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#### Friends of Elephants - Origin & Objectives

The support we received while organizing the program 'Elephant Enigma' in January this year (2014) motivated us to initiate an informal group called FRIENDS OF ELEPHANTS. In our experience, there are small things (i. e. Lots of Gods of Small Things) that could be done to make a difference in the Asian Elephants' conservation and welfare. Providing technical support in conducting science, conservation, welfare and educational programs on elephants, empowering forest watchers and help in providing educational support to their families, generating resource in helping the mahout's family (including their children's education), efforts to motivate mahouts to treat their elephant with better care, conducting workshops on elephant conservation and welfare, are some of the conservation and welfare initiatives, that FRIENDS OF ELEPHANTS proposes to involve itself formally or informally.

If you wish to be a part of this informal group and share your time (even a small portion); we could connect ourselves by regular updates, events on elephant science, conservation and welfare, share publications, photos, videos, news items of the species or we could even attempt to conduct a course on elephants (for various levels of people) which will take care of research, conservation and welfare of the species.



Thanks to a friend who pinned Friends of Elephants Newsletter at Friendship Point near Rangasthala - Rangoli Metro Art Centre



Onlooker gathering details of the event

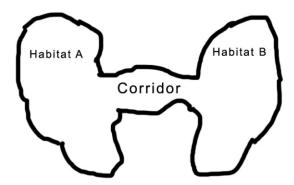
# "Elephant Roots" - Defining elephant corridors, routes and habitats

'Elephant Roots' was the second program conducted by Friends of Elephants on the 31st May 2014 to understand the various aspects related to elephant habitat, corridors, migratory routes and elephant habitat usage patterns.



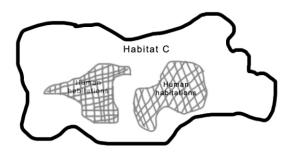
Distribution of resource materials to the audience while they entre the venue

"Elephant Corridor" is defined as 'a narrow path' that connects two different elephant habitats. This could be a thin natural forest cover connecting two of them. This narrow path could also be of cultivated or forested or non-forested private lands. Only this narrow path facilitates movement of elephants across these two elephant habitats.



Pictorial representation of an "Elephant Corridor"

If a given habitat is seasonal, for e.g. during dry season trees in some of the prime elephant habitats shed their leaves, there is scarcity of water resources and the food becomes unpalatable. This triggers elephant to move to the other habitats. If the movement is not facilitated, the elephant cannot survive in a forest, where the seasonality does not fulfill their biological needs. This, in addition to becoming a challenge for their survival, may also force the elephants to move out of the habitat and move into human habitations. The narrow path is very crucial and such paths are to be identified, acquired, monitored and managed.



Pictorial representation of an "Elephant Corridor"

Main threats for some of the elephant corridors in India or elsewhere are the presence of human habitation within or nearby, railway and road networks, factories, irrigation canals, agricultural lands, reservoirs, dams, coffee, tea and other commercial plantations, labour colonies, army firing ranges, religious structures and others. These anthropogenic activities cause elephant populations to be fragmented and isolated.

"Elephant migratory route or the path" found within or across habitat, is very different from the corridor, for e.g. if the animal has to move to explore water resources, they may follow a specific route to reach the water source within the habitat, not essentially moving to the nearby habitat using the narrow path (corridor). Many such routes may be available within the habitat, which may be connected or not connected to the habitat by a corridor.



Pictorial representation of "Elephant Routes"

**"Elephant Habitats"** is defined as a large intact vegetative cover with grasslands, forests (of different types) and water sources with no human habitation or developmental activities within. There are many habitats that may be connected or not connected by corridors.

"Political & geographical boundaries" The movement of elephants from one state to the other state or one country to another country may be confused as a corridor. The political boundaries of given habitats may be different from the geographical boundaries. The elephants, for e.g. move between Karnataka to Kerala, Kerala to Tamil Nadu or India to Burma, India to Nepal and India to Bhutan.



