

FINAL REPORT – July 15th, 2000

PROJECT NAME: Anti-Poaching and Education in Myanmar

PROJECT #: 98-093-070

GRANT PERIOD: 10/01/98 to 09/30/00

REPORT PERIOD: 1998 thru 2000

GRANTOR: NFWF from the Save the Tiger Fund

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GRANT AMOUNT: \$42,565

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Attached is the final report, covering the grant period for the Project Proposal received by NWWF on July 15, 1998.

PROJECT SUMMARY

The Problem

Wildlife poaching and trade in Myanmar has long been recognized by conservationists to be a problem not only for Myanmar's tigers and other wildlife, but also for wildlife in the region. Due to political isolation, warfare, crime, and poverty, commercial and subsistence poaching in Myanmar has significantly reduced populations of tigers, some prey species, turtles, and other wildlife. Myanmar has also become a major conduit for wildlife trafficking in Asia, impacting populations in neighboring countries by facilitating trade.

WildAid's Response

In late 1996 and early 1997, WildAid (then called Global Survival Network) at the request of the David Shepherd Conservation Foundation (DSCF), and in coordination with the Burmese NGO "FREDA," developed a program called Shen Than Yay (Burmese for Surviving Together) to achieve several goals:

1. enhance wildlife conservation efforts in this isolated country;
2. protect a population of tigers reported by local authorities to exist in a park called Alaundaw Kathapa National Park (AKNP).

AKNP presented an opportunity to create a working model to develop wildlife protection measures in Myanmar. AKNP is a lush, 1,000 square kilometer forest in Sagaing Division, not far from the borders of India and Bangladesh -- well within Myanmar's non-warring zone. The exact geographical coordinates of this park are between 94 15° and 94 45° east longitudes and 25 0° and 22 45° north latitudes. This jungle forest was turned into a national park in 1985 with the help of the United Nations FAO. It was all but abandoned by 1990 because of political instability. AK Park is home to a wide array of flora and fauna, including leopards, civets, elephants, Himalayan bears, Malayan sun bears, clouded leopards, golden cats and a wide array of other species.

AK Park is also home to a famous Buddhist shrine and a small group of monks who care for the shrine. As legend goes, about 2,400 years ago a Buddhist Saint, Alaungdaw Kathapa traveled from India and settled in this forest, where he lived and was eventually buried. Since his death, villagers from Myanmar's countryside have visited his burial site and shrine once every year. Besides sporadic visits, today about 30,000 or more Burmese make an annual pilgrimage to AK Park during the spring when they take meditation from the monks who live next to the shrine of Alaungdaw Kathapa year round.

These monks have joined forces with FREDA, WildAid, and DSCF to cultivate local community support for wildlife conservation, reminding them of the basic Buddhist precept not to kill, and distributing materials about the spiritual synergy between wildlife and people. The message is that we can all survive together: Shen Than Yay.

Surviving Together is a comprehensive program that breaks down into 4 parts:

- Anti-poaching assistance to AK Park forest guards: equipment & training;
- Agricultural assistance to local villages in the AK Park buffer zone (training them in alternatives to slash and burn farming techniques and providing them seeds for fruit trees);
- Environmental/wildlife education during the annual pilgrimage, and during the rest of the year in local, make shift primary schools. Local monks assist in the educational effort using materials designed by FREDa and the monks, and paid for by WildAid, DSCF and Save the Tiger Fund/Exxon Mobil. (photo of such efforts provided to David Phemister in June 2000).
- Science: forest guards conduct a systematic wildlife survey, using plaster pugmarks, and physical sightings. Information is centralized and analyzed. Due to mis-readings of pugmarks (thought to be tigers when they were probably leopards), survey information is now shared with WCS-Myanmar's expert team.

Project Goals

The main objective of the Shen Than Yay project is to help FREDa and AKNP rangers combat poaching of wildlife and the illegal trade in wildlife in and around AK Park, and to help other protected area staff do the same by acting as a prototype. AK Park is being protected for its own wildlife, but it is also being developed into a model conservation project and into a badly needed wildlife conservation training ground for the Burmese.

