

CCA South Asia Case Study: Nagavalli

Introduction

Nagavalli is a village situated in Tumkur district, in southeast Karnataka, India. It is 76 kilometres northwest from the state capital Bengaluru. It lies between the coordinates 13° 20' 24" N, 77° 6' 0" E¹. Regular sightings of Slender Loris (*Loris tardigradus malabaricus*) occur within the four square kilometres of area. The sightings occur in Nagavalli, Lakkenahalli, Sopanahalli, Timmasandra, Pannasandra, Banavara, Bidrekatte, Dommanakuppe, Bellagere and Aranganathpura villages

Nagavalli is a *panchayat* head village with 7 villages under its jurisdiction. The population of the panchayat is 5800 people². The major religions are Hinduism and Islam. Kannada is the primary language of the area while twelve per³ cent of the population also speak Urdu.

The terrain consists of dry scrubby grasslands along with agricultural fields and four wetlands in the form of water reservoirs. According to the Biodiversity Register (See Annexure I), the area has 517 types of flowering plants, 28 species of fresh fish, 11 species of toads and frogs; 24 species of reptiles; 144 species of birds; 15 species of mammals; 54 species of butterflies and 59 species of other insects.



Mr. Gundappa – second from left

¹ - According to Wikimapia:

[http://stable.toolserver.org/geohack/geohack.php?pagename=Tumkur_district¶ms=13.34_N_77.1_E_r
egion:IN_type:city](http://stable.toolserver.org/geohack/geohack.php?pagename=Tumkur_district¶ms=13.34_N_77.1_E_region:IN_type:city)

² - Population Census of 2001.

³ - Population Census of 2001.

History

In 1996, a group of school children saw a small primate sleeping in a clump of bamboo. They informed their teacher, Mr. B.V. Gundappa who realised that this was a rare find. He decided to work proactively towards protecting and conserving the slender loris found in and around Nagavalli.

Using his two nature groups Wildlife Aware Nature Club (WANC) and Maduka (See Annexure III), he sought to study the behavioural patterns and population of this animal.

In the year 1999, WWF-India conducted a student seminar on wildlife. One of the students from Nagavalli, presented a paper on the slender loris. This paper documented the behavioural patterns, the ecological importance and economic benefits of the primate. It went on to be part of a national seminar and also sparked a lot of interest in the subject.

In 2001, WANC and some students conducted a small census of the slender loris population and within 3 hours they saw eight slender loris. WWF uploaded this information on their website and soon local and national media started covering the area.

They also conducted a census for the biodiversity registrar. This was helped by the detailed inventory of all the reported births, deaths and strange occurrences of slender loris in the area that Mr. Gundappa has kept.



Slender loris (*Tardigradus malabaricus*)

Slender Loris

Slender Loris (*Tardigradus malabaricus*) is a small nocturnal primate found only in India and Srilanka. *Loris tardigradus malabaricus* is a subspecies that is only found in the Western Ghats in southern India. *Kaard pappa*, literally 'child of the forest', is the local name for the primate. They are listed under Schedule I of the Wildlife protection Act 1972 and have been declared Endangered by the 2004 IUCN Red List. This small primate is approximately 6 to 10 inches long with pencil-thin limbs, a small vestigial tail and large saucer-shaped eyes. They weigh from 100 to 300 gms and are mostly arboreal, insectivorous animals though they also eat shoots, leaves, flowers, eggs and nestlings. The movements of this primate are slow and stealth, thus they have the ability to move through trees without causing any disturbances. They inhabit tropical rainforest, scrub forest, semi-deciduous forest and swamps. Although they forage alone, these primates sleep in groups of 2-4. They have a lifespan of approximately 15 years where they become sexually mature at ten months and breed twice a year.

Threats

The inhabitants of the village do not proactively harm the slender loris. Most of the threats to the slender loris population are consequences of actions that were not meant to directly affect the animals.

Slender loris are nocturnal animals and deaths occasionally occur when the animals cross major roads. The incidents of roadkill increased after the Tumkur – Mysore highway was widened. Habitat loss occurs when the open dry scrubby land in the villages, where the slender loris reside, is cleared for agricultural purposes. This has reduced the area available for the primate and negatively impacted the population. The electrical wires in the farms have caused fatalities as well and have become one cause for concern. Though no formal studies have been conducted, biomagnifications are also viewed as a possible threat. People are concerned that the rampant use of pesticides may be affecting the health of the primates in the area.