Map showing political boundaries of different countries

The state or the country boundaries are imaginary lines. They may or may not have any influence on the elephant movement. Elephant migration across state or country, even if they are imaginary lines, but come under different political or administrative systems (of states and countries), calls for an understanding of the elephant movement across these two different jurisdictions.

"Elephant habitat in North East (NE)-India and Burma" The elephant habitat that falls within the political boundaries of North-India and Burma, is politically and geographically very interesting to explore. The habitat mosaic has different landscape elements and features of deep slopes, valleys, hills and mountains clothed with dense primary forests, and are also a source of major rivers. The River Brahmaputra and its tributaries play a very important role in forming a landscape mosaic here. As the rivers often change their course, a mosaic of grassland ecosystems is formed. Here the water content and water holding capacity of this ecosystem is very high, which may not permit the seeds from trees to get established.

The grassland ecosystem extends up to the foothills, which gives rise to foothill forests. These foothill forests further extend as a forest within the chain of hills, followed by the inner Himalayas and the Greater Himalayas

From the grasslands to the first part of the inner Himalayas is a very crucial elephant habitat. Within the grasslands, the short grasses and the tall grasses form important food and shade resources for the pachyderms (Elephants and Rhinos).

The tall grass is used as shelter during the peak hot hours and in the early mornings and late evenings they can explore the short grasses for their foraging requirements. When the water level increases and creates flood like situations, or grasslands are burnt due to forest fires or grasses become unpalatable, elephants and other animals move to the foothills and hills.

However, the large-scale encroachments and conversion of forests into different activities have made the grasslands and foot-hill forests small, fragmented and isolated habitats. Due to this the elephants are pushed into the hills and mountains where the efforts they have to put to explore their foraging needs are very high. In these dense forested hills and mountains, most of the plant species are unpalatable and the edible plant species have a patchy distribution. Elephants have to use specific routes to identify the distribution of such species.

Understanding the anthropological history of the region (NE-India and Burma) is important in this regard. This region is mainly inhabited by a series of tribal populations, with different traditions and languages, various degrees of development, broken down into a network of international and administrative boundaries, under various political statuses, but sharing the same essential, life-sustaining resources of the forest.



Lisus - one of the human communities inhabiting inside the forest

Some parts of the regions are politically very sensitive; this sensitivity is due to conflict and infractions among different groups of human communities that live here. On the advent of vote bank politics, settlers from neighboring countries are given permanent citizen status, further augmenting conflict among different groups and administrative setups. This also gave rise to the formation of extreme groups that demand independent states or autonomous status.

Some of them, to increase the land under their jurisdiction, invaded a large scale of forest lands. All these activities directly or indirectly influenced the forest status. The region has a very unique war history; elephants were captured in a large numbers for military operations, developing roads through dense, difficult forested terrain. This has put a lot of stress on elephant numbers, welfare and their habitat.

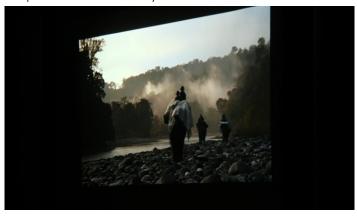


Signboard showing war history

Probably more in the case of any other region in India, it is essential to take the socio-political situation and war history into account in order to evaluate the present state of elephants and their habitat. It also appears that in spite of heavy timber extraction and large scale capture of elephants for varied reasons, both of which have now been banned, substantial portions of the border area are still covered with forests and still a reasonable number of elephant survive here.

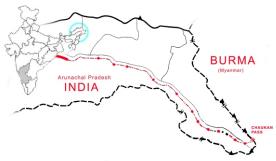
## "The Old Elephant Route"