The general means toward this end are to provide support in the areas of anti-poaching (training and equipment), buffer zone management (agricultural assistance and education assistance), environmental/wildlife education, and science.

RECENT HI-LIGHTS AND OUTPUTS

Special News

1. The Myanmar government has agreed in principle to a much needed ranger training for staff from AK and 2 other protected areas for early 2001, to be led by WildAid, in cooperation with US Fish and Wildlife Service, WCS, and FREDa.
2. FREDa is now on email and beginning to network internationally for financial aid and training support;
3. WildAid and FREDa recently finished a wildlife trade survey in Myanmar, which identified major channels of trade through the country. Results are being shared with local and international authorities.
4. The Forestry Department has recently provided a special fund amounting to Kyat 3.4 million (around US \$ 10,000) for the installation of radio communication network in AKNP. Three main stations at Yinmarbin, Kabaing and Chaung-ma-gyi (near the elephant camp) were already built and they have six walkie-talkie sets to communicate between the

patrolling parties. This development will certainly improve the quality of patrolling and effectiveness of anti-poaching activities.

Recent Wildlife Sightings

Aside from no evidence of tigers, AKNP appears to have a healthy population of many other species of fauna. This has been confirmed from camera trap surveys conducted by WCS, and by actual sightings by ranger patrols. For example:

Two AKNP patrolling groups have reported the finding of footprints of Tiger/Leopard cats at Khaung Tin Chaung and Pyabon taung. FREDa has suggested to the AKNP Warden to identify scientifically whether the footprints belong to the tiger or leopard and to share the finding with WCS. One group also sighted a bear at Thanpaya Chaung. All the patrolling parties found several footprints of wild elephants between November 1999 and May 2000 along Khaung Tin Chaung. Maung Shwe, and another patrol sighted a couple of gorals on the ridges of Mahu Legyi at the end of last year. Both barking deers and sambhur deers are found frequently; so are wild dogs and wild boars.

In January 2000, Ranger Hla Thaung and party sighted 2 female barking deer along Khaung Tin stream. Security Officer Thaung Pe and party reported sightings of 15 elephants, 5 sambhur deer and a snake along a stream. Ranger Chit Po and party reported the sightings of one snake along Mone ridge, 7 monkeys along the Mahu range and some fish in the Pwe-gyi stream. A rare sighting was that of a banded krait swallowing a green snake near the Mone stream.

During February 2000, Ranger Tin Cho and party reported sighting a pair of hornbills, one eagle along Kyein stream and some fresh water fish (cuvier) along Kya-ma-lay stream. The patrol also saw the skeleton of a barking deer near Zwe-Htone stream.

In March, the party led by Ranger Hla Thaung reported sighting several hornbills along Ngan-Boke stream, several grackles and green imperial pigeons along the same stream. One male bear, the skull of a gaur and several species of fresh water fish in Thazin-pin and Ngan-Boke streams were also observed. Senior Ranger Htay Win and party sighted one barking deer at Khaung Tin Wa, one crab eating mongoose at Kyetma-Oak stream and a group of leaf monkeys (*Presbytis* species) near the same stream.

In view of such numerous population and diversity of prey species in the Park and the sustained protection by the wildlife staff (with the support of WildAid/DSCF), tigers could rebound in AKNP if any exist or live near, or possibly if they were re-introduced.

False Alarm

The sighting of a tiger, by one of the employees of the Extraction Department of Myanmar Timber Enterprise was reported to a member of FREDa assigned to AKNP. The tiger was said to have been sighted in compartment No. 4-A of Thingadon forest reserve – which is outside the buffer zone – on 27 February 2000. The report, relayed to FREDa, said that a group of hunters had given chase to the tiger and that the Park Warden U Ye Htut, had also sent a patrol after the hunters. However, later news revealed the report to be false and that the supposed tiger turned out to be a leopard.

