



Final Report

**TIGER CONSERVATION ENHANCEMENT IN
BHUTAN**

(January 2000 – June 2001)

WWF-Bhutan Program
Chubachu PB 210
Thimphu

July 2001

TIGER CONSERVATION ENHANCEMENT IN BHUTAN

*Final report to the Save the Tiger Fund of the National Fish and Wildlife Foundation
Submitted July 2001 by World Wildlife Fund Project #1999-0268-093
(January 2000 to June 2001)*

This final report presents the cumulative achievement of the Tiger Conservation Enhancement Project in Bhutan initiated in January of 2000 and funded by the Save the Tiger Fund.

INTRODUCTION

Bhutan occupies a unique position within the environment and development debate. Its late entry into the development race has given Bhutan the opportunity to learn from the experiences of its neighbors. Moreover, Bhutan has had the option of carefully building an environmentally sustainable and culturally appropriate development strategy. Accordingly, approximately 72 percent of Bhutan's forests are still intact, of which 60 percent is to be protected and maintained in the future as decided by the 73rd session of the Bhutan National Assembly. Over a quarter of the kingdom is under an extensive network of protected areas, and another 9 percent of the kingdom is included in a network of biological corridors connecting the nine different protected areas. Bhutan's tiger population is estimated somewhere between 115 and 150, with approximately 70 to 80 adult tigers.

Despite these promising trends, Bhutan's environment is under threat. Although the low population density of 13 people per square kilometer has protected the natural habitat from heavy encroachment and over-exploitation of its resources, the population growth rate is of great concern. At 3.1 percent, Bhutan's population growth rate is one of the highest in the world, and the public's dependence upon forest resources is considerable. Thus, population pressures are growing and unless measures are taken immediately to ensure environmental protection, Bhutan's wildlife habitat, and along with Bhutan's tigers, will disappear. Bhutan provides the world a unique opportunity to **conserve** a biologically important area and a significant share of the Eastern Himalayas Ecoregion, instead of having to undergo restoration and other prescriptive solutions later.

Bhutan's role in tiger conservation is a major component of WWF's strategy in the Eastern Himalayas Ecoregion, particularly given the political instability, enormous population pressures, and tiger habitat degradation in neighbouring countries. Bhutan provides a contiguous natural space, encompassing an altitudinal continuum from the foothills in the south (100 meters) to the alpine forests in the north (4200 meters), an ideal habitat for tigers. The kingdom's largely Buddhist population associates tigers with religious deities, in particular, Guru Padmasambava, the Indian saint who brought Buddhism to Bhutan. Consequently, Bhutan has invested in two tiger conservation units (TCU) in the region, the Manas (Bhutan)/Namdapha TCU and the Sunderbans TCU.

STATUS OF TIGER CONSERVATION IN BHUTAN

The first steps toward tiger specific conservation came in 1995 when the Forests and Nature Conservation Act of Bhutan labeled the tiger and 29 other species of plants and wildlife as “totally protected.” In 1998, the Royal government formed a partnership with WWF to develop a national tiger conservation strategy. Following the recommendations outlined in the strategy, the tiger conservation project has taken a proactive approach to enhancing the conditions for tiger conservation and protection in Bhutan.

This tiger conservation strategy shifted the focus of tiger conservation from the south to the central Himalayan forests, particularly to ThrumshingLa National Park in central Bhutan, which is identified as the most crucial tiger habitat in Bhutan. Conservation of the tiger habitat in this park is extremely critical for maintaining a continuous tiger distribution, a rarity in other tiger range countries. In September 1999, a camera trap set up by a wildlife survey team captured a tiger at 3400 meters, the highest altitude ever recorded for a tiger, proving that tigers frequently used high altitude passes to move from one valley to another.

PROJECT SUMMARY

The tiger conservation project was launched in January 2000 with the purpose of creating a large network of protected areas for tigers and other wildlife in Bhutan by protecting core areas and conserving existing wildlife corridors. The tiger conservation project has since helped address the public’s lack of awareness regarding the need for tiger conservation. It has been instrumental in building stakeholder capacity and capability as well as a base for an information gathering and monitoring system. In addition, forestry officials have learned new techniques such as camera trapping. The specific objectives of the project are to:

- Initiate and internalize research and in-depth studies in order to enhance scientific understanding and knowledge of tigers in Bhutan;
- Assess the livestock depredation by tigers and other predators;
- Establish an information and monitoring system and update information on tigers at Nature Conservation Division and other protected area offices;
- Raise awareness of the Bhutanese public to enlist their support for, and participation in, tiger conservation;
- Promote regional and international cooperation by fostering effective affiliations between Bhutanese conservation organizations and other tiger conservation organizations in Asia and beyond; and
- Strengthen the capacity of the Department of Forestry Services and its affiliates for effective implementation of tiger conservation activities with adequate resources and professional competence.