The documentary "The Old Elephant Route" was screened as a part of the program that was made to try and rediscover an old migratory path to gain a better understanding of the possibility of elephant movement across international boundaries. There is a historical background to this documentary. As a young forest officer in Assam in the 1930's P. D. Stracey heard of an ancient migratory route for wild elephants on the border between Burma (Myanmar) and India through Chaukan Pass. Chaukan Pass is the real Shangri-La of the elephant route, politically connecting Burma to North Eastern India. This pass, a saddle between the western Patkai ranges and the eastern Kumawng ranges, is believed to be used for ages by the migrating elephants of Assam and Burma. P. D. Stracey mentioned this pass in his book "Elephant Gold", a compendium of captive elephants during the Khedda period; where Errol Grey, an English Tea planter who first discovered the presence of an elephant route at the altitude of 9000 ft. The Chaukan pass sprang once again into public consciousness during the World War II. In 1942 when the Japanese invaded Burma they advanced northwards cutting off the sea, air and land routes to India. British, Indians and Burmese in Burma were forced to flee northwards into India through jungle paths, one of which was the Chaukan route. As it was the monsoon time, many of the fleeing refugees grappling along the east bank were trapped by the swollen tributaries of the Noa Dehing. Around 200 people were rescued by elephants organized by the tea planter cum hunter Gyles Mackrell.



Screenshot from "The Old Elephant Route" documentary

The documentary portrayed the arduous journey (walking 150 miles) undertaken in the year 2000 on elephant back by two elephant biologists and one elephant mahout from southern India, to explore this terrain and to understand whether this habitat was still viable one for the elephants; connecting the habitats or the movement of elephants between the two strongholds of the Asian Elephant. The documentary yielded important information- on the indirect observations of elephant presence, the encroachment of land by refugees and rich natural habitat for the Asian Elephant. One could also realize the exceptional complexity of the political and sociological situation in the region, and its impact on the elephants and their habitat.



The route explored by the team in 2000

## "Old Elephant Route Revisited"

In 2013 (13 years later), a well known Indian Himalayan Explorer, a Bio-technologist and others undertook the same journey, trekking across this "Heart of Darkness". Their assignment becomes a source of comparison of sociocultural, ecological and political status of the landscape and elephants. The expedition team explored the landscape through Maio-Vijaynagar (MV) Road, along the rivers and climbing hills and mountains. At 40th mile of M. V. Road (near Deban Inspection Bungalow (IB)) they found elephants were being used to transport trekking gear for the trekkers into the Namdhapha National Park. At the IB was a small shrine with paintings of Ganesh and Hanuman, with their skin color in a natural dark brown, a rare imagery considering that Lord Ganesha, the Elephant God is always shown to have fair skin!



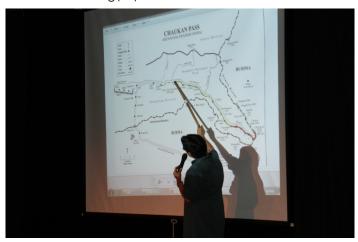
Lakshmi R. Sharing her experience of "The Old Elephant Route" revisited

All along the M. V. Road, which runs high above the east bank of the Noa Dehing, small thatched shops at regular intervals were observed by them. Apart from chips, cigarettes and biscuits, canned beer, soft drinks, giant fish caught in the Noa Dehing and some unidentifiable meat were observed to be sold in these shops. The 2000 expedition team did not encounter any such shops and, shops selling all these items indicate that many people use this path regularly. The 2013 expedition team passed through many Lisu villages with well laid out houses built on stilts and surrounded by rice fields. Chickens and pigs were owned by many families. Kitchen gardens with Vegetables, pineapple, sugarcane, persimmon and guava trees were common. Although they deny it, poaching is probably prevalent as they did see some people with their crossbows, and deer meat in the shops. In 2000, except for a few scattered settlements here and there, not many settlements were observed, but crossbows used by the villagers were noticed.

The wildlife reported could give some indication of the status of them and the forest and its cover. In 2000, not many wildlife and their signs were encountered during rainy days of their expeditions, but later during sunny days many calls of Gibbons were heard. Gibbons chattered loudly on 2013 expedition team approach and sometimes as they emerged from the dark jungle cover, they could see brief segments of the ridges and hornbills swishing past across the blue sky. In 2000, the team was not able to reach their designation of Chaukan Pass due to land slides.

