

**PROJECT TITLE:** Development of a National Tiger Action Plan for Union of Myanmar.  
Conservation

**PROJECT # :** 98-093-068

**GRANTEE:** Wildlife Conservation Society

**GRANT PERIOD:** November 1, 1998 to October 31, 1999

**REPORT PERIOD:** Final Report

---

**Goals:** To develop a scientifically-based National Tiger Action Plan for Myanmar to ensure the long-term survival of the country's wild tigers. The project will be conducted in close partnership with the Myanmar Department of Forestry. To the greatest extent possible, WCS is working to 1) ensure that researchers/scientists from Myanmar play a leading, rather than auxiliary, role in the project; 2) account for the human side of the equation in any conservation plan and establish clear plans for initiating community-based conservation measures around key tiger habitats; and 3) design the plan so as to establish realistic goals for actual on-the-ground protection of tigers and their prey.

**Progress 1998 - 1999:**

**1) Project planning and administration**

On December 2, 1998, WCS Director of Science, Asia Programs, Dr. Alan Rabinowitz and WCS Indochina Tiger Program Coordinator Dr. Tony Lynam presented a one-hour slide show on "Tiger Census Techniques and the Development of a Myanmar Tiger Action Plan for the Year 2001" to more than 100 senior forestry staff, as well as students and professors from Yangon University. The slides and discussion concerned past and present WCS activities in Myanmar, the partnering of WCS and the Forestry Department in developing and implementing the proposed three year Myanmar Tiger Action Plan, and the application of tiger survey techniques being used in Thailand, to forest habitats throughout Myanmar. The presentation was opened with a keynote address by the Director-General of Forestry, Dr. Kyaw Tin, and was followed by a question and answer period, a light buffet, and a viewing of a WCS tiger video. On December 10, 1998 the proposal for the project was presented to the Ministry of Forests and it was duly approved by the Cabinet of the Myanmar Government on 30 March 1999.

A two week training tiger survey training course was held in Ahlaungdaw Kathapaw National Park, the second largest protected area in Myanmar and one of the countries prime protected tiger sites, from December 7-21, 1998. Twenty senior-level trainees and three observers attended the 14-day training. These staff came from twelve national parks and sanctuaries, the Institute of Forestry, and the Forest Resources and Environment Development Association (FREDA). The trainees were given classroom and field instruction in a variety of topics relating to the documentation and conservation of wild tigers, tiger prey species and tiger habitats. The program was conducted by Drs. Rabinowitz and Lynam with assistance from Myanmar Country Program Coordinators U Saw Tun Khaing and Myanmar Training Coordinator, U Than Myint. A summary of the course, an outline of its contents and schedule, and an evaluation of the

performance of the trainees were attached to the first interim report.

On completion of the tiger survey training course in Alaungdaw Kathapa National Park in December 1998, seven participants were selected to form the tiger team based on overall performance in the training course, as well as performance working in the field and with other trainees. Six members of the team are from the Forest Department, and one is from WCS. The Director-General of the Department directed the six government staff to be seconded to the project for the first year of the project, with options for them to continue in the second and third years pending a successful progress for the project. The period of their secondment began on 1 May 1999 and will end on 30 April 2000.

The activities of the Tiger Survey Team will be supervised jointly by the Director of the Nature and Wildlife Conservation Division, and WCS – Myanmar Country Program Coordinator. Technical guidance and instruction for the team will be provided by Dr Alan Rabinowitz, Director for Science, Asia Programs, and Dr Tony Lynam, Indochina Tiger Field Coordinator, Thailand.

The Tiger Survey Team members are:

1. U Saw Htoo Tha Po, Co-leader, WCS – Myanmar Program
2. U Myint Aung, Co-leader, Staff Officer, Myanmar Forest Department
3. U Tin Mya Soe, Ranger Officer, Myanmar Forest Department
4. U Sein Aung Min, Range Officer, Myanmar Forest Department
5. U Moe Myint Aung, Forester, Myanmar Forest Department
6. U Tun Tun Lwin, Forester, Myanmar Forest Department
7. Daw Myint Myint Oo, Range Officer, Myanmar Forest Department

Team members 1-6 will work full-time on the tiger program, Daw Myint Myint Oo, the only female member of the team, will participate on a part-time basis as education coordinator. She maintains regular duties as education officer for Hlawga Park, near Yangon.

