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A new conservation NGO, neotropical primate conservation: Project experiences in Peru

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The Neotropics, tropical areas of South and Central America are home to the largest number of primate species of any bio-region. Many of these species face a serious risk of extinction due to anthropogenic factors such as hunting and deforestation. In 2007 a new NGO was set up to promote the *in-situ* conservation of these species, Neotropical Primate Conservation (NPC) is the first NGO solely dedicated to this end. NPC breaks from traditional conservation methods in that it includes compatible sustainable development, environmental education and reforestation as core objectives in addition to more traditional investigation and habitat protection. NPC's first major project aims to aid the conservation of the little known and critically endangered yellow tailed woolly monkey (*Oreonax flavicauda*) in Peru. One and half years into the project some of the major obstacles experienced have been difficulties in raising funds, un-cooperative governments and institutions and an initial lack of understanding within local communities. Advances have been made into understanding the needs of and threats to this species, networking between local NGOs and developing low-cost, high-quality working techniques.

Key words: Conservation, primates, sustainable development, yellow tailed woolly Monkey.

INTRODUCTION

Worldwide there exist many environmental conservation NGO's, although working in diverse ways, all aim to aid in the preservation of the earth's biodiversity. Far fewer have objectives specific to a single family, bio-region or habitat, which could lead to limited resources and expertise being stretched across a wide range of projects. To redress this balance in the case of the platyrrhine primate family the NGO "Neotropical Primate Conservation" (NPC) was set up in 2007. The primary goal of this organization is to aid the conservation of primates from south and Central America (www.neoprimate.org). It has been shown that the use of certain species as "Conservation Flagship Species" (Dietz et al., 1993) can substantially benefit not only conservation of the focal species but also that of its habitat, many sympatric species and ecosystem services that local human populations may depend on, such as the supply of renewable resources. Conversely, activities that ensure the conservation of habitat, sympatric species and ecosystem services will also bene-

fit conservation of primates. To this end NPC works towards its stated objective through scientific investigation of species conservation needs, habitat protection, reforestation and habitat rehabilitation, reintroduction of captive primates to their natural habitat, environmental education and public awareness, promoting sustainable economic alternatives for local communities and more traditional habitat protection activities.

NPC's first major project is currently in its second year, this work is centered on the conservation needs of the critically endangered (CR 4Ac, IUCN 2008) yellow tailed woolly monkey in Northeastern Peru. This species was thought extinct until the mid 1970's (Mittermeier et al., 1975). After its "rediscovery" a few basic studies were made during the late 1970's and early 1980's to establish this species geographical distribution and basic ecological needs (Leo Luna, 1980). Since then the species has been the subject of sporadic research (Butchart et al., 1995; DeLuycker, 2007; Shanee et al., 2008a) but little conservation effort has been made since the initial work of Asociacion Peruana para la Conservacion (www.apeco.org) and the WWF in the early 1980's. The reasons for this lack stem from the species restricted distribution

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(It is primarily limited to only 2 Peruvian departments, San Martin and Amazonas) and inaccessible habitat characterized by tropical montane forest at elevations between 1600 and 2400 m above sea level on the eastern slopes of the Andes (Shanee et al., 2008a), but also due to the areas' social and political instability most clearly seen in relation to the activities of the Marxist revolutionary group *Sendero Luminoso*, or Shining path (Kent, 1993) and the suitability of this area for the cultivation of coca and opium poppies (Fjelds  et al., 2005). Since the suppression of the "shining path's" activities and the subsequent construction and paving of the main highway from the coast to the eastern lowlands in the late 1980's and early 1990's the area has once again become accessible to outsiders. Ironically the inaccessibility and lawlessness of this area not only prevented conservation activities but also aided the survival of this species by keeping out large scale immigration as well as logging and mining concessions (Shanee et al. 2007). With the opening of the main highway in the 1980's the departments of San Martin and Amazonas have seen some of the highest immigration rates in Peru (INEI, 2007) which has led to massive deforestation and increased hunting pressure. In fact the species' remaining habitat has been estimated at 6,302 km² of an original estimated 11,240 Km² (Leo Luna, 1982) a loss of 44% of the original extent of its habitat in a quarter of a century (Buckingham and Shanee 2009).