The above objectives are in concordance with the majority of the criteria recognized by the Save the Tiger Fund (STF). The table below shows the strong correlation between project objectives and STF criteria.

Project Objectives	Related STF criteria
Initiate and internalize research and in-depth studies	<ul style="list-style-type: none"> • Improved management/protection of tiger habitats • Enhanced prey protection measures for in situ efforts • Anticipated benefits to wild tiger populations • Methods for resolving conflicts between tiger and economic development
Raise awareness of Bhutanese public	<ul style="list-style-type: none"> • Integration of local communities in tiger conservation (through increased support, and participation in, tiger conservation)
Promote regional and international cooperation	<ul style="list-style-type: none"> • Cooperation and coordination with other tiger conservation organizations (regional and international)
Enhance the implementation capacity of the Department of Forestry Services and its affiliates	<ul style="list-style-type: none"> • Improved management/protection of suitable tiger habitats
Establish an information and monitoring system and progressively update information on tigers by NCD and other protected area offices.	<ul style="list-style-type: none"> • Improved management/ protection of tiger habitats • Anticipated benefits to wild tiger population • Cooperation and coordination amongst tiger conservation organizations • No duplication and conflict with other conservation efforts

PROJECT ACTIVITIES

Various stakeholders implement the different tiger conservation project activities through their own organizational networks. The Tiger Program Unit at Nature Conservation Division (NCD) is the lead agency and coordinates the tiger conservation activities at the national level, in addition to implementing some of the activities.

Objective 1: To initiate and internalise research and in-depth studies

Livestock depredation

Collecting information on livestock depredation by predators is a continuous process rather than a one-time activity. There is the need to establish reliable time series data to develop informed policies and strategies. NCD, in collaboration with WWF, began collecting data two years ago. In May 2000, NCD presented the findings from the data collected for one year in a workshop held in Bhutan with WWF participants from Nepal, Mongolia, Pakistan, the United States, and other conservation partners. Unfortunately, the Livestock Depredation Action Plan that was envisaged could not be drafted because of insufficient data. However, information

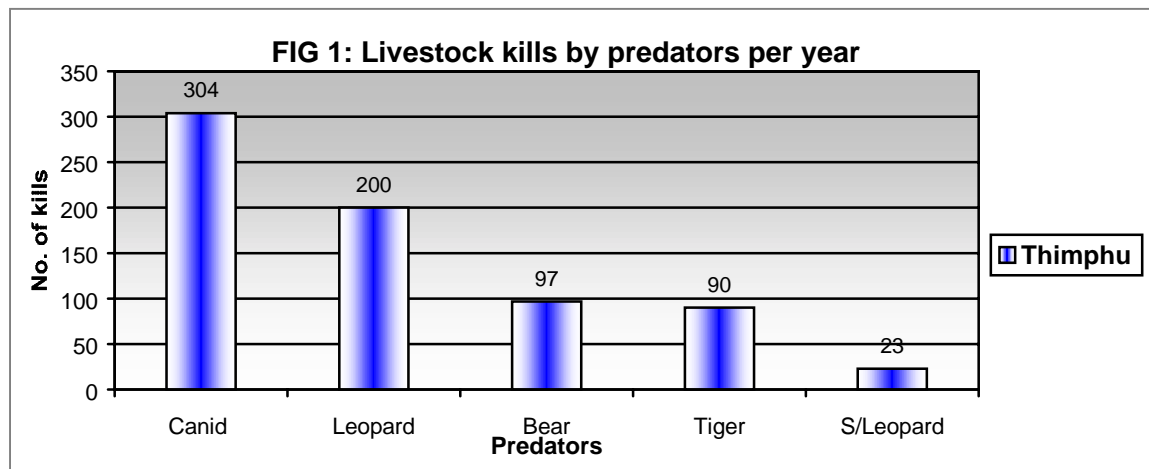
collection will continue for another year to ensure sufficient data for drafting the plan in the future. The problem of livestock depredation must be comprehensively studied in relation to tigers.