Participation Methods

Most of the activities in the area revolve around studying the slender loris and disseminating information about the same. The documentation is essentially undertaken by Gundappa through his inventory. In addition to this, a detailed study of the area was conducted when the biodiversity registrar was created by the members of WANC, Maduka and some external resource people. The information gathered through these studies is disseminated through lectures and articles in regional and national media.

A bulk of these activities are organised by the members of WANC. They are trying to get more village participation in the conservation activities. To achieve stronger local participation, Gundappa had proposed to make Nagavalli and the surrounding areas a Community Reserve (See Annexure II). He hopes that this will make people, villagers and government officials alike, more involved in the conservation work. However due to some technical errors in the papers that were filed as a request to convert the area to a conservation reserve, led the request to be rejected.



Slender Loris Habitat

Strengths

The lifestyle of the village is their strength. They have a history of non-interference and do not hunt or kill the primate for commercial or other purposes.

Maduka, the local wildlife club for students is very active. There are several nature camps, lectures and study tours that take place. The existence of such a committed group that also acts as a platform to talk about and take part in environmental activities is a major strength of the village.

Other than the widening of the Tumkur – Mysore highway, there are not many development projects that pose an immediate threat to the existence of the slender loris.

Constraints

The strength of the village, i.e. the non-interference of the villagers is also its biggest constraint. Most of the inhabitants are not actively involved with the research and conservation efforts of WANC and Maduka. The goal of conservation work has been impeded in part by the lack of participation from the community as a whole and in part because there is no clear plan in place.

Current Status

There are no new problems cropping up. The old issues of non-participation and non-interference continue parallel to the lack of direct harm. The attempts to make the area a community reserve are also on hold. Though there is more information available now than there was before.

Conclusion

Nagavalli possesses, within its boundaries, an endemic primate that appears to face a high risk of extinction. The community has a traditional practice of living symbiotically with the slender loris, which continues to date. However attempts are being made to create a more proactive method of living that helps protect the primate. Thus the focus is to move away from non-interference towards conservation. Most of the programmes have focused on documentation rather than conservation. This strategy aims at inculcating a sense of pride, amongst the villagers, in the hope that this pride will translate into proactive help from the villagers in conservation efforts. However, all these activities are initiated and carried out by WANC and Maduka and it is this lack of community participation that makes it incorrect to term the area as a CCA.



This report was written by Persis Taraporevala based on information gathered from a field visit to Nagavalli on the 24th of December 2008, a phone interview with Mr. Gundappa in January 2009, a case study written by Ameen Ahmed from the CCA Directory (2009) edited by Neema Pathak and an article by Upadhye, A.S. called 'This village has an unusual friend' from the The Sunday Times of India, Times City (Bangalore). The contingent that visited Nagavalli included Neema Pathak, Vivek Broome and Persis Taraporevala.

Photographs by Vivek Gour-Broome and Ashish Kothari



Map of Karnataka, with Nagavalli denoted

Annexure I: Biodiversity Register

Section 22 of the Biological diversity Rules, 2004 (under the Biological Diversity Act, 2002) states that 'every local body shall constitute a Biodiversity Management Committee (BMC's) within its area of jurisdiction'. The main function of the BMC of the area is preparing a People's Biodiversity Register that contains a detailed report on the biological resources and the knowledge on these resources available. This must be done in consultation with local people.

Annexure II: Community Reserve

According to sections 36C and 36D of the Wildlife Protection Act 1972 (amended in 2003) a Community Reserve is a new form of protected area. Only private or community land where a community or an individual has volunteered to conserve wildlife can be declared a community reserve. A Community Reserve Management Committee, consisting of five people nominated by local governmental bodies (Panchayat or Gram Sabha) will have the authority to conserve, maintain and manage the reserve.

Annexure III: WANC and Maduka

WANC (Wildlife Aware Nature Club) and Maduka are local environmental groups. WANC is situated in the city of Tumkur, about fifteen kilometres from Nagavalli. It started in 1989 and focuses on environmental education for children and wildlife conservation. Maduka, which means 'frog' in Kannada is the environmental group in Nagavalli for school children. It is run by Gundappa and actively takes part in study tours and lectures related to wildlife. Both these groups work together on slender loris protection and documentation.

