



Claudio V. Padua
SHIN Q1 13 Conjunto 8 Casa 5
BRAZIL
Phone ++55 61 3685646
Email cpadua@ipe.org.br

Mary C. Pearl / Andrew Taber
460 West 34th Street, 17th Floor
New York 10001
USA
Phone ++1 212 3804460
Email pearl@wildlifetrust.org

Raman Sukumar / Joshua David
AERCC (division of ANCF)
C/o Centre for Ecological Sciences
Indian Institute of Science
Bangalore 560012
INDIA
Phone ++91-80-22933102
Email joshua@asiannature.org
nature_naturally@yahoo.co.in



Issue 2
December 2006

NATUR(E)ALLY

NEWSLETTER OF THE WILDLIFE TRUST ALLIANCE

FIELD NEWS

- Conservation Heroes: Saving Tamarins By Canoe 4
- Conservation Biology Of Pampas Deer In Uruguay 6
- Dynamics Of Disease Transmission: Update From The Pontal De Paranapanema 7
- Pathbreaking Journeys: Update From Wildlife Trust 8
- Collaring To Conserve Asian Elephants In The Northern Bengal Landscape 10



NEWS & VIEWS 15

PROFILE

The Cerrado Musings 17

MILESTONES 21

ANNOUNCEMENTS 23

COLLARING TO CONSERVE ASIAN ELEPHANTS IN THE NORTHERN BENGAL LANDSCAPE

N. Baskaran

Asian Nature Conservation Foundation

The mellow sunshine played hide and seek with the trees as the denizens of the jungle went about with their afternoon siesta. The quite sights and sounds of the woods exuded warmth as the sun nudged towards the horizon to mark the end of another day. For the forty year old female Asian elephant it was just another day in the jungles of Dam Dim estate, west of Mal Bazaar in Jalpaiguri district. She did not care for the strange shadows and sounds around her. She was used to people as she constantly raided the neighboring cultivations. A gentle thud is all she heard, but the sharp prick of the dart on her rump sent shivers down her spine. Before long she slipped into a gentle slumber. The radio collaring team swung into action, fitting a satellite collar around her neck in record time. But time was running out, and the collaring team could finally breathe easy when the elephant got onto its feet and resumed feeding on the luscious greens. The Dam Dim estate is situated in the western part of the Northern Bengal landscape (Gorumara National Park and adjoining areas) where there is peak crop depredation.

Northern Bengal Landscape: Too small for too many

About 1500 km to the east of Delhi lies the Northern West Bengal region. Extending over an area of 2000 km², this is a vital area for conserving Asian elephants and biodiversity. From the foothill forests of the Eastern Himalayas, to the large swathes of terai grasslands interspersed with tea estates and large patches of savannah woodlands with towering trees, this area is blessed with a plethora of vegetation and wildlife. This breathtakingly beautiful region is crisscrossed by some great rivers like the Teesta and the Torsa and their broad pebble beds.

Numerous human settlements, cultivation and tea estates have highly fragmented the forests of this region leading to shortage of living space for the elephants, bringing them into constant conflict with people.

Although Elephants are worshipped as Ganesha, the elephant-headed god, the traditional tolerance among the farmers is waning. For the poor farmer in these landscapes, his survival takes priority over his religious beliefs. Small farmers lose an entire year's supply of

food grains in a single nightly raid by these elephants. Elephants finding the high energy crops very tempting leave their safe confines and venture out for some bellyful adventure. Severe human-elephant conflict in the region has resulted in the loss of agricultural crops and property worth millions of rupees as well as several human lives each year. On an average there is a case of manslaughter every week in this region. Many elephants are also killed in the ensuing struggle.



The Asian Elephant: Too big for too little

The seasonal and annual requirement of space and vegetation type by elephants is an important consideration in minimizing human-elephant conflict as habitat loss has been a major factor influencing crop raiding by elephants. Although the elephant has a large appetite, it suffers from poor digestion, and hence needs a large habitat to stay alive. They consume more than 200 kgs of food every day and their home range stretches from a few hundred to thousand square

kilometers of forest. When the elephant gets isolated into small pockets of forests without adequate food and water, it does the next best thing to starving - it raids the neighbouring cultivation.

A radio-telemetry study of elephants in West Bengal is providing critical information on the seasonal use of habitat, usage of corridors and crop-raiding patterns. Thirteen elephants have been collared in the last five years and the study has shown the elephants to move over an area of up to 1000 square kilometers each year, thus indicating that the maintenance of large, contiguous tracts of forest and grassland habitat is important to ensure their long-term survival. The location data of the elephants also give us important information on the habitat use and preference, which help in prioritizing specific areas for protection and habitat enrichment. Out of the thirteen elephants (seven female and six male), four elephants have been fitted with GPS collars that give us the GPS locations on a day-to-day basis, while the remaining elephants have been fitted with VHF collars. Of the four GPS collared elephants, two are adult females, one is an adult male and the other is an adult male without tusk [makhana].

We have been using the GPS telemetry technique to monitor the movement of habitual crop raiders on a day-to-day basis. The centre is also developing an 'early warning system' to alert wildlife managers and villagers when marauding elephants move close to settlements and cultivation. The movement of four satellite collared elephants is monitored with the help of six satellites of the ARGOS network. The satellite collars are designed with an additional VHF transmitter apart from GPS transmitter. In order to conserve transmitter batteries, the VHF transmitter [GPS] is programmed to function during the day light hours and the GPS transmitter functions [obtain location] during windows of eight hours alternating with a switch off for the intervening period. As a result, the satellite collar is able to obtain three locations per broadcast day. The collar is also designed to store the location data with information on the location, temperature of the surroundings, elevation and activity of the animal, and programmed to broadcast these every day or on alternative days to the ARGOS network that in turn transmits the data to our Centre through the Internet.