Updating the National Strategy for Tiger Conservation

The previous tiger strategy, written three years ago, recommended cash incentives to the farmers who lost livestock to predators and to the informants after technical officials verified the information during their field visits. Theoretically, this incentive would encourage people to come forward with reliable information and the Tiger Program Unit could establish a reliable time series data for easy monitoring.

One of the items in the agenda of the first annual Park Managers meeting in March 2001 was tiger conservation and the depredation of livestock. The meeting raised questions on the sustainability of the compensation scheme for livestock depredation. It was felt that compensation, funded by donors in the absence of internal sources of revenue, was not sustainable. Thus, the meeting resolved that the national strategy for tiger conservation warranted revision.

In May 2001, Dr. Chuck McDougal, a tiger specialist, was hired to help review the existing data; his main task was to update the national tiger conservation strategy. His primary findings on livestock depredation and the ranking of predators are given in Figure 1.



New information, such as the presence of tigers at elevations over 3000 meters, needed to be incorporated in the revised strategy. Dr. McDougal confirmed that tigers were present in the six protected areas and in the network of biological corridors connecting them. He also found that these areas harbored other endangered or vulnerable species of mammals and birds. It is therefore presumed that tiger conservation in protected areas will ensure the conservation of other valuable species. The endangered species found in the protected areas are given in Table 1.

Table 1: Endangered Species and Vulnerable Species in Protected Areas

SPECIES	PROTECTED AREAS					
	PWS	JDNP	BMNP	RMNP	TNP	BWS
Blue sheep		√				√
Snow leopard		√				√
Takin		√				
Serow		√	√		√	√
Red Panda		√	√		√	√
Tiger	√	√	√	√	√	√
Himalayan black bear		√	√	√	√	√
Clouded leopard	√		√	√		
Golden langur	√		√	√		
Capped langur				√	√	√
Gaur	√			√		
Elephant	√			√		
Black necked crane			√			√
Satyr T		√	√		√	√
Hornbill	√		√	√	√	√

Note:
PWS (*Phibsoo Wildlife Sanctuary*), **BMNP** (*Black Mountain National Park*), **RMNP** (*Royal Manas National Park*), **TNP** (*ThrumshingLa National Park*), **BWS** (*Bumdiling Wildlife Sanctuary*)

A further change in the tiger conservation strategy is recommended because the strategy was written under the assumption that the tigers in Bhutan migrated west to the Manas (Bhutan)/Namdapha Tiger Conservation Unit from the Bumdiling Wildlife Sanctuary. It was later confirmed that tigers from Bumdiling do not migrate to the Tawang district of Arunachal, which forms part of the Namdapha Tiger Conservation Unit, because the upper portion of Tawang adjoining Bumdiling is snow-capped while the villagers of Zemithang heavily populate lower section of Tawang. It is now recommended that the Phipsoo Wildlife Sanctuary in southern Bhutan be extended to the west to connect it with the Buxa Tiger Reserve, which in turn is linked to Jaldapara.

Refresher course for pug marking

The tiger conservation program organized a half-day refresher course on techniques for pug marking on 30th May 2001. Twenty forestry officials attended the half-day course, which was conducted by Dr. McDougal.

Objective 2: To raise the conservation awareness of the Bhutanese public

Visits to schools

Mr. Sangay, the coordinator of the tiger conservation program, visited Bhutanese schools to give short talks to students and teachers, expanding on the importance of tiger conservation

and the role students have in tiger conservation. In addition to becoming educated themselves, school children are then able to effectively communicate the importance of tiger conservation to their parents, who are mostly farmers. Parents are thus more likely to also become involved in local discussions regarding wildlife conflict situations. Teachers and students have shown great interests in tiger conservation, and most schools requested reading materials on tigers for their libraries.

Tiger quizzes

To further create awareness among students and the public at large on environmental issues, particularly tiger conservation, we organized a national quiz contest for five high schools from the western region of the country in May 2000. The first round of questions dealt with general issues like endangered species, protected areas in the country, and other environmental issues, while the second round of questions focused on tigers and tiger conservation. The tiger quiz contest was covered by the Bhutan Broadcasting Services for the national radio and TV programs, and by *Kuensel*, the national newspaper. The contest generated positive and substantive publicity.

