intention of providing a reference point for its native place, Putao area in Northern Myanmar.
- **Avifauna:**
  - The Putao District of Kachin State has been of interest to biologists since the turn of the century. During the second expedition, U Thein Aung from Nature and Wildlife Conservation Division was able to record 125 species of birds of which 24 species are of Himalayan origin and the rest are natives of neighboring countries and other parts of Myanmar. He put up mistnets at Namti camp and Naung Mung to capture birds for detailed identification and released them afterwards.
- **Flora**
- **Orchids:**
  - Zoologists and botanists have recognised Putao district in Kachin State as a research ground for more than a century. According to the records, researchers have been visiting this area from around 1900 up till the present. Botanist Mr. F. Kingdon Ward discovered the famous black orchid (*Paphiopedilum Wardii*) in this area around 1920.
  - In the second expedition, U Kyaw Nyunt and U Saw Lwin studied the natural habitat of black orchids.
  - The orchid group took a separate trip to Naing Ngun area, 6,700 feet above sea level near Namti where the black orchid grows naturally. The team managed to record the black orchid and its habitat thoroughly by means of photos and video tapes. The orchid team also climbed Lonsein mountain near Tasaku camp in search of the black orchid's habitat.
  - By the end of the expedition, the orchid team had recorded 38 different species of orchids among which were 17 species hitherto unidentified.
- **Other Findings:**
  - Although other findings are not the main focus of the expedition, it is deemed worthy of note that they are closely linked to the Hkakabo-razi Protected Area and the regional development of the Putao area.
- **Wildlife Trade:**
  - Deer skin is the main item in wildlife trade. Due to its high demand for making leather jackets for

sale in local markets and in China, deer skins from Hkakabo-razi areas go to local markets, such as Mandalay and Taungyi and to China through border passes. Hunting deer for skins is increasing and prices are doubling every year. The cross-border skin trade route runs from Naung Mung, Khaunglanphu, and to China border towns while the local skin trade runs from Naung Mung and Putao, to Myitkyina and Mandalay. Local people go to border areas with wildlife products for exchange of their basic commodities such as salt, clothing and dried tea leaves. In addition to deer skin, pangolin, turtle, skeleton of monkeys and cats, gall bladder of bears, fetus of deer are also in demand in wildlife trading at border area. Similarly, various kinds of skins, horns, tongues and hooves of serows and shoulder bags made of monkey skins are the main items in local wildlife trade markets. Though the street price of deer skin in Naung Mung and Putao was about 200 kyats per skin during the first expedition, it is now fetching 450 to 500 kyats per piece. The scales of pangolin that are used for medicines used to fetch the price of 5000 kyats per viss last year but the price has risen to 10,000 kyats per viss this year.

- **Hunting:**

- Though hunting is not the main job of their living, most households in each village possess flint guns, bows and arrows, snap traps, snap traps with fitted arrow, jaw traps which are used to capture wildlife for meat and skin and antlers for sale. In hilly areas, the hills are fenced from the top to the banks of streams with small openings in the fence where snares are set up. Log traps are also used for small animals like rats, civets, pangolins and occasionally birds. If reckless hunting were allowed unchecked, all wildlife in this area will be wiped out in the very near future.

- **Religion and Hunting:**

- Of all the ethnic tribes in the area, Rawan constitutes the majority coexisting with Lisu, Kachin and Myanmar Tibetans. Most tribes believe in Christianity, with government staff, Myanmar, Shan and Myanmar Tibetans professing the Buddhist faith. In every village, there is a preacher who is supported by villagers who donate 10 % of their monthly income to him, to enable him to carry on Christian work. Some preachers in some areas have involved themselves in hunting and encouraging local people to hunt wildlife, collect skins and trade them for profit, part of which are to be donated to preachers. Furthermore, organising and indoctrinating local people with the belief that animals were created just for the consumption of human beings and killing them therefore is according to God's will, could mislead local people. In turn, this belief will lead to the extinction of valuable wildlife in this region.

