

Projet Varibolomavo: Saving *Prolemur simus* **Initial results and immediate actions**



The Aspinall Foundation – Madagascar Programme September 2009

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Projet Varibolomavo: Saving Prolemur simus The Aspinall Foundation Madagascar Programme

Since the signing of an "Accord de Siège" with the Ministry of Foreign Affairs on 5 June 2009, The Aspinall Foundation is officially recognised as an NGO in Madagascar, with the overall mission to work with local partners in Madagascar for the conservation of endangered species and their habitats. Our first project, known as "Projet Varibolomavo", is to save the critically endangered greater bamboo lemur *Prolemur simus*, one of the rarest primates in the world, from imminent extinction.

Since our arrival in Madagascar in October 2008, we have undertaken two major surveys to search for previously unknown populations of greater bamboo lemur. We have learnt the hard way why this species is considered the rarest and most elusive lemur in the world – we took just over six months to find evidence of it's presence for the first time. Since that first breakthrough, however, we have succeeded in almost doubling the number of known localities for the species in the wild, and pushed the known limits of the species range almost 100 km further north than previously thought.

The survey results have exceeded our expectations, but we need to act quickly to turn our new-found knowledge into effective conservation – as quickly as we have been discovering new populations, illegal exploitation of their forest habitats has been increasing following the suspension of much international aid for political reasons. As a truly non-governmental organisation, The Aspinall Foundation now has the opportunity to provide immediate protection for these new populations, to attempt to ensure linkage between them, and to fulfil a key role in saving this unique but critically endangered species from imminent extinction.

In this report, we present a summary of the results of the first phase of this project, between October 2008 and August 2009, and discuss conservation activities we will undertake to build on these results in the immediate future.

Aims and Objectives

The aim of Projet Varibolomavo is to ensure the long-term persistence of the critically endangered greater bamboo lemur. To achieve this aim, the project has the following objectives (TAF 2008):

- 1. To play a key role in coordinating an urgent, collaborative response to the current crisis facing the greater bamboo lemur in the wild and in captivity;
- 2. To organise as a matter of urgency a rapid but extensive survey of greater bamboo lemur distribution and abundance in the wild;
- 3. To ensure that all known sites within the remaining rainforest corridors that support greater bamboo lemurs are effectively managed for their conservation;
- 4. To develop management mechanisms for all small, isolated populations in habitat fragments outside the main rainforest corridors, for their persistence and their potential role as sources for future captive-breeding, translocation, reinforcement or reintroduction strategies;
- 5. To ensure the survival of any greater bamboo lemur groups or individuals restricted to sites or habitats that can not be protected.

1. To play a key role in coordinating an urgent, collaborative response to the current crisis facing the greater bamboo lemur in the wild and in captivity

We envisaged realising this objective in two major ways: a) facilitating communication between interested parties; and b) organising a workshop in Madagascar to develop a collaborative action plan for the survival of the species in the long term.

Apart from regular email communication with a wide variety of people, we have facilitated or participated in several meetings that are already improving collaboration for *Prolemur* conservation, including an informal meeting at the IPS conference in Edinburgh in August 2008, and a formal meeting in March 2009 at Andasibe, near Torotorofotsy. Additionally, Port Lympne hosted a meeting organised by the EAZA *Prolemur* EEP in January 2009. We expect to continue to play a lead role in facilitating communication over the coming year, perhaps with the development of a trimestrial e-newsletter providing brief news of relevance to *Prolemur* conservation and links to more detailed information.

The organisation of a participatory workshop in Madagascar remains a priority, but with the rapid evolution of our knowledge-base over the past year, and the political changes currently dominating the country, we have decided to wait until next year before considering organising such a major workshop. We continue to be in contact with CBSG about their potential involvement.

As an immediate action, we will continue to work with numerous local partners to explore in detail the conservation needs of sites supporting the species, concentrating especially on the socio-economic aspects of natural resource management.

Ideal time frame: the possibility of a large participatory workshop may be envisaged during 2010. Collaboration and communication is ongoing.