PROGRESS TO DATE

WildAid has encouraging and discouraging news about this program:

1. Patrolling has continued to evolve and improve, aided greatly by the implementation of a radio system, a new patrolling strategy, and the GPS's provided by WildAid.
2. The AK Park program has served as a stimulant for the government authorities to increase their attention to wildlife matters, resulting in more financial contribution in the form of installing new radio communication network.
3. AK Park serves as a model program for protected areas with the country to emulate, and has been chosen as the site for a Ranger training to take place in March of next year.
4. Wildlife surveys by Wildlife Conservation Society and internal monitoring of AK Park continue to confirm that the park is an important area for biodiversity conservation.
5. The WCS survey, camera traps, and field reports from patrolling parties still fail to record the presence of any tigers.

More specifically:

Anti-Poaching Patrolling

The Park Warden has issued instructions to the rangers to adopt a new patrolling system to cover a wider periphery in the course of their anti-poaching activities. According to the new system, the park area was split into 3 zones and these again were divided into A and B compartments. A range officer, who was in overall charge of the patrols, was assigned the task of planning the actual monthly patrol routes for the parties. The general pattern to be adopted was as shown in the accompanying map (see attachment).

During October and December 1999 and during February and March 2000, 2 patrolling parties for each month were deployed for anti-poaching activities. During November 1999 and in January 2000, 3 patrolling parties were deployed for anti-poaching activities. The areas for all of these activities were staggered so as to cover as much of the park as possible.

Along with refinements to the anti-poaching patrolling zones, a new system relying on the radiotelephones, and smaller armed groups, consisting of 3 to 5 rangers, was implemented. Implementing a new approach in an effort to cover the roughly 620 square miles of mountainous forests that make up AK Park, the patrols nearer the AK shrine were sent out for short periods, with larger groups taking charge of outer areas for longer periods. The introduction of the radiotelephones, and enhanced communication between the patrolling parties themselves and the command post in the park should considerably improve the effectiveness of the anti-poaching activities.

Patrolling staffs are in good health and their moral remains high. The sightings of wildlife populations are reported regularly. Since 2 GPS units were been donated by WildAid last year, FRED A has advised the Warden of the Park to promote the use of GPS in all aspects of observations i.e., sightings, footprints, and evidence of poaching.

Community Outreach

U Kyaw Khin, an agriculture graduate, has been recruited and posted in charge of the tree nursery established for local communities to use for free. Recall that FREDA conducted a training for village leaders, chosen by local monks, on how to develop environmentally friendly and sustainable agriculture, including kitchen gardening, and fruit trees. So far, 13,157 seedlings of 16 multipurpose trees species and fruit trees have been successfully raised at the project's nursery, which is just outside the park, and these seeds are now ready for distribution to the villagers for community development and for planting at the strategic locations in AKNP core zone now.

The following seedlings have been raised up to 31st March, 2000 in the nursery and will be distributed to the villages during the rainy season :-

