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### Highlighting achievements 2004-2006 in Monts de Cristal Landscape.

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Sub-Project Title	Monte Alen Monts de Cristal (Gabon) Landscape
Date Submitted	2 November, 2006
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Partner organizations	Missouri Botanical Garden
Financial Summary	Wildlife Conservation Society Total received \$978,614 Total contributed \$1,456,666

*‘The Cristal Mountains Project aims to develop a foundation for long-term conservation, sustainable forest management and maintenance of ecological services in the Cristal Mountains Landscape in Gabon, Western central Africa, in close coordination with complementary efforts in Equatorial Guinea, using a landscape-level planning approach based on refuge theory and participatory dialogue with local stakeholders.’*

## INTRODUCTION

The Monts de Cristal area in Gabon, as well as the corresponding Mt. Allen zone in Equatorial Guinea, are likely the richest of Africa’s lowland rain forests. Designed to maximize altitudinal gradients and to cover areas known to have played the role as critical refuges for biodiversity through climate fluctuations during the Pleistocene, the protected areas located in these forests perfectly meet the dual goals of reducing biodiversity loss and moderating the effects of climate change. The ecosystem services provided by the Landscape, in particular through the provision of clean HEP energy and drinking water for Libreville, in addition to their role in regulating local climate patterns, are critical for the well-being of the estimated 60% of Gabon’s population living in close proximity to the Monts de Cristal. Furthermore, these forests are a key source of protein and surveys undertaken during the first phase of CBFP-CARPE have demonstrated that parts of the

landscape have very healthy large mammal populations, including a previously undocumented key population of great apes that seem not to have been affected by the ebola virus.

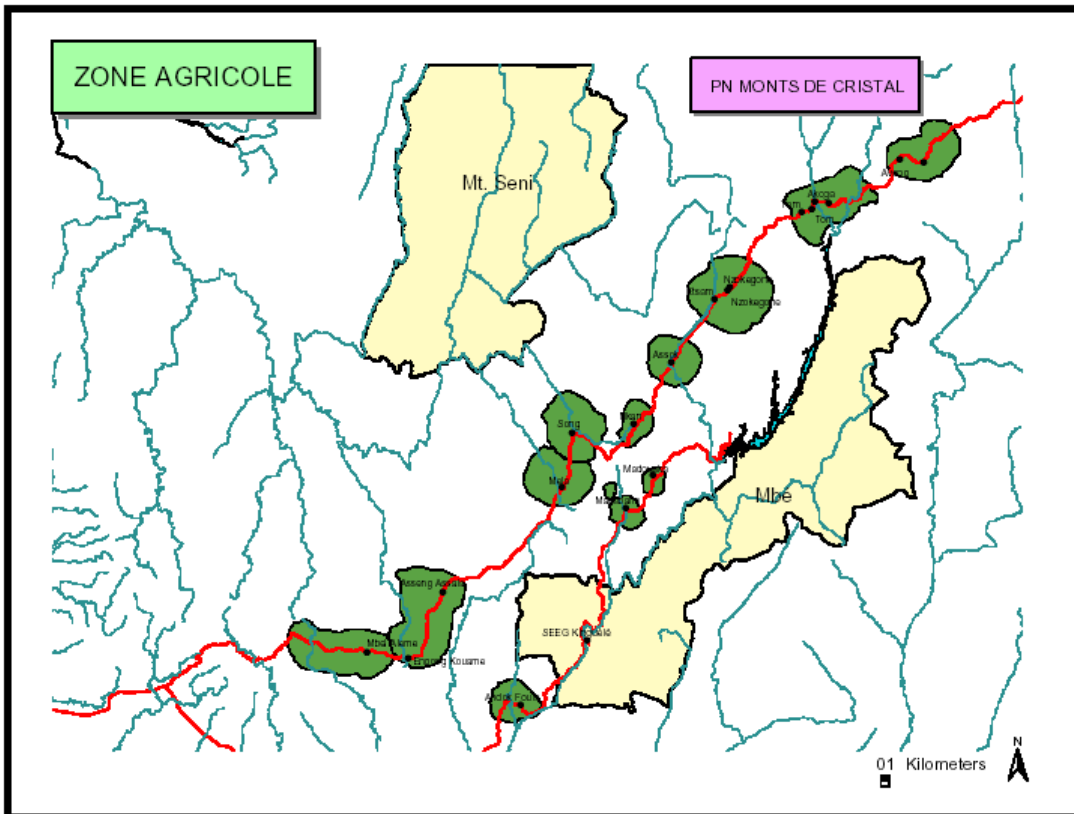
WCS, WWF and Missouri Botanical Garden have been working in coordination within the Gabon segment of the landscape over the last 3 years. Our work has highlighted the biological importance of the area, demonstrated that the newly created national parks do not impact significantly on traditional livelihoods, and made significant progress in integrating industrial resource users (timber, mining, water . . .) into a land use planning process.