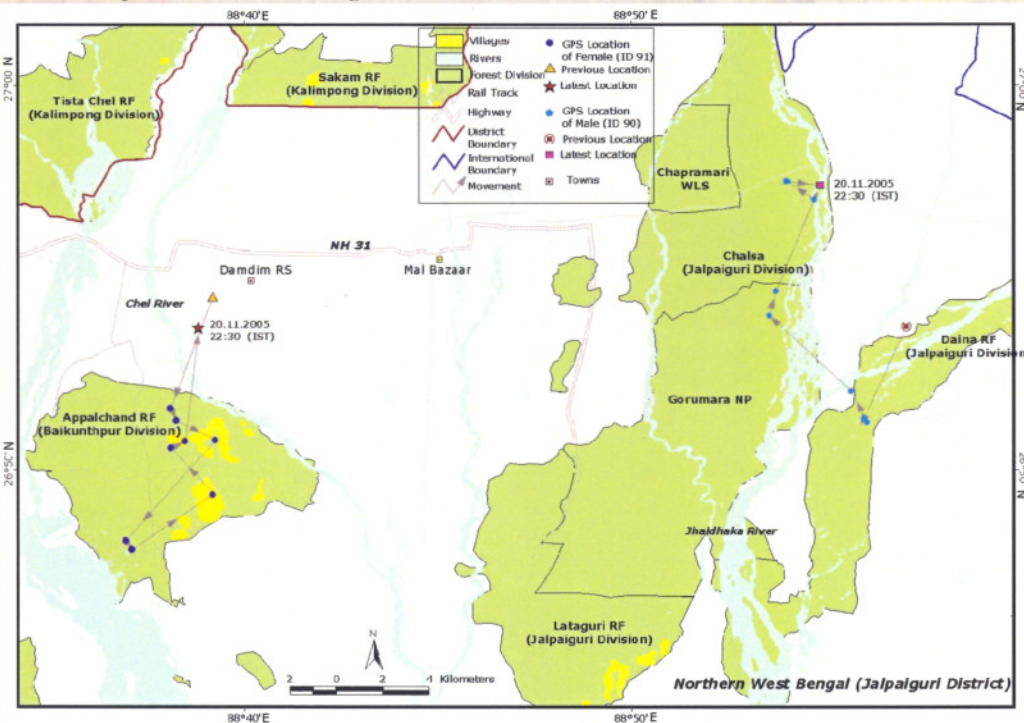


The data obtained from the ARGOS is de-coded and the locations plotted using GIS software. The resulting maps are being sent to the park managers through email on a regular basis (3-4 times / week) in order to alert them about the possibility of the elephants raiding the nearby villages. The conflict is mitigated to a large extent when unnecessary encounters between the elephants and humans are avoided. Based on their reading of the movement of the elephants they alert their staff, the “anti-depredation squads” and local villagers for pre-empting crop raiding.

Wildlife officials have expressed great satisfaction with the progress of this experiment. The idea is to have the ability to track notorious elephants on a day-to-day basis so that the wildlife manager would have the option of alerting his staff and local villagers if any of these elephants were to approach a settlement for crop raiding (that also may result in manslaughter).

In a relatively fragmented landscape, it is also important to identify the possible use of specific corridors by elephants in the course of their seasonal movements. Corridors play a vital role in connecting important landscapes that are crucial for the long-term survival of the species.

By conserving the elephant we will be ensuring the preservation of large forest tracts, which will ultimately benefit other species and mankind as well. As for Dami, she continues to roam the vast jungles of the Northern Bengal Landscape a free animal. Conservation technology has made it possible to keep her away from human settlements and cultivation, a great step towards minimizing human-elephant conflict in the region.



NEWS & VIEWS



SKYPE IS NO HYPE

Free internet telephony that's highly practical and user-friendly

Joshua David
Asian Nature Conservation Foundation

Skype is a very useful and no-cost communication tool to the Alliance members. A simple and downloadable software, it allows you to make unlimited free telephone calls and chat on the internet from most computers and operating systems. The service is free and is available in 27 languages including English, Spanish and Portuguese. Launched in 2003, more than 59 million have registered to its free services and at any given time more than 3 million people are using skype. I think it is a wonderful tool for the alliance members to be in constant touch with each other. This free service also enables conference call among up to four users.

There are also other services in Skype that help you to call regular phone lines, enable others to call you on your unique Skype telephone number as well as voicemail when you are not on the phone. All you need to do is download the software from the following site and register yourself. Besides the internet connection, the only other thing you require is a Personal Computer microphone and speakers or an affordable PC headset.

It will be wonderful if all of us register to this service and hit skype every time we want to meet in cyberspace.

NEW POSTGRADUATE COURSE IN CONSERVATION BIOLOGY

Pablo Bordino

I have had a meeting with the authorities from the UCA (Universidad Catolica Argentina) and they are interested in developing a postgraduate course in Conservation Biology or any other related discipline. The idea to develop a new postgraduate course was around my head during our meeting in Brazil. Hence, the UCA was appropriated because AquaMarina is just trying to sign an agreement of cooperation with them as they are modifying their curricula. I will also try to contact two other Universities to know the level of interest they have. It was perfect to have the WTA brochures in my hands during the meeting to explain to them that we are part of an international alliance. It gave more power to our presentation and helped to have more credibility. I expect to have a chance to tell you that a new postgraduate course on CB is up and running in Argentina the next time when we are all together, and also invite you all as professors of the course. I will keep you all updated.