However, after the long exploration, the 2013 team took leave of the more arduous river bank route to Chaukan Pass and climbed to the top of a ridge well above the river close to  $\sim 2700$  meters from where they could see Chaukan Bum (3046 m), the peak above the Chaukan Pass. Through a Utopian jungle of moss covered birch and rhododendron trees and a forest floor of giant ferns they descended into Burma for a short while before arriving at the Chaukan Pass at 2419 m where the Indo-Burma Border Pillar # 183 is also found.

The location of the Chaukan Pass in a well-marked 'jungle migratory path' clearly gives credence to the existence of the purported old elephant route of yesteryears. That humans rather than elephants are probably using this route these days is a grim reminder of their threatened habitats and their dwindling population.



Speaker unfolding the exploration of the route undertaken by their team in 2013

## **Panel discussion**

After "The Old Elephant Route" documentary screening and the talk on Old Elephant Route Revisited, a panel discussion was organized with the some of the members of both expedition teams. The documentary screening and the talk gave rise to discussions on various aspects such as forest status, elephant numbers and the reasons for their low density in the region, elephant movement, their migratory paths, corridors, captive elephants, and their welfare and elephant mahouts.



Audience engrossed in the panel discussion

The session addressed the important question of the weather patterns being same in India and Burma, why would the elephants migrate across these countries? Panelist suggested that, elephants migrate for many reasons – for social contact, food, shade, water and for many more reasons-elephants are voyagers; they keep moving and do not stay in one place and are not aware about crossing a political border. In this landscape, if one considers- elephant foraging behaviour, in comparison to the plant diversity, what elephants eat is very less, so they need to move in a larger area to find those species of plants. If there is a monoculture landscape where that particular plant is a part of their food regime, then they could restrict themselves to one place. But if they eat about 150 species and these 150 species are found in a low density then they have to move about a lot - so to explore the plant species they have to move to many locations using traditional knowledge and routes.

The audience also wished to know, have all elephant corridors been tracked and is there any way of tracking the elephant path? One of the panelists answered these questions by initiating a definition for elephant corridor and suggested, if we do not differentiate between corridor and habitat, then we will end up calling everything as a corridor. In this case as the landscape is connected, technically it cannot be called as a corridor, but can be called as a habitat for elephants on both Indian and Burmese sides.



Panelists

Here the importance of political boundaries was discussed and for elephants it's a geographical boundary, which makes India and Burma as one land. It's more of the geographical boundary that makes the elephant to move, and the elephant will move only in large spaces like along the river or saddles, it's not easy to move in all directions.

For example, there are 13 elephant corridors in South India, which are very sensitive and investigated for the elephant usage pattern. However, details such as elephant usage, numbers, movement patterns, and other threats are not known.

If elephants are fixed with radio collars, it may help in monitoring their movement pattern and usage of the given corridor. But collaring elephants are very expensive. Earlier collars used to cost Rs. 6 lacs each and the expected life span was only 2 years. Now, using, new technologies, they are available for even Rs. 50,000/-. However, even with this cost, the question remains- how many elephants can we collar? Alternatively, one can look at the indirect signals if we know these are the paths that were identified as the corridor, and then we spend time locating the dung and the indirect methods of science to see if animal movement is taking place. We can also use DNA and genetic studies to determine whether these were the same individual or different individuals moving.



A member from the audience sharing a lighter moment

#### **Outcome**

Since the area is of strategic national importance, it is kept under the regime of the Indian Army.



Audience intently going through the newsletter distributed

However these two expeditions have opened up the gates to the scientific community to help understand the conservation of this landscape for the flagship species of the Asian Elephant and other species as well. Like the two other meetings, a lot of the audience showed their interest in participating in the various initiatives of "Friends of Elephant" and their contribution towards protecting the Asian Elephant.

## **Acknowledgments**

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31st May 2014 event was sponsored by









#### Our Partners













Friends of Elephants radio interview was aired on Saturday, 28th June 2014 on Radio Active CR 90.4 Mhz between 12:00 - 12:30 pm.

The audio file of this program has been uploaded on the website www.edaa.in