Sr. No	Common name	Scientific name	Total Nos. raised	Nos. ending last month	Planted during the month	No. dead or lost	Nos. ending March 2000	Percentage survived
1.	Thayet (Mango)	<i>Mangifera indica</i>	2360	1812	-	-	1812	76.78
2.	Tanyin	<i>Pithecellobium lobatum</i>	890	564	-	-	564	63.37
3.	Yinma (golden mahogany)	<i>Chukrassia tabularis</i>	1000	793	-	-	793	79.30
4.	Nanthabyu (scented wood) (sandal wood)	<i>Santalum album</i>	1300	1138	-	-	1138	87.54
5.	Tamar (neem tree)	<i>Azadirachta indica</i>	1300	959	-	-	959	73.77
6.	Thanpaya (lime)	<i>Citrus medica</i>	496	143	350	4	489	98.58
7.	Shauk (lemon)	<i>Citrus limon</i>	966	240	720	22	938	97.11
8.	Marlaka (Guava)	<i>Psidium guajava</i>	1090	1050	-	18	1032	94.67
9.	Magyi (Tamarind)	<i>Tamarindus indica</i>	1950	1630	-	3	1627	83.43
10.	Auzar (Custard apple)	<i>Annona squamosa</i>	750	732	-	-	732	97.60
11.	Line-ma-kyu	-	200	167	-	6	161	80.50
12.	Seinpanpu (gold mohur)	<i>Poinciana regia</i>	150	98	50	1	147	98.00
13.	Hninzee (Rose)	<i>Rosa indica</i>	50	49	-	2	47	94.00
14.	Shaukpan (Pomelo)	<i>Citrus decumana</i>	55	54	-	1	53	96.36
15.	Sein-ta-kyu (Yellow bells)	<i>Tecomella stans</i>	500	-	500	-	500	100.00
16.	Mar-tar-kut	-	100	-	100	-	100	100.00
		Total	13157	9429	1720	57	11092	84.30

These include 9 species of fruit trees, one specie bearing small fruits, a favorite with the birds, and other multi-purpose shade bearing trees.

FREDA Professional Assistant U Cythu Lwin has resigned, but a senior forestry graduate, U Kyin Khan Khan has been appointed in his place. He has been given instructions as to how he should perform extension activities in the buffer zone villages and how to collaborate with AKNP wildlife staff for more effective conservation of wildlife in the Park.

Results of Monitoring Activities by AK Park Rangers

AKNP officials report that because of the frequency of patrolling in various parts of the Park, timber and wildlife poaching, fish poisoning and illegal orchid collection have been considerably minimized. WildAid believes this to be true to a large extent, however, due to the lack of base-line data on human traffic and wildlife populations in the park, the degree to which poaching has reduced cannot yet be measured.

One problem around the buffer zone was the debarking of tanning bark from standing trees. In most cases, trees were felled and debarked for sale to the leather tanning works at Monywa and Kani towns. Though the trees felled were left in the park, this nevertheless poses problems of habitat destruction and degradation of forests in the long run. It is apparent that other income generating activities would need to be determined and effective law enforcement carried out to help ease the problem. It was learned from the Park Warden that these illicit fellings took place in the absence of the patrols while they were reporting back to the command post. To overcome this setback, the warden is arranging to have one team patrolling this area when others are at the command post.

Encounter with Poachers

There were few instances of intrusions into the park during this reporting period. Ranger Tin Cho and party in December had detected some signs of timber poaching, with a few saw pit sites identified in the compartments 12 and 13 of Pindaungyi reserve forest, which is in the border buffer zone area within the Park boundary.

During the period from January to March 2000, except for fish poisoning with toxic bark in some parts of the Patolone stream, the patrols did not encounter any poachers. January to March is a cool, dry season when the pilgrimage to the shrine is the heaviest. It is the time when poachers usually avoid hunting game. However, illicitly felled trees with their bark removed were found during these patrols. It is believed the bark is used for tanning.

Cooperation with Buffer Zone Communities

FREDA as well as AKNP park staff have realized how important it is to associate and cooperate with the buffer zone communities. Visits to those communities, educating them, helping them generate extra income, and providing technical know-how will eventually improve the quality of their life. There is also the need for Park management to win the hearts of the village communities and to advocate the value of living in harmony with the wildlife environment.

FREDA Professional Assistant U Kyin Khan Khan met with the villagers of the buffer zone area and has so far conducted a socio-economic survey in nine villages. The following baseline data has been collected:

- (1) Location with map references;
- (2) Households and population;
- (3) Ownership of crop lands and percentages;
- (4) Number of domestic cattle and gender of the village population;
- (5) Educational standards and number of students in each class gender-wise;
- (6) Health status and information;
- (7) Fuelwood requirement and pattern of stoves;
- (8) Non-farm income generating activities and the forest environment;
- (9) Information on wildlife;
- (10) Interest of villagers for growing fruit trees;
- (11) Request of villagers for the community development.