2. To organise as a matter of urgency a rapid but extensive survey of greater bamboo lemur distribution and abundance in the wild

This objective has been the focus of our work since our arrival in Madagascar. As we explained in our project proposal (TAF 2008), a recent scientific paper by Wright et al. (2008) gives the results of past survey efforts, with confirmed sightings at only 11 of 70 sites surveyed during a 21 year period. Based on this information, we organised two extensive surveys over large areas with the aim of locating currently unknown groups or populations.

The first survey (Ratolojanahary et al. 2009) was undertaken within the southern portion of the eastern rainforest belt, known as the "Fandriana-Vondrozo Corridor" (COFAV), in collaboration with GERP (the Madagascar Primate Group) and the research NGO ValBio, whose staff are experienced in differentiating between the feeding remains of the different bamboo lemur species. This survey encountered various organisational problems, not least a relatively low-level of cooperation by local communities due to suspicions that we were involved in illegal exploitation of their forests, and particularly in the stealing of bones from ancestral graves, following the upsurge in lawlessness during the political crisis. As a result, we were not entirely satisfied with the extent of these southern surveys, but never-the-less were able to survey 27 sites, with only a single *Prolemur* feeding sign encountered, and that dating from at least a year earlier, and one sighting of a large bamboo lemur whose identity remains to be confirmed. We also gathered interesting information about potential new sites in the region, but have not yet verified these.

The second survey (Dolch et al. 2009, Rajaonson et al. 2009, Ravaloharimanitra 2009) was undertaken in the central region of the eastern rainforest, known as the "Ankeniheny-Zahamena Corridor" (CAZ), in collaboration with GERP, Conservation International, and Association Mitsinjo (a local community-based association who work on greater bamboo lemurs at Torotorofotsy, and so whose staff are again very familiar with identifying feeding signs). Many local communities have been organised into associations and given management responsibility of local forests in this region, so we were able to target the community members most likely to have knowledge of bamboo lemurs in a way we were not able to do in the first survey. This is probably the major reason why this survey has proved to be so much more successful than the first, resulting in almost doubling the known number of sites supporting greater bamboo lemurs, with 11 sites identified from 35 sites surveyed, and extending the known range of the species almost 100 km further north than previously thought.

Given the success of the second survey, we would like to survey still further north, to try to find the true northern limit of the species range. There is also a long portion of forest lying between the areas of the first and second surveys, from where no *Prolemur* site has yet been confirmed, but from where we have convincing information from local people about their probable presence. We would like therefore to verify this information, to help ascertain whether the northern and southern populations are indeed isolated, or in fact continuous. For the southern region, a new approach is required which we will discuss below, but would focus on protection with the gradual gathering of new information.

Ideal time frame: Sep to Dec 2009 to find the northern range limit and to verify the linkage or otherwise between the northern and southern populations; for the southern region, see below.

3. To ensure that all known sites within the remaining rainforest corridors that support greater bamboo lemurs are effectively managed for their conservation

Our second survey has demonstrated that the Ankeniheny-Zahamena Corridor (CAZ), representing the central portion of the eastern rainforest belt, supports several groups of greater bamboo lemur, and can therefore now be considered a priority site for the conservation of the species. The corridor is under the overall management responsibility of Conservation International, who consider it to require an annual budget of 1 million USD. The corridor is in the process of being zoned into many smaller (but continuous) management units, most of which will be managed by local communities, but some are open to other forms of management. Given the extensive but patchy distribution of the greater bamboo lemur within the CAZ, and the problems of illegal logging, mining and hunting almost throughout, the most effective way for The Aspinall Foundation to assure the survival of the species within the corridor will be to hire local rangers to regularly patrol the specific sites that we have found to

support the species, dismantling lemur traps and deterring illegal hunters, loggers and miners. At the same time, these patrol teams would map the distribution of the greater bamboo lemur groups at each site, and monitor changes in group size, composition and behaviour. With time, the information gathered by these patrols will allow prioritisation of the sites for further intervention, such as assessing the number of patrols required at each site, and the level of linkage between the sites. Each patrol team will be responsible for patrolling each of the lemur sites within their respective zones. We would initially focus on four zones in the CAZ (Didy, Fierenana, Morarano-Gare, Lakato), covering at least seven of the greater bamboo lemur sites we have identified during the surveys.