Poems and paintings

The tiger conservation program organized a poetry contest, both in English and Dzongkha, as well as a painting competition for school children on the theme "Save the tiger, Save life on Earth." The main objective was to educate children on the importance of tiger conservation and to encourage a predisposition to conservation. We received 135 entries for poems and 49 entries for paintings. The winners and runners-up for both competitions were awarded cash prizes.

Conservation messages in audiocassettes

Poems from the children's poetry contest were used as lyrics to songs and recorded on audiocassettes, which are powerful tools for disseminating conservation messages as farmers in even the most remote villages receive radio messages. About 400 audiocassettes were produced and supplied to farmers and schools near conservation areas. Further, audiocassettes were given to the Bhutan Broadcasting Services (BBS) for dissemination. The audiocassettes are available on request.

The royal inauguration of ThrumshingLa National Park

One of the greatest achievements of conservation efforts in Bhutan came on May 31, 2000, when Her Majesty the Queen, Ashi Dorji Wangmo Wangchuck, inaugurated ThrumshingLa National Park. The park is located in central Bhutan and connected with most of the other national parks. It was declared a protected area in 1993 and was formally gazetted as a national park in 1998. The park occupies 768 square kilometers and is home to tigers, red pandas, black-capped langurs, rufous-necked hornbill, and over 276 species of birds. The royal patronage generated immense publicity. We anticipate that the park will be the primary tiger habitat in Bhutan in the future, if not also for the entire south Asian region.

Tigers at 3400 meters altitude!

Rumors of tiger sightings in the high mountain altitudes were reported but never substantiated until a camera trap placed by a team conducting a wildlife survey in ThrumshingLa National Park captured a tiger on film at 3400 meters. The picture and news of the tiger at ThrumshingLa spread quickly both within and outside the country. WWF-Bhutan received many questions and requests from abroad asking for more information. The report on wildlife survey will be made available on request. A copy of the press release accompanies this report.

Tiger T-shirts

The momentum of publicity and awareness received by tiger conservation program needs to be maintained. In response, we designed a T-shirt with a picture of the tiger in ThrumshingLa on the back and the WWF panda logo in the front. One thousand shirts have been ordered, which will be distributed to relevant people during occasions centered on conservation.

Awareness briefing of potential donors by WWF

Every year, groups of potential donors visit Bhutan and are briefed on government policies, programs, and strategies with particular reference to conservation of biodiversity. Furthermore, the visitors are briefed on WWF activities in Bhutan, including their support of tiger conservation. Two groups of potential donors from the United States have visited so far in 2001. Particularly interesting to the participants was the evidence of tigers at high altitudes. Support by organizations such as the National Fish and Wildlife Foundation make possible the research and analysis that enables us to educate others and inspire enthusiasm for protecting Bhutan's natural habitats and biodiversity.

Meeting on WWF's "Future Directions"

WWF-Bhutan drafted a strategic planning document called "Future Directions," which will serve as a guide for the organization's future programs and activities. It was written after a thorough review of relevant government policy documents and encompasses the priorities of the Royal Government and the global priorities of WWF that are appropriate in the Bhutanese context. Future Directions was presented and discussed by over 20 officials from conservation partners including other nongovernmental organizations and the donor community at a meeting held on June 23, 2000. Our conservation partners were updated on the ecoregion-based conservation-planning concept, and we solicited feedback on the document.

Objective 3: To promote regional and international cooperation

Global Tiger Conservation Strategy

The program officer for WWF-Bhutan, Ms. Pema Y. Namgyel, who worked closely with the tiger project, attended the Global Tiger Conservation Strategy held in Java, Indonesia in early September 2000. A paper on the status of tiger conservation in Bhutan was presented at the workshop. Participants from TRAFFIC, the Zoological Society of London, the Smithsonian Institution, and WWF staff from tiger range countries discussed the vision and tiger conservation framework and were able to exchange of ideas and experiences.

Executive committee meeting

In February 2001, the second Executive Committee Meeting for Global Tiger Forum was held in New Delhi. A representative from NCD attended the forum and field trip to Corbett National Park, which has the highest density of tigers in India.