Slow-burning A.1 stoves, manufactured by the Yezin Forest Research Institute, which are credited with a saving of around 40% of the fuelwood, are to be distributed to the villagers. Twigs and small branches, which are easily collected around the villages, are to be used with these stoves.

Also, FREDA has purchased school textbooks and stationery for distribution to about 950 students of the primary and middle schools in the area.

SUMMARY AND OPPORTUNITIES

Developments

Myanmar's biodiversity is said to be unparalleled in the Asia-Pacific region. The country's diverse habitats - from icy Himalayan mountains in the north, to the rain forests in the south - have been stated as home to an incredible 7,000 plant species, 300 known mammal species, more than 400 species of reptiles and amphibians, and 1000 bird species. However, as the result of population growth, degradation of forests due to human encroachment, infrastructure development and poaching during the past decade leaves this status in doubt today.

The WildAid / DSCF/ FREDA programme, "Shin Than Yay" (Surviving Together) is a significant contribution towards wildlife conservation in the AKNP and partly towards biodiversity conservation in Myanmar. In fact, as a pioneer initiative between local and international NGOs, the success of this collaborative effort could be considered as a milestone in wildlife conservation in the country. WildAid and FREDA believe that the evidence of prolific wildlife in the AKNP and the positive results achieved through our joint collaboration, highlights the need for a sustained effort in protecting the status of wildlife in the park, and to share lessons learned with staff from other protected areas around the country.

The support provided by STF has been fruitful, not only in the continued protection of diversified wildlife in AKNP, but also in serving as a stimulant for the government authorities

to increase their attention to wildlife matters. The result has been more financial contribution from the government in the form of installing new radio communication network.

In view of the fact that the WildAid / DSCF/ FREDA program “ Surviving Together” has been successful and highly appreciated by the grassroots level community, the wildlife staff in the field, and the government authority concerned, similar programmes may be extended to other critical wildlife sanctuaries like Htamanthi in the north, Shwe-Oo-daung in central Myanmar near Mandalay, and Myinmolekka’s high valued forest in the south near Kanbauk. The decision depends on the objective and scale of funding support by international NGOs and the views of the Forest Department administration.

Camera trap and pugmark/observation surveys of tiger have been recorded in Htamanthi and Myinmolekka, by WCS and by Mr. Alistair Monument of Myanmar Premier Petroleum Limited (a British firm operating off-shore drilling and laying pipe lines across the Myinmolekka area to Thailand).

Problems

Last year, unusually heavy rains caused soil erosion in the Patolon and Taungdwin reserves. Soil cover in the form of grass, herbs or trees would help to reduce the erosion.

On the eastern boundary of the Park, Yargyi and 10 other villages (Seywa) in the northern Portion of the Park, many of the village cattle have been grazing in the Park due to the existence of the temporary access roads, thus, restricting the habitat for the wild population. There is the danger of some cattle with infectious disease spreading to the wildlife as well.

Control or restriction of grazing of domestic cattle is an issue faced by the Park management. There is the need for an extension wing to concentrate in this area of the Park.

The villagers in the buffer zone had to face an unexpected problem during the first quarter of 2000. At the insistence of the village authorities, they were obliged to buy coal briquettes. However, due to high transportation cost, they never collected the briquettes they paid for. Also, the briquettes were not popular because they were difficult to light and they emitted a lot of smoke. Another factor was that fuel wood in the form of small branches and twigs were easily collected from around the villages.

NEXT STEPS

Fulfilling Potential

AK Park will be the site of a WildAid ranger-training program to held in March of 2001. Rangers from AK Park and from other protect areas in Myanmar will be brought together to receive hands on instruction to enhance the effectiveness of the day to day management of protected areas. Special Agents from the U.S. Fish & Wildlife Service will join WildAid, FREDA and WCS to provide specialized wildlife enforcement training, as well as training in monitoring and outreach.