- **Butterfly Collection:**

- Naung Mung area possesses rare wildlife, medicinal plants, rhododendrons, black orchids and various kinds of rare butterflies. Members of the expedition, encountered a butterfly collection team at Gawlei village. They had 8 members divided into 3 teams, two of which were collecting butterflies in the Hkakabo-razi Protected Area.
- They had already collected 500 butterflies and possessed modern catching instruments like nests, generator, storing boxes and various kinds of preservatives. Local people were given 5 kyats for a beautiful butterfly in first class condition. The young collectors were mostly from the Shan State and the trader was from Kyaington. Top quality butterflies are sent to Japan through Thailand.
- They were in this area with the permission of the concerned authorities for the express purpose of studying the forest resources of the Naung Mung area. In actual fact, they were collecting rare butterflies for commercial purposes. The collecting capacity of each team seemed very high and this could lead to extinction of rare butterflies in this area.

- **Shifting Cultivation:**

- According to the 1998 census, Naung Mung township has a total population of 8,588 with a total area of 2,512 square miles. The population density is 4 persons per square mile and land share per head is 190 acres. Faced with difficulties in communication and abundance of spare lands, people used to practice shifting cultivation and in turn soil erosion was evident in every part of the shifting cultivation areas. Furthermore, signs of gradual extinction of valuable forests, wildlife and medicinal plants could be seen as the cost of agriculture. The cultivator usually practiced shifting cultivation for only 7 years at a given place and when the soil fertility declined, moved to another forested area to burn down trees for cultivation. He returned to the same spot for cultivation about 17 years later. Since shifting cultivators are searching for good forested areas which are believed to provide fertile soil for their crops, the cultivable land is now 10 to 12 miles away from their villages. Felling natural forests for agriculture land is due, not to the scarcity of land for cultivation but because lands around their villages no longer yield good harvests which would outweigh their inputs. Though the main crop is paddy, clearing of forested area is usually for cultivating mustard used in producing cooking oil. Therefore, virgin forests are getting scarce in this area and some forests which resemble natural forests are in fact secondary growths where shifting cultivation had once been practiced.

- **Communication Routes:**

- Regarding communication from Putao to Naung Mung, there is a 9 mile stretch of all weather road from Putao to Khaungmulone where the Maika River has to be crossed. Then you have to take to a forest footpath that crosses the 6,000- foot high Babulon mountain to reach Naung Mung 45 miles away. Another route from Putao to Naung Mung is the 14 miles of good all weather road from Putao to Machanbaw from where you proceed to Ahlanga, Ahtanga, Babaw, Ratbaw and Naung Mung. The road from Machanbaw to Naung Mung is about 60 miles long, a rough road on which vehicles can only be used with difficulty in driving up to Naung Mung. The route from Naung Mung, Gawlei, Lansarhtu, to Ratbaw is just a trail. It is learnt that the route was formerly in very good condition with proper maintenance carried out and even mules could manage to get through. However, the lack of proper maintenance and the use of short cuts with deep slopes created erosion and damaged the existing trails. Furthermore, neglect in using old good trails allows weeds to encroach on the trails. Suspension bridges that have properly been maintained are in good condition and present no danger to those crossing.

- **Recommendations:**

- Naung Mung area in Putao District of Kachin State has been an interesting place not only for biologists, botanists but also for sociologists for more than a century. It seems that very low density of population and difficulties in communication make this area maintain its pristine status. The area is rimmed on the north by crescent shape snow capped mountain ranges forming a continuation of the Himalayas and feeding the headwaters of the mighty Ayeyawady river which is vital to Myanmar. This region also features varied wildlife of temperate and tropical nature, a clean environment and scenic beauty to attract scientists, adventure lovers and holiday makers. Though this area possesses many valuable resources in terms of environmental conservation, its fragile ecological balance is at its risk unless necessary measures are taken in time. In this context, the team submitted the following recommendations.
- Myanmar wildlife has been conserved as one of the valuable resources of the country in accordance with the Wildlife Conservation Law that was promulgated in 1936. This law was amended in 1994 in which 39 species of mammals were listed as totally protected animals. Out of these 39, 15 rare species are to be found in this area including the takin, the red serow, the tufted deer, the musk deer and the red panda.
- However, conserving wildlife by law as a valuable resource of the country is not widely known or accepted among some people who engage in hunting, killing and capturing live ones for sale and display. Hunting wildlife for the sake of subsistence living is acceptable, but hunting and collecting animals products for trade which will lead to the extinction of valuable Myanmar wildlife is unacceptable. In fact, the real persons who are getting rich at the expense of killing

Myanmar wildlife are the traders and not the local hunters.