#### Assessment of new areas for potential protected status

In May 1999, Dr. Alan Rabinowitz conducted an expedition to the Hukawng Valley, a virtually unexplored area in northwest Myanmar near the Myanmar-Assam border and one of the high priority sites listed in previous tiger documents for surveys. The purpose of the trip was to assess the status and quality of undeveloped forest areas to determine if these areas contained tiger populations and merited further protection by the government.

Reports indicate that this may be a high priority area in Myanmar for tigers. First hand accounts from hunters indicated the presence of tigers and other large mammal species such as leopard, dhole, wild elephants and gaur. There were no reports of rhinoceros. Hornbills were seen or heard regularly while gibbons called daily. The expedition reports that tigers are under some degree of hunting pressure from Lisu tribes people killing them for the bone trade.

Following this expedition, a proposal recommending the protection of 2500 km<sup>2</sup> area of the Hukawng Valley was drawn up by Dr. Rabinowitz on the following basis:

- The valley contains the headwaters of the Chindwin River, a major water source for the

- country
- Much of the interior contains intact wetland and terrestrial areas with large numbers of large mammal species that are rare or extinct in the rest of the country
  - There is currently no protected area in Myanmar which contains the diversity of species found in the Hukawng Valley, nor is there a protected area large enough to ensure the survival of Myanmar's large mammal species.
  - The proposed protected area of the valley is uninhabited and the local people do not object to having such areas protected for its forests and wildlife.
  - Extraction of mineral and forest products is not currently occurring within proposed park boundaries and the timber products have no significant commercial value.

The concept was presented to the Forestry Department at the conclusion of the expedition and they appeared to be supportive. The proposal is likely to be passed, making this the largest protected area in the country and one of the potentially more important tiger sites in the north.

## **2) Tiger surveys**

During June 1999 the National Tiger Team conducted a field survey for tigers at Alaungdaw Kathapa National Park, Sagaing Division. Gazetted in 1984, Alaundaw Kathapa is Myanmar's oldest park and historically supported populations of a number of large mammal species, including elephant, banteng, gaur and tiger. This was the first of up to 24 surveys planned for different areas of Myanmar over the next 2 years. The exercise served as an advanced training exercise for the team, the final field training before the team would launch their own surveys, independent of WCS trainers.

A standardized interview protocol was first used to gather information from 125 people in 25 villages around the park on the likelihood of tiger presence in and around the park. A previous survey conducted near park headquarters in December 1998 yielded no sign of tigers. Despite their former abundance, evidence for the current presence of tigers at Alaungdaw Kathapa was slim and limited to two unconfirmed reports from the buffer area near human settlements. The team decided to establish 30 camera-traps in a forty-square kilometer plot in the core area of the park, with 15 extra traps set on animal trails to the north-west, west and south reaching towards the buffer areas. Park warden U Ye Htut provided camp staff and logistical assistance for the team and he joined the survey for the first four days. U Ye Htut and his staff were very keen to participate in the survey. Domestic elephants were used to transport field equipment and a base camp was established from which daily forays were made to conduct sign surveys and establish camera-traps in the core area. Each day 1-2 teams of tiger team members and park rangers worked together to carry out the surveys, which included habitat assessments.

Intensive use was made of GPS units and maps to navigate across rugged terrain in the study area. The team's skills in planning and efficient use of time and human resources were thoroughly tested in the field. The thirty camera-traps were established in the core area plot within 5 days. Following a day's rest the team split into three to cover the remaining 45 km of trails with camera-traps and conduct additional sign surveys over a further 5 days.

The survey doubled as a patrolling expedition for the rangers, and signs of human activity were recorded and reported to the park warden. Global Survival Network through a local NGO

FREDA, is supporting wildlife conservation activities in the park by supplementing guards salaries, and providing per diems for field rations and field equipment to enable rangers to continuously patrol the park year-round.