WildAid recently finished a wildlife trade survey in Myanmar, which identified major channels of trade through the country. It is worth noting that in the area of Mandalay, wildlife enforcement has increased recently, for how long we do not know.

Since tiger survey training in June 1999, several park rangers who participated in the survey have acquired some experience and expertise in techniques of wildlife survey. Led by the Park Warden U Ye Htut, these rangers will form a survey team that will detect track and sign and employ camera-traps to survey areas not yet covered by the tiger survey team, and also monitor selected areas already surveyed. Surveys will be conducted three times during the year; rainy, cool and dry seasons, and will include all habitats, including deciduous, indaing, and riverine evergreen forests, degraded and undisturbed.

It is hoped that information from the study will furnish a fair idea of the presence of the various species of wildlife other than those already known & help in determining better management needs for the park. It could also provide basic information on wildlife distribution for future ecological studies.

Camera-traps will be set up along transects covering ridgetops, trails, streambeds and roads in buffer areas surrounding the park and positions changed each month. Rapid assessments of track and sign will be done in these buffer zone areas and in certain additional areas already surveyed during the tiger survey in June 1999. If possible, numbers and species lists of large mammals will be determined from camera-traps and track and sign surveys.

The first phase of the programme is set to obtain records of wildlife whose presence is not commonly known. The second phase will record animals with known presence.