Annexure IV: For further details contact:

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Annexe I: Nagavalli

(Format for the preliminary database of CCA sites in India)

Basic data

Site Name (in local language and in English)	Nagavalli
Country (include State and Province)	Tumkur district, Karnataka, India
Area encompassed by the CCA (specify unit of measurement).	4 Sq Km
GIS Coordinates (if available)	Unknown
Main ecosystem type	Dry Scrubby grasslands along with agricultural fields and four wetlands in the form of water reservoirs.
Whether it includes sea areas (Yes or no)	No
Whether it includes freshwater (Yes or no)	Yes, 4 water tanks
Marine (Y or N)	No
Concerned community (name and approx. number of persons)	Is a mixed community. Nagavalli panchayat has a population of 5800 people. ⁴
Is the community considering itself an indigenous people? (Please note Yes or No; if yes note which people)	No
Is the community considering itself a minority? (Please note Yes or No, if yes on the basis of what, e.g. religion, ethnicity)	No
Is the community permanently settled? (Please note Yes or No; if the community is mobile, does it have a customary transhumance territory?)	Yes
Is the community local per capita income inferior, basically the same or superior to national value? (please note how confident you are about the information)	Unknown
Is the CCA recognised as a protected area by governmental agencies? (Yes or no; if yes, how? If no, is it otherwise recognized?) If yes, legal document? Establishment date?	No, but they want to be recognised as a community reserve ⁵ . A proposal was submitted for the same however this was rejected because some legal formalities were not completed
Conflicts with land tenure, natural	Unknown

⁴ - 2001 census of India

⁵ - sections 36C & D of the Wildlife Protection Act 1972 (amended in 2003)

resource use?	
What is the main management objective (e.g. livelihood, cultural, spiritual...)	Conservation of Slender Loris (<i>Loris tardigradus</i>)
By definition, a CCA fulfils a management objective. To which IUCN management category do you consider it would best fit (this does not imply that the management objective is consciously pursued by the concerned community, but that it is actually achieved)	Category IV ⁶

Additional qualitative information

Description of biodiversity & resources (ecosystems, species, functions) conserved by the CCA	Conservation work revolves around the Slender Loris but according to the Biodiversity registrar ⁷ the area has 517 types of flowering plants, 28 species of fresh fish, 11 species of toads and frogs; 24 species of reptiles; 144 species of birds; 15 species of mammals; 54 species of butterflies and 59 species of other insects. If conservation takes place, most of these species will benefit from the conservation work as well.
Description of local ethnic groups and languages spoken	It is village with a strong Hindu and Muslim population. The predominant language is Kannada with 12% of the population speaking Urdu.
Broad historical context of the CCA	Found slender loris in 1996 and conservation efforts have been going on since then. There is a Nature group called WANC (Wildlife Awareness Nature Club) with 15 members and the local school nature club <i>Maduka</i> work on conservation and documentation work.
Governance structure for the CCA (who takes management decisions, how?)	Unknown
Length of time the governance model has been in place	Unknown
Land and resource ownership in the CCA	Farmland is owned by people, grassland is revenue land ⁸
Type of land use in the CCA	Farmland
Existence of written or oral management plans and specific rules for the use of natural resources in the CCA	There seems to be no management plan beyond slender loris conservation and dissemination of information about the

⁶ - http://www.unep-wcmc.org/protected_areas/categories/index.html

⁷ - Biological Diversity 2004 (http://www.nbaindia.org/docs/simplified_methodology_onpbr.pdf)

⁸ - Agricultural land that cannot be used for commercial or residential purposes.

	primate. This strategy aims to inculcate a sense of pride amongst the villagers about the fact that slender loris reside in their village. This pride should translate into proactive help from the villagers in conservation efforts. It is unknown if written or oral rules exist.
Map and zoning of the CCA (please attach if available and relevant,)	Available at Nagavalli, will attach later.
Relevant pictures with captions (please attach if available)	Available
Major threats to biodiversity and/or the CCA governance system	Threats to Slender Loris include <ul style="list-style-type: none"> - Road kill: Widening of the Tumkur-Mysore road has increased the incidents of road kill as the animals are nocturnal and are often run over by cars while they cross the road at night. - Electrical fences: Some of the farms have electrical fencing and this has led to several fatalities. - Biomagnifications: Studies have not been conducted but rampant use of pesticides may be affecting the health of the primates in the area. - Habitat loss: due to clearing of land for agricultural purposes
Local CCA-relevant features, stories, names, rules and practices	Mr. B.V. Gundappa, a local school teacher, is the backbone of the documentation activities and attempts at conservation of the Slender Loris. He started an environmental group for the children in the area called Maduka and is a member of Wildlife Aware Nature Club (WANC). These two groups have conducted most of the activities related to the primate.
Gender aspect of the CCA (elaborate)	Unknown,
Climate change attributes(elaborate)	Unknown

Contact individuals and organizations:

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