### **3) Data analysis and planning workshop**

Films from camera-traps set in the park were retrieved during a return visit to the park in August, and were developed at a local photographic laboratory. In September 1999 Dr Tony Lynam visited Yangon to conduct a workshop with the purpose of analyzing data from Alaungdaw Kathapa National Park. The tiger team members analyzed the films and sign survey data for species richness, diversity and distribution of large mammals. No photorecords of tigers were taken nor was track or other sign of them encountered, either in the core area or on the animal trails. The survey covered 2/3rds of the park's area but tigers were absent, which suggests the strong possibility that tigers have been lost entirely from the park.

Despite this fact, other endangered large mammals were recorded including gaur, banteng and elephant, plus 15 other species of mammals, including Asian dhole, leopard, golden cat, clouded leopard, crab-eating mongoose, civets, deer and wild boar. Clearly the park is an important area for biodiversity conservation. A report is being prepared for a government publication, "Myanmar Forestry Journal" to announce the results of the survey. The government is interested in periodic briefs on the activities of the tiger team and publication in local journals will accomplish this. It is important to provide information on the status of tigers to dispell the myths about areas which were traditionally held up as important for the species but for which recent evidence is to the contrary. This will help direct conservation priorities in a country where the status of forests and landuse practices is changing continually.

The tiger team proposes to conduct tiger surveys in up to 24 areas contained in 11 forest complexes across the country during the next 2 years. Surveys in the first complex, Block A (see Map of Priority Area for Tiger Survey Project in Myanmar) are to be completed by October 1999. One area in this complex, Mahamyaing Forest Reserve, was visited during August for the purpose of interviewing villagers and conducting a rapid assessment for tiger sign. Local people reported that tigers no longer exist in the area. Logging activities in the interior of this 500+ square kilometre forest block and heavy extraction of non-forest products mean that the chance that tigers still exist in the park at low densities is a very slim one. The team will not conduct further survey work in the area, and instead moved onto Tamanthi Wildlife Sanctuary in search of tigers.

In August 1999 the team redeployed the 45 camera-traps in Tamanthi Wildlife Sanctuary. Last surveyed in 1994 by Drs Alan Rabinowitz and George Schaller, the area is known to still contain tigers, and may be a high priority site for tigers in Myanmar, although there exists heavy poaching pressure on tigers and other large mammals. Although no sign of tigers were recorded during the sign survey, local villagers reported tigers as still occurring in the park. We expect to confirm this from the camera-survey.

### **4) Monitoring activities**

The Global Survival Network (GSN), which supports FREDA, has come forward as a collaborator for wildlife conservation activities in Ahlaungdaw Kathapaw N. P. With funds

from EXXON and the David Sheppard Foundation in England, GSN has provided camera traps that can be used by park staff to continually monitor several sections of the park throughout the year, including areas not surveyed by the tiger team. The WCS Tiger Team, along with Dr. Lynam, has developed a protocol for the use of the cameras. Park rangers will commence monitoring in the park in November 1999. It is unlikely that tigers still exist in the park but monitoring of buffer areas outside of the park should confirm this. In any case the park has high value for biodiversity conservation, given the presence of three highly endangered large mammals: elephant, gaur and banteng, and should be a target for conservation activities in the future.

#### **5) Evaluation and measures of success**

During the current reporting period, several new objectives for the project were accomplished. The final field training of the tiger team was completed, and instruction in techniques of data analysis and reporting was done at WCS – Myanmar headquarters in Yangon (Objective #2). The team has formulated a set of priorities for conducting country-wide surveys for tigers (Objective #3), and has commenced field assessments at two sites considered high priority for tigers: Alaungdaw Kathapa and Tamanthi (Objective #4). The team has started organizing their field data onto electronic spreadsheets which will be developed later into a tiger information database (Objective#5). Finally, Daw Thin Thin Tun, a Ranger from the Nature and Wildlife Conservation Division of the Myanmar Forestry Department, is to be assigned part-time duties in helping the tiger team organize their tiger information database. She has basic experience with using Geographic Information System (GIS) databases, and has been selected to attend a special workshop for using spatial data in wildlife survey and research, which will be run by WCS Landscape Ecologist Dr Eric Sanderson in Bogor, Indonesia in February 2000. In 2000 Daw Thin Thin Tun will then assist the team in mapping their tiger data onto a GIS database for the project.