Livestock depredation workshop in Thimphu

As discussed above, WWF and NCD organized a regional workshop to present data collected on livestock depredation in Thimphu to participants from Nepal, Mongolia, Pakistan, the United States, and conservation partners from Bhutan. We aim to use the successes of the tiger conservation project in Bhutan to inform stakeholders and decision-makers in neighboring areas of Asia.

Objective 4: To enhance the implementation capacity of the Department of Forestry Services and its affiliates

Exchanging ideas with Nepalese counterparts

The tiger conservation program sent three field personnel involved in tiger conservation activities to Nepal for two weeks in May 2000 to exchange information and ideas with our Nepalese counterparts. The program in Nepal was coordinated by WWF-Nepal. In June 2000, twenty officials from Nature Conservation Division and Territorial Divisions went on another study tour to Nepal, where they visited Royal Chitwan and Royal Bardia National Parks to study survey techniques including camera-trapping methods, tiger habitat management, and to gain insights of wildlife conservation policies and practices in Nepal.

The tiger conservation program has supported tiger conservation activities in Royal Manas National Park. Tigers in this region are more threatened because of its proximity to the market for wildlife parts and their products. Furthermore, the border is long and porous, and patrolling is difficult. Field staff from Manas went to Nepal for two weeks in July 2000 to keep abreast on the tiger conservation activities in other countries. They visited parks in Nepal and exchanged ideas on various issues such as poaching, conservation of habitat and preys, and linking different protected areas with safe passage of corridors. Manas field staff were equipped with basic facilities for patrolling and monitoring the status and movement of tigers.

In-country training for Wangdi Division staff

The tiger program conducted a one-day in-country training on the standardization of surveying methodologies and reporting formats. The training also included a presentation on wild tracks and encounters, which included feces of herbivores and carnivores and vegetation evidences encountered in the field. A total of 20 forestry officials attended the January 2001 training.

Specimen identification and trapping

The corridor connecting ThrumshingLa National Park to Bumdiling Wildlife Sanctuary is a critical tiger habitat in Bhutan. About 20 people spent over 65 days surveying the corridor, including four species experts from the Natural History Museum of Chicago who shared their

experiences and also trained national staff on trapping techniques. They have identified several wildlife species that constitute important prey for tigers and other predators. Completed in May 2001, initial findings of the survey show that the corridor contains a wealth of biodiversity. Various species of rodents, birds, insects, and mammals were collected, many of which are thought to be new. Some species have been delivered to the Field Museum in Chicago for DNA analysis and confirmation. Reports from this extensive survey will be available after samples have been thoroughly studied and verified.

Integrated biodiversity information system

The present system of collecting information on an individual species basis may not be sustainable for Bhutan given that economic and human resources are limited. Thus, the Royal Government is considering establishing a “Bhutan integrated biodiversity information system” (BIBIS) to collect information, which will be more effective than the current system and which seeks to eliminate duplication of activities. In the future, most of the macro or general information on biodiversity, including information on tigers, will be collected and disseminated through the BIBIS system. The multi-stakeholders workshop identified five reasons (in Box 1) why establishing integrated biodiversity information management system in Bhutan would be useful.

Box 1: Rationale for BIBIS

- *To enhance the Royal Government of Bhutan (RGOB) and other stakeholders capacity in the conservation and utilization of biodiversity.*
- *To facilitate better coordination among the RGOB organizations and other stakeholders in the conservation and utilization of biodiversity.*
- *To enhance access to biodiversity information.*
- *To facilitate and enhance the utilization of biodiversity information.*
- *To enhance the quantity and quality of information available on Bhutan’s rich biodiversity.*

The concept behind BIBIS is to build a national system that will manage and link the biodiversity information activities of all concerned stakeholders. There is a need to take a decentralized approach towards inventory activities in routine biodiversity surveys, and inventory and monitoring activities conducted by partners. To ensure that the system accommodates most needs for biodiversity information, it should work in a coordinated and integrated effort implemented by multiple stakeholders. Thus, in the future the tiger conservation program will coordinate with BIBIS to get tiger information through this sustainable and efficient system.