- Therefore, in order to protect our wildlife, measures should be taken to restrict trade routes to neighbouring countries and market places in Naung Mung, Putao and Putao airport. In addition, equipment and methods used in hunting including setting up of snares all along the mountain ranges, using jaws traps that could kill many animals, possibly leading to extinction, should also be barred. In the very near future, the Nature and Wildlife Conservation Division will open its office in Putao and it is expected that such controlled measures will be carried out by concerned authorities.
- The rare Phet Gyi or leaf deer should also be listed like takin and tufted deer as a totally protected Myanmar wild animal. Like leaf deer, there are many as yet unrecorded wild mammalian species such as stone marten and avifauna which are found in this area. More emphasis should be given to conservation work in this area. Apart from being declared a protected area, the forests around Hkakabo-razi, are still under the category of unclassed forests. To fully protect and conserve trees, medicinal plants, wildlife and their habitats, the buffer zone around the Hkakabo-razi protected area should also be declared as protected unclassed or reserved forests. Up to now, the total protected area of Myanmar is still very low. It is expected that inclusion of Hkakabo-razi area will help increase the existing protected area to 5% and the inclusion of buffer zone around Hkakabo-razi in the reserved forest category will increase it to 30%.
- It is learnt that collecting butterflies near Naung Mung for export has been going on for four years.
- Butterflies do not live in isolation but co-exist in a symbiotic relationship with flora. They play a main role in cross pollination among trees for future regeneration of forests, especially of orchids. Therefore, priority should be given to the sustainable existence of butterflies that are helping in conserving environment rather than benefit traders. It is suggested that economic activities run by economic oriented organisations which could hamper the long-term stability of the natural environment, should be restricted and tightened.
- This area is significant not only from the biological but also from botanical point of view. For instance, the area should be protected for black orchid as a rare resource and endemic species of Kachin State. After collection of many unknown species, there is a strong possibility that new species of orchids like black orchids might be discovered. So, it is suggested that orchid local and international experts should be encouraged and helped in carrying out orchid research in this area.
- Clearing trees for shifting cultivation is the routine practice of the local people. This causes depletion of natural forests, destroying wildlife habitats and soil erosion. Practicing shifting cultivation in the northernmost area which is the upstream watershed of the Ayeyawady river may be viewed as a major problem that cannot be easily cured if no alternative livelihood is provided for the local people.
- However, Naung Mung area is fortunate to have great potential for growing long term cash crops such as tea, coffee and grape fruit that could be grown on permanent land. Soil and weather in that area are favorable for such crops.
- If the authorities concerned of Kachin State could upgrade the existing Naung Mung-Putao road and if the road being renovated from Myintkyina to Putao is completed, it would help much in the development of the region. In doing so, it will be demonstrated that permanent cultivation can generate more income for the local people resulting in development of the region. In turn, this will save more forest land from being denuded and the natural environment will become stable, thus helping gradual development of ecotourism in this area. Those activities will help to accelerate regional development and the building of a better future for the local populace.

- The Naung Mung area surveyed by the expedition team is the buffer zone of Hkakabo-razi National Park that will be designated and developed in the near future. The development of the social status of local people living in this area is very much dependent upon the effectiveness of natural environment conservation. If this area is transformed from a protected area into a national park, activities for socioeconomic development of the local people will have to be carried out. In doing so, local and international NGOs like Wildlife Conservation Society ( WCS ) will be involved in this task in collaboration with the government departments concerned. To go one step farther, it is a strong possibility that this area will be upgraded from National Park status to that of World Heritage Site. If this area becomes a World Heritage Site, it will pave the way for getting assistance from NGO and UN organisations in collaboration with government departments for the development of the social, economic and health of the local people. Therefore, it is suggested that degradation of natural environment of this area should be prevented right now with all out efforts with a view to maintaining the valuable resources of our country.

## • **8. Conclusion**

- The expedition to Naung Mung area was the second attempt at collaboration between the Forest Department and WCS. Discovery of the blue sheep, the black barking deer and a feasibility study over the possibility of upgrading the protected area status to Hkakabo-razi National Park were the outcomes of the first expedition.
- During the second expedition, studies of the leaf deer, rare orchids and avifauna endemic to the region were carried out in detail. In addition, not only the current status of wildlife in Hkakabo-razi area but also ways and means to protect them were explored.

## • **Reference**

- U Saw Htun Khaing, and U Than Myint, "Expedition to Naung Mung Area, Northern Myanmar". Field Document No: 2-98 Wildlife Conservation Society, Myanmar Program. July, 1998.

**U Saw Htun Khaing,**

**U Than Myint and Dr. Sein Tu**