Photo records of Tiger Survey in Alaungdaw Kathapa National Park



Fig. 1: Tiger survey team on the way to Alaungdaw Kathapa NP. (21.6.99)



Fig. 2: Tiger survey team members setting up camera traps on the ridge between Natgyi and Khaungtin Chaungs of Alaungdaw Kathapa NP. (26.6.99)

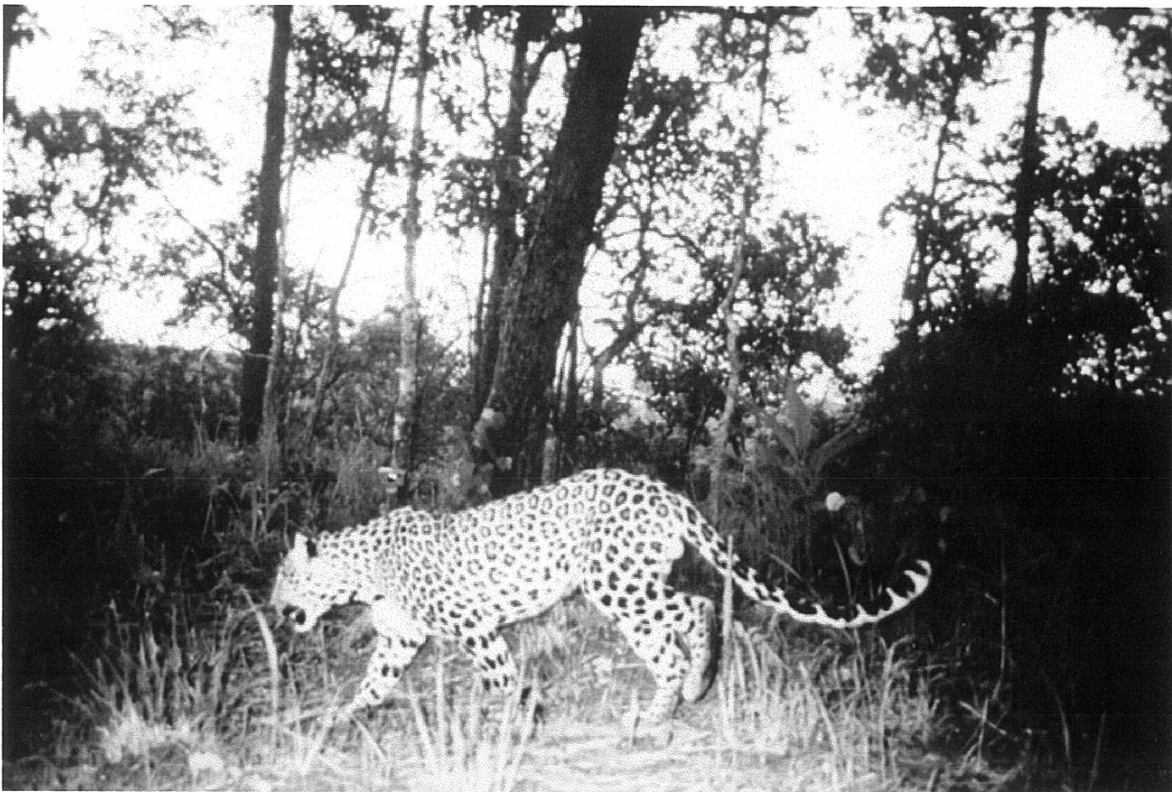


Fig. 3: A leopard ( Kya Thit ) caught with the camera trap, near Mindon Camp of Alaungdaw Kathapa NP. ( July, 99).



Fig. 4: A banteng ( Saing ) caught with the camera trap, on the Pyabontaung Range of Alaungdaw Kathapa NP. ( July, 99)