Objective 5: To establish an information and monitoring system

Status survey

With support from the National Fish and Wildlife Foundation, the Territorial Divisions and the parks of the Department of Forestry Services continue to conduct tiger status surveys, which will be conducted every year to help develop a time series database. Utilizing camera

trapping, the surveys have so far provided valuable information—such as evidence of tigers at over 3000 meters—that contributes to more accurate methods of tiger conservation as well as to public awareness.

Socio-economic study

ThrumshingLa National Park conducted a study in May/June 2000 covering a total of seven *geogs* (village blocks) in and around the park. The purpose of the study was to establish baseline information on the socio-economic situation of households and settlements. Amongst other information, the study covered livestock depredation by wildlife predators including tigers. The information has been incorporated into the management plan of the park for developing Integrated Conservation and Development Projects in these communities.

Livestock migration study

ThrumshingLa National Park consists largely of registered grazing areas of nearby communities. Most families migrate their herds seasonally; hence the park constitutes both migration areas as well as routes for migration. As a result, some parts of the park have been used for grazing throughout the year, without sufficient time for regeneration of growth. Thus, it was important to find out the reasons for such practices before formulating any strategies to deal with the problems. WWF-Bhutan commissioned a study on grazing patterns in the area, which was conducted by local consulting firm, Roots Consulting. Based on the findings of the study, the park has identified critical grazing areas that need to be protected from permanent damage. At the national level, the study findings will be used to highlight damage from cattle migration and to ask the government to formulate a specific policy on wild grazing and cattle migration.

LANs for Nature Conservation Division

In addition to a computer, printer, color photocopier, and other equipment procured and disbursed by the project, WWF has supported procurement and installation of Local Area Networks (LANs) in NCD. We also provided two desktop computers to facilitate better flow of information between the project and stakeholders in order to make possible more efficient and affective monitoring and implementation of project activities and reporting.

Field equipment

In the past, field equipment was distributed to those field staff who were trained in tiger surveys. Field equipment purchased during this reporting period was meant for the head office of the tiger conservation program. The field equipment will be maintained in the office as pool. These items included tents, rain gears, and sleeping bags and mats

CONCLUSION

Tiger specific programs were not part of the Bhutan development package prior to 1996. Before then, tiger conservation activities were covered by only general conservation programs because of financial and manpower resource constraints. However, the need for a specific tiger conservation program became apparent in the later half of the 1990s when Bhutan witnessed increased pressure on its natural resources from population growth and economic expansion.

Since 1998 WWF has been supporting the Department of Forestry Services in the implementation of the national tiger conservation strategy. Since this time we have:

- Initiated camera trapping;
- Updated the national strategy for tiger conservation to meet new demands and developments;
- Conducted workshops for park managers and divisional forest officers;
- Institutionalized the reporting procedures by specifying the role of different forestry agencies. This was essential for efficient reporting and sustaining the collection and updating of base information on tigers;
- Decentralized the tiger survey staff to regional and district forestry organizations;
- Trained forestry officials on pug marking;
- Trained forestry staff in cleaning, tanning, and mounting specimens for education and awareness building for the wider public. Four species experts from the Natural History Museum of Chicago and 15 Bhutanese forestry officials spent more than two months in the field, imparting hands-on-training to national staff;
- Studied and disseminated data on livestock depredation;
- Contributed to the Ministry of Agriculture's efforts to establish a national level information system called "Bhutan integrated biodiversity information system" (BIBIS);
- Supported surveys and studies in and around ThrumshingLa National Park to establish baseline data on wildlife, socio-economic levels, and livestock migration; and
- Purchased equipment and installed LANS at NCD. This is in addition to equipping the office of the Tiger Program Unit with field and office equipment.

The tiger conservation program has a national mandate, implemented through a decentralized system. This calls for effective coordination and communication amongst the key partners. As of now, NCD and WWF have a smooth and successful working relationship. The success of the tiger project largely depends on continued active coordination by NCD, which plays the key role in coordinating field offices to implement project activities.

In the immediate future, the tiger conservation program will implement activities within the five broad themes. We will:

- Research in-depth the life cycle of tigers to generate reliable information to help develop more holistic and long-term conservation strategies and programs;
- Raise public awareness and educate stakeholders on the importance for tiger conservation in our context. The messages include social, economic, spiritual, and environment benefits of tiger conservation;
- Continue to support participation in regional and international programs. In wildlife conservation, particularly with regard to large mammals such as tigers, conservation has to be seen more in ecoregional and global perspectives. International boundaries do not mean much to wildlife;

- Establish an information and monitoring system considering the decentralized structure of information collection and dissemination adopted by the project. This system will be further strengthened with project support; and
- Continue to support capacity and capability development for stakeholders in order to sustain the tiger conservation program supported by WWF. Unlike in the past, all stakeholders will have equal access to human resource development support of the project.