Project objectives and activities

After an initial survey of the species and its habitat (Shanee et al., 2007) it was decided to initiate a community based conservation project in the Comunidad Campesino de Yambrasbamba (Literally: Yambrasbamba Peasant Community). This area was chosen as it represented one of the largest areas of intact habitat for this species and was in a relatively safe area for work to be undertaken. The area had the added advantage of being situated between 3 existing protected areas; Santuario Nacional Cordillera Colan; Bosque Proteccion de Alto Mayo and the area de conservacion Privada Abra Patricia. This proximity to protected areas and the extension of forest made the area of particular importance to the species survival as the protection of a relatively small area of forest would, in effect, join the other reserves thus forming one large reserve of continuous habitat.

After previous consultation with the 5 villages within the projects jurisdiction and review of past experiences of similar work, it was decided that the project would combine scientific investigation (to update current scientific knowledge on the species), reforestation (to reduce pressure on existing habitat and upgrade secondary forests through enrichment planting), environmental education for both adults and children (to increase awareness of the species and its endangered status) and the development of sustainable economic alternatives to cattle ranching

and small scale logging activities, much of which is illegal (personal observation).

Initially biological census work was begun in selected sites to form the basic justification for the creation of the reserve area. Following this local people were trained to act as field guides and student volunteers from throughout Peru were enlisted to help in this work. At the same time groups of interested locals were formed to work in reforestation activities with each group being responsible for a tree nursery in each of the 5 villages. This work was done on a voluntary basis, with all materials and methods supplied by NPC. Plants produced in the nurseries were divided equally between those who worked in the nurseries to be planted on their lands.

Environmental education activities were divided into 2 categories; activities for children and activities for adults. When available, student volunteers were sent to villages on a rotational basis to work for 1 week giving conservation oriented classes during school hours as well as extra curricular activities. A seminar series for adults was developed with project staff and invited speakers giving talks on a diverse range of subjects related to nature conservation.

The development of sustainable economic alternatives started with the formation of a legally registered communal association, Asociacion por el Desarrollo Sostenible del Bajo Imasa, which would be able to handle funds generated from such activities. Initial alternatives promoted were the production and sale of local handicrafts, eco-tourism in the surrounding forests and the cultivation of Sacha Inchi (*Plukenetia huayabambana*) a local plant high in Omega acids.

Results to date

Scientific census work has produced a list of 22 mammal, species several of which are either endemic or endangered species, also the first density estimates for the yellow tailed woolly monkey for any area (Shanee, 2008b) inventories of birds, amphibians and small mammals have been completed in several areas with the possible discovery of new species (Un-published data).

3 communal tree nurseries have been established so far as well as 2 school tree nurseries; in the first year these nurseries produced several thousand seedlings of 11 native species. The plants were distributed as planned between the villagers and planted on their lands.

Many of the student volunteers were able to complete education work with children in local schools and over 80 seminars were given to adults on subjects ranging from solid waste management to the legal status of endangered species.

Eco-tourism was probably the most successful economic alternative in the first year with visits by tourists from North and South America and Europe. Several local women were able to attend a regional craft fair to sell their handicrafts, although few items were sold they gained a

lot of experience and will be better prepared next time.

Discussions with community authorities and many local people revealed an openness to consider the creation of a reserve. Also, through education work in the neighboring community of *Corosha*, it was possible to begin the legal registration of a 3,000 ha reserve that the community had been protecting as the water source for their mini-hydroelectric plant. This work was funded in the main part by Peruvian NGO Sociedad Peruano de Derecho Ambiental (www.spda.org.pe) and work was carried out together with the Museo de Historia Natural of San Marcos University. Several people in other neighboring areas have also approached NPC with an interest in protecting forested areas that they own.

Challenges experienced

Even though the project deals with many national and international priorities, for example, the species critically endangered (CR 4Ac, IUCN, 2008) and endemic status, the projects location in one of the so called "Biodiversity hotspots" (Mittermeier et al., 2004; Myers et al., 2000), the major initial problem encountered was in raising funds to sustain the project. This may be even more surprising as the species is currently listed, for the third time, as one of the 25 most endangered primate species (PSG, 2008). As a small NGO, newly set up without a proven track record it was hard to enlist support from many of the larger funders, this problem was eventually resolved through a series of small grants from various sources, including other NGOs and Zoos. The financial problems have only been heightened with the current world economic crisis.