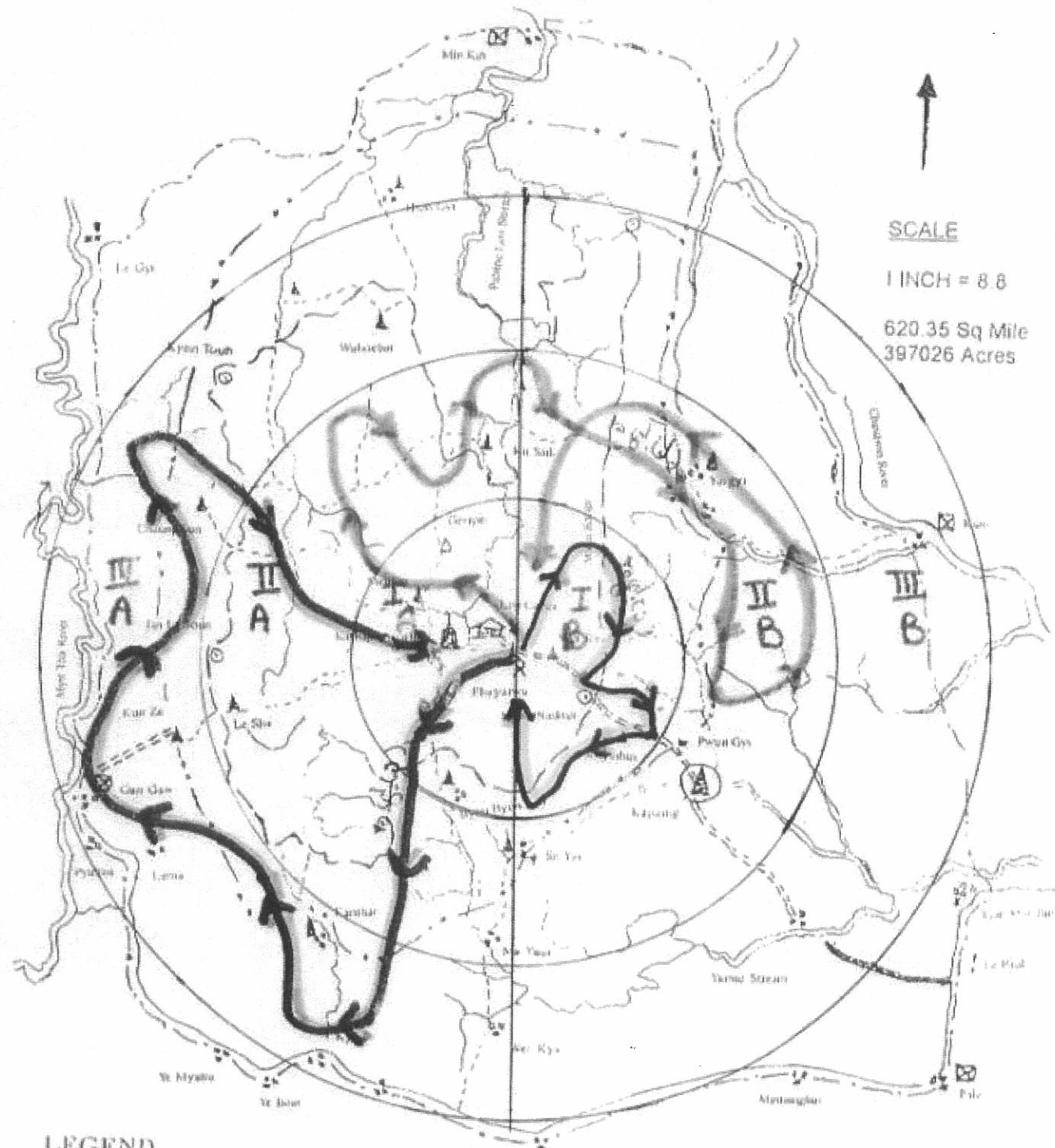
Preliminary Results

The outcome of the first venture has been quite encouraging. Trap camera shots of marbled cat (*Pardofelis marmorata*), rhesus monkey (*Mocaca species*), barking deer (*Muntiacus muntjak*), porcupine, wild cat, large Indian civet, gaur (*Bos gaurus*), serow (*Capricornis sumatrensis*), wild boar, and black bear (*Malayan sun bear*) were just received recently from AKNP.

PHOTO & OTHER ATTACHMENTS

(see attachments)

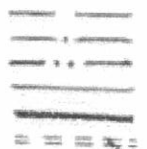
Alaungdaw Kathapa National Park Management Map



LEGEND

- 1 Park Boundary
- 2 Administrative Boundary
- 3 Buffer Zone Boundary
- 4 All Weather Tarrad Road
- 5 Metalled Road
- 6 Dry Weather Road
- 7 Foot-Path
- 8 River, Stream

- 9 Township Office
- 10. Main Patrol Station (Payawa)
- 11. Base Camp (Kapaing)
- 12. Patrol Station
- 13. Guest House (Log Cabin)
- 14. Kathapa Shrine
- 15. Town / Village



(Signature)

16. Sample patrolling route for groups

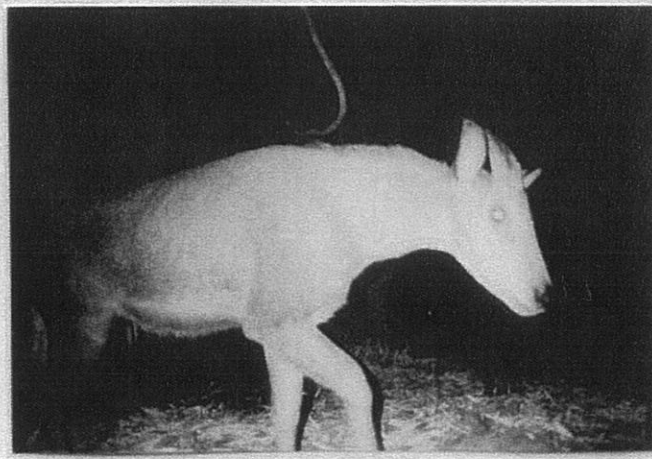
17. Sample patrolling route for group

RECORD OF WILDLIFE IN AKNP OBTAINED FROM TRAP CAMERAS

8 March to 20 April 2000



GAUR



SEROW

RECORD OF WILDLIFE IN AKNP OBTAINED FROM TRAP CAMERAS

8 March to 20 April 2000



WILD BOAR



BLACK MALAYAN SUN BEAR