The southern Fandriana-Vondrozo Corridor (COFAV) should benefit from a similar strategy, but as we failed to find new sites here during our surveys, initially we will concentrate on just a single site within this corridor, at Ankorabe. This location was discovered by Delmore et al. (2009), who observed two greater bamboo lemur individuals there in 2008 whilst undertaking a genetic study of brown lemurs. Once trained and with their patrol system established, the patrol team at this site can then consecrate some of their time to searching for new sites within the corridor.

In the long-term, these patrol teams will provide the information necessary to prioritise these sites for potential additional support from The Aspinall Foundation, either through conservation agreements with local communities, or through direct management responsibility.

Ideal time frame: The patrol teams for the CAZ sites can be identified, trained and started between Oct and Dec 2009. As the COFAV site is a lot further away, and logistically more difficult to reach, this site can be targeted once the CAZ patrol teams are up and running; therefore sometime between Nov 2009 and Jan 2010.

4. To develop management mechanisms for all small, isolated populations in habitat fragments outside the main rainforest corridors, for their persistence and their potential role as sources for release stock for potential future translocation, reinforcement or reintroduction strategies

There are so few groups of greater bamboo lemurs known in the wild that the effective management of each and every group is a priority for the survival of the species. Whilst several known groups utilise bamboo stands within the remaining rainforest belt as described above, some groups occur in isolated habitat fragments that are in effect islands within a deforested agricultural landscape. Therefore, in addition to the protection of the rainforest corridor, an urgent complementary strategy is to secure the long-term persistence of the habitat fragments, and intensively manage the small, isolated populations within them in what could best be described as a semi-captive breeding programme. These controlled isolated populations would then be ideal for providing stock for any future efforts for reinforcement, reintroduction or translocation strategies.

We identified two principle sites in our original project proposal (TAF 2008). One, the Mahasoa agricultural plantation, was successfully added to the map of potential protected areas following our discussions with Pat Wright in Edinburgh in Aug 2008, and her Malagasy NGO MICET is now responsible for promoting the site. The

second, the Kianjavato coffee plantation, managed by a semi-autonomous government agricultural research organisation called FOFIFA, and surrounding area, is the subject of a research programme by Henry Dorly Zoo. This has demonstrated that the area supports the largest of the currently-known southern populations of the greater bamboo lemur (McGuire et al. 2009). The site has not yet been proposed as a protected area, but we have been trying to build a consensus that this should occur.

In addition, a new southern site has been discovered near Ranomafana by ValBio, at Vohitrarivo, and our second survey has identified four new northern sites around the CAZ (Ambodimanga, Sahavola, Vohiposa and Ambalafary). In a similar strategy to that proposed above, patrol teams need to be formed quickly for the four sites discovered during our surveys, to protect these groups and to ascertain their numbers, ranges, and threats – at nearby sites our surveys found evidence that greater bamboo lemurs had gone extinct in very recent years.

Ideal time frame: The patrol teams for the sites around CAZ can be hired at the same time as those for the sites within CAZ (as described in the previous objective), between Sep and Dec 2009.

5. To ensure the survival of any greater bamboo lemur groups or individuals restricted to sites or habitats that can not be protected

This is a kind of last-chance saloon for any groups or even individuals identified during the surveys that are stuck in habitats that simply don't have a future. This would need to be undertaken within a strict, legal framework, but such animals should be captured and cared for at suitable sites. Currently the best captive facilities in Madagascar are Parc Ivoloina near Tamatave and the Zoo in Antananarivo. If we can secure management of suitable isolated habitat nearer the species ranges, as part of objective 4 above, then captive facilities for such animals could be developed there as well. However, we have no plans to undertake this in the immediate future.

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