As with much environmental conservation work traditional development plans have often been implemented in direct contrast to the work of NGOs. For example, the construction of a new road into the remaining forested areas with no plans to control immigration of settlers from outlying regions and the building of tree nurseries by the regional government (in the name of conservation), which produce mainly exotic species, such as eucalyptus and pine, which have been shown to damage soils, water courses and natural ecosystems (Scott and Lesch, 1997). Similarly, the recent proliferation of mining companies, which have begun filling the area and who generally claim to be environmentally and socially aware, but fail to complete their social or environmental obligations (pers. obs). This has led to problems for the project as these companies have substantial funds for employing consultant agencies to persuade local population to support them.

Land conflicts are also a serious issue and have hindered previous attempts at land protection. These conflicts usually take the form of land trafficking and the swapping of land between owners without informing the authorities. More seriously is the lack of definition of the communities' borders in the far flung forested areas,

which are not physically marked. As a result many community members claim to own land in areas that do not belong to the community and vice-versa.

The single largest problem has been the lack of trust towards outsiders in general and foreigners in particular. The general feeling in the community is that foreigners would only be interested in this area if they were going to get rich at their expense, a product of the presence of foreign mining companies and consulting companies that have sporadically passed through the area. This leads to a feeling that any outsider wanting to work in the area, no matter their intentions, should pay the community or individual landowners for the right to be there. There is also some resentment due to the perception that foreigners bring a form of neo-colonialism to dominate Peru.

Plans/opportunities

There will be an intensification of reforestation and investigation work in the next year which will enable the gathering of more much needed data for proper conservation planning for the species and habitat. This is possible as these were the most successful parts of project work to date, thanks to which continuing funding has been secured.

To increase the impact and scope of environmental education work an agreement has been made with the Universidad Nacional Toribio Rodrigues de Mendoza - Amazonas (UNAT-A) to send final year students from various subjects (including education). The students will do their thesis practical work teaching biology and conservation in local schools. This will not only increase education work on site, but also give opportunities to Peruvian students, an important aspect for ensuring the future of conservation in the region.

An inter-organizational agreement has also been signed with Dr Robert Horwich (www.communityconservation.org) who has agreed to help in organizing the communities and developing income strategies. This is an important step and very promising because of his vast experience in similar projects (Horwich, 1986, 1990). With this alliance it is hoped that a species action plan can be made covering its entire range. By networking with and empowering local NGO's and institutions it is hoped to form a strong local movement dedicated to protecting the species and its habitat. To make sure that the conservation message gets to all levels of the population, and not stay on paper, special attention is given to working with the different local religious leaders and with the Ronda Campesina, a national network of locally organized vigilance groups, which have been identified as the most influential organizations in the area. Other agreements are under discussion with New York University to form an alliance for continued research in the area. This will bring 2 benefits, increased knowledge of the species and ecosystem and an extra income for local people directly related to maintenance of forested areas

and animals through employment as guides and field assistants.

A paying volunteer scheme (<http://neoprimate.org/volunteering>) has been set up in order to bring groups to perform specific tasks during their time here which will not only increase man-power but also help the project on its way to sustainability. Other new funding avenues are being researched with the hope of getting some multi-year grants which will alleviate pressure and free up more time and people to work on the projects *in-situ*.

Conclusions

At its inception the project had fairly modest goals, most of which have or will soon be completed, all within the planned timeframe and other goals have even been exceeded for example, the number of trees produced in the nurseries and the size of the reserve area being registered. As stated above, difficulties have mainly been in development work but considering the small budget, which was significantly smaller than the usual for such projects, there have been real advances made.

The project has developed some novel techniques that work well for the situation and goals, especially in the communal nature of reforestation work and the use of local and national students to help in education work whilst providing experience for the future. The projects' aim to tackle the issue from several directions simultaneously and to adapt its work plan according to various on the ground situations that may arise will hopefully ensure its continued future success.

To find out more about the organization and its projects please visit www.neoprimate.org.

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