Case Study in NE India -- salvaging small wild populations while strengthening others of a highly threatened species

Proposed use of Wild to Wild Rapid Translocation with specific reference to Hoolock Gibbons in minute populations and habitat fragments, by Sally Walker and Sanjay Molur*

The Guidelines of the Reintroduction Specialist Group define translocation as the ***"deliberate and mediated movement of wild individuals or populations from one part of their range to another."***

In view of the current habitat fragmentation and population decline, resulting in large numbers of small populations of threatened species left in isolated fragments of forest or highly degraded habitat or even habitat that has become agricultural fields, it comes as a surprise that the technique of genuine translocation, as defined above, is not used more often. As a matter of fact, it is used very rarely as we discovered when trying to find an experienced reintroduction
practitioner who had conducted "deliberate and mediated" movements of small populations of primates.

In our search for a trainer to staff a translocation training for biologists and foresters concerned with Hoolock Gibbon in northeastern India and Bangladesh, we researched the topic thoroughly, first for gibbon translocations, and failing that, for ape translocation (as gibbons are apes) and finally for any primate wild to wild translocation that had been conducted systematically (meaning deliberately and mediated as opposed to *ad hoc,* haphazard or reactionary!). In the gibbon and ape movements we found that all who had claimed to have done translocation had actually done rehabilitation or release of captive animals.

There have been many exercises in rehabilitation for lifelong captive gibbons which were rescued from human owners who used the animals for begging from foreign tourists on the beaches of South East Asia to a "sanctuary" set up for the purpose. In India the word "sanctuary" is not used like this ... a sanctuary is a natural forest with some legal protection. In this case "sanctuary" was a forested area fenced in and run like an zoo with open enclosures. The animals remained captive. These sanctuaries are reported to have been closed as they were not successful.

We located a biologist called Cecilia Kierulff who had conducted a genuine translocation of wild Golden Lion Tamarins from a habitat which offered no long term security to a more suitable one with good potential as a safe haven. She translocated 42 animals in several groups and had no fatalities associated with the exercise. The groups had very few problems and are breeding well and dispersing appropriately. Her translocations were all successful. Her animals are established.

Even before hearing Dr. Kierulff's experiences, some of us wondered why wildlife conservation practitioners do not do more to find small, isolated populations of threatened animals which have no chance of survival in their current habitat but still have theatened conspecifics living within their natural range in a relatively safe habitat. It seems obvious that such an investigation should be done before either
1. capturing wild animals for captive breeding
2. introducing captive "welfare" specimens of animals which had been confiscated or donated or rescued but spent some time in captivity. OR
3. even systematically bred captive born animals intended for release for conservation.

These small, isolated populations are, after all, wild which means that they are most likely free of diseases transmitted by either human beings or animals which is one of the banes of captive stock (even if they have been kept in captivity a short time). Also they are behaviourally superior to any captive born animals and even to wild caught or captured animals which have spent some time in captivity. Wild animals for wild habitats makes much more sense as they have had no chance to develop bad habits, that is if they are truly wild. Wild animals which have become almost domesticated by living in trees in an agricultural field and accustomed to human beings through feeding, and certainly wild animals, such as primates, who have taken up residence in cities and towns and which look to human habitations for their food. It is not that there are no problems with genuine (that is) wild to wild translocation also but the problems are much less likely to result in total failure, which is the case with the other options. Also releasing a batch of animals which have been in captivity into a genuine piece of wild habitat may spoil it for other animals who could pick up transmissible diseases. Given that total picture, properly done translocations beat all other options.

That being said, a little more actual background on this case study will help you understand the other information in this magazine. We have chosen to share with you a Report in process, and that too, a draft report in order to introduce this topic of translocation as a tool which might be considered before resorting to releases of once captive and ill prepared animals into wild areas.

*** Sanjay Molur and Sally Walker, Co-Chairs RSG, South Asia of the IUCN SSC Reintroduction Specialist Group**

Background
A training to undertake conservation actions recommended at the Hoolock Gibbon PHVA held at Dhaka, Bangladesh in 2005 was conducted on 15-19 September 2008 at the Forest Training School, Jalukbari, Assam. The training had been a long time in planning and awaiting just the right resource persons. Finally, dates were fixed and resource persons rounded up and participants invited.

The training centred on one of the problems discussed at the PHVA, that is the phenomenon of small, wild, isolated populations (actually families) of 2-3 individuals in virtual fragments of forest located far from larger groups. With no possibility of gene transfer between different groups and scant potential for restoring the forest fragements (some of which are surrounded by villages or agricultural fields), these animals could be called "living dead". In the PHVA many of these isolates were identified and it was recommended that they be translocated from certain doom as has been happening with increasing regularity, to localities where they had a chance of survival and being linked with a larger group in course of time. A recommendation from the workshop for this conservation action and tentative and unsystematic plans for doing so inspired the plan for special training.

The training was envisioned to be a "wild to wild" translocation with which would be meticulously planned but conducted rapidly to avoid the wild animals being in human care for long. However, having surveyed the primate community for persons who had done wild to wild translocations and turning up empty-handed, we were forced for some time to consider.

A case study of Golden Lion Tamarin translocations as opposed to GLT reintroductions or rehabilitations of captive and semi captive animals indicated that wild to wild without lengthy quarantine or human handling had the greater chance of success.

Therefore the workshop focused only on wild animals that would be doomed without action, managed in such a way that they could contribute to the wild gene pool for years to come.

The position of Hoolock Gibbon is very precarious in India having declined from one lakh individuals to 5000 in just four decades, a decline of 90%. Human being settling in or near forest areas led to fragmentation of once contiguous forests and Hoolocks from 18 locations were extinguished in less than five years.

Currently Bangladesh has only about 200 individuals in 22 locations, 3 with <20, another 3 <15, and 14 <10 individuals. India has about 200 locations holding Hoolocks but 77 of these locations have less than 20 individuals and 47 less than 10 individuals.

The organisers were very lucky to locate the Brazilian biologist who conducted the wild to wild translocations of Golden Lion Tamarins ALL of which successfully settled into their new, safer locations. This was a dramatic success rate compared to earlier captive GLT reintroductions. Dr. Cecilia Kierulff, now Conservation Coordinator at the Sao Paulo Zoo, kept participants and other resource persons spellbound with her saga of introducing the project, getting permission from the International GLT advisory body as well as from her own authority, finding a site, planning, translocating the Golden Lion Tamarins and the very extensive monitoring which was done until there was no option but to conclude success. Many of these sat spellbound through her presentations twice! We got her back so we could expose the State Chief Wildlife Wardens to the methodology and also to record and video her presentations. We were very fortunate the second workshop to have Dr. Fred Launay, Chair of the Reintroduction Specialist Group with us as well as Mike Jordan, Chair RSG Europe and North Asia who has reintroduced and translocated hundreds of mammals. We also had the Hoolock Gibbon field biologists with us, particularly Jayanta Das, Jihosuo Biswas, Surajit Baruah and Nabajit Das. We should mention that Dr. David Chivers was with us first workshop who served as Ph.D. guide at Cambridge for Cecilia and some of the Indian primatologists. Chief Wildlife Warden of Assam, Mr. Malekar spent a lot of time with us and was the one to permit both workshops. Both workshops were generously sponsored by the U.S. Fish and Wildlife Service, Department of the Interior, Chester Zoo and Knowsley Safari Park.

We have some material from Cecilia's presentations which we will use as part of our reports on these workshops. Time only permits us to clip some of the more exciting parts to share with you here. We are also including the draft recomendations from both workshops and working group reports from our planning sessions with the foresters and field biologists on the following pages.