As described above, Bhutan's tiger conservation program has made marked progress in the past four years. Under the broad umbrella of the national strategy for tiger conservation, WWF is supporting the Tiger Program Unit of NCD in developing a five-year tiger conservation project, to be implemented coinciding with the 9th Plan of the government. The information generated from next year's activities will help to improve the five-year tiger proposal. In the future, the Tiger Program Unit, as the lead agency, will coordinate implementation of this project. Although current activities will continue, the overall approach within the project will become more comprehensive. Changes include incorporating information technology to play a larger role in awareness campaigns and addressing the conflict between conservation and economic livelihoods of people in the future. We are grateful for the support of the Save the Tiger Fund of the National Fish and Wildlife Foundation, which has helped make possible the significant advances to date in tiger conservation in Bhutan.

ATTACHMENTS

- Financial report
- Press release: "Bengal tiger sighted at ThrumshingLa"
- .jpg image of tiger

Bengal tiger sighted at Thrumshingla



The Royal Bengal tiger (Photograph taken with “Camera trap” technique at Thrumshingla)

A FOUR-MEMBER Bhutanese team surveying wildlife in the Thrumshingla National Park recently returned home with the first photograph ever of a tiger at an altitude as high as 3,000 metres.

The Royal Bengal tiger (*Panthera tigris*) of South Asia was previously believed to inhabit relatively lowland sub-tropical forests till pugmarks at Puchela (4,110 metres) in the Thrumshingla National Park some years ago suggested that the cats used expansively high altitude passes to move to adjoining valleys, according to a tiger expert.

Dr. Pralad Yonzon, a wildlife biologist from Resources Himnalaya who led the four-member team, told Kuensel, “Occasional sightings confirmed their existence at such high altitudes but this is the first time that we have photographic evidence.”

The Country Representative of the World Wildlife Fund in Bhutan, Dr. Kinley Dorji, said that he hoped the evidence would put to rest the “doubts in the minds of skeptics”.

“We hope the picture will actually make our tiger conservation task easier,” he said.

It just might. Considerable attention, at least, is seen to be heading in the direction of the Tiger Conservation Programme of the Nature Conservation Section.

Since 1996, five tiger surveys have been carried out in the kingdom under the programme.

The tigers that haunt the Central Himalayan region in Bhutan are known to be especially elusive and unpredictable, owing to environment conditioning and human encroachment into their habitat. It thus took until last year for the extensive tiger surveys to cover all the national parks and protected areas as well as the bulks of the dzongkhags.

According to an NCD official involved in the Tiger Conservation Programme, the surveys revealed that there were 70-80 adult Royal Bengal tigers in Bhutan. Cubs included, the tiger population could add up to anything between 115 and 150.

No dramatic population increase is foreseen for the time being as the mortality rate for juvenile tigers in their first year is as high as 34 percent. Another 17 percent of their survivors are said to die in the second year.

Bhutan's tiger population is, nonetheless, healthy and indicates that tiger habitat and prey base are more or less intact and that Bhutan is in sound ecological health, the NCD official said Kuensel.

Although most of the tigers in Bhutan are found in southern sub-tropical region of the country, the 768-square kilometre Thrumshingla National Park and the recently demarcated biological corridors form part of the tiger ecosystem.

The largest of all cats, the Royal Bengal tigers can weigh 250 kilogrammes and measure 3.20 metres from nose to tail end. It is sometimes described as the "ultimate land predator" as it is able to bring down prey larger than itself.

Admired and dreaded in the literature of world famous naturalist Jim Corbett, it has also been misunderstood often as a born man-eater. No man-eating incidents have been reported in Bhutan although the cats do account for the disappearance of many a head of cattle.

The 6,000 Royal Bengal tigers in this part of the world constitute about 60 percent of the global tiger population.

By Kunga T. Dorji

(Extract from the Bhutan's National Newspaper Kuensel May 6-12, 2000 Vol. XV. No. 18)