## Major Accomplishments and Results

- ② Working with the Conseil National des Parcs Nationaux a 5-year activity planning exercise has been completed for the Monts de Cristal National Park and will guide activities pending the development and adoption of a management plan.
- ② In all the equivalent of a full year of botanical expeditions have documented the exceptional botanical richness of the Monts de Cristal region, with new species being found on every expedition. The region is not only spectacularly diverse at the species level, but also at the genus and family level, which distinguishes it from the more species rich but genus- and family-poor *fynbos* in South Africa. It is now recognized as the richest site in Gabon, and indeed of the entire lowland African rainforest area, rivaling most forests in Latin-America, and countering the label of African species richness being ‘the odd man out’ compared with Asia and Latin America. ● ‘Elfin cloudforest’, typically associated with the Andes above 3000m, was discovered here at just 5-700m altitude. ● The region is now generally recognized by experts as one of the very few *major* ‘Pleistocene Refuges’: store rooms of African rainforest biodiversity during dry geological periods as Ice Ages (suggesting it will be particularly resilient in the face of current global warming). Given that ‘reducing biodiversity loss’ is CARPE’s main overall Strategic Objective, conservation of this ‘top-division’ biodiversity landscape is of the utmost importance for African and global biodiversity. ● Now that CARPE funds have shown its Refuge-character, we suggest that conservation in this region should be prioritized over rainforest area’s that may inevitably vanish and turn to savanna in the coming decades due to climate change.
- ② CARPE funds have been crucial in the actual delimitation on the ground of the newly declared National Park in the most biodiverse area of the Congo Basin. This has greatly helped clarifying the actual position of the protected area to regional inhabitants and extractive industries, halting (alleged) misunderstandings. UN-mediated discussions between Gabon and Equatorial Guinea have thus far prevented delimitation of the remaining 7% of the park limit that coincides with the international border.
- ② Establishing protected areas has always been controversial. Claims of strong negative effects on local communities have been postulated, yet with little to no quantitative data to back this up. WCS has partnered up with Boston College and assessed detailed pre-park welfare levels of all communities within a 20 km radius of four new National Parks (created late 2002, implementation 2004), one of which is the Cristal Mountains National Park. A similar sample far away from these parks (yet within the same landscape) serves as a control for possible nationwide changes over time. Comparison with future assessments will detect types and levels of changes. The study is not only (1) providing vital demographic, historic and cultural knowledge for immediate adaptive regional management, but (2) will be of great significance to the global debate of ‘people versus parks’, and (3) will form an objective evaluation of CARPE-funded performance in these regions.
- ② WCS has long recognized the importance of local inhabitants’ consent and cooperation for successful conservation. Protected areas being an unknown concept in Gabon, WCS-Cristal has hired expertise to develop and implement a continued information, environmental awareness and education package, which is now starting to bear fruit, and which has not gone unnoticed

in the outside world. Our outreach coordinator is frequently being consulted by external parties who recognize the value of his experience. For example, representatives of UNESCO’s ‘2005-2014—Decade of Environmental Education conference, who are themselves in a *planning* phase, were impressed to hear that Martin Hega has already successfully implemented EE for two years. He was co-organizer and keynote speaker of workshop to synchronize EE in Congo Basin countries. Went to Paris on invitation by international development organizations, and passed by Unesco in Paris again for meetings on way to campaign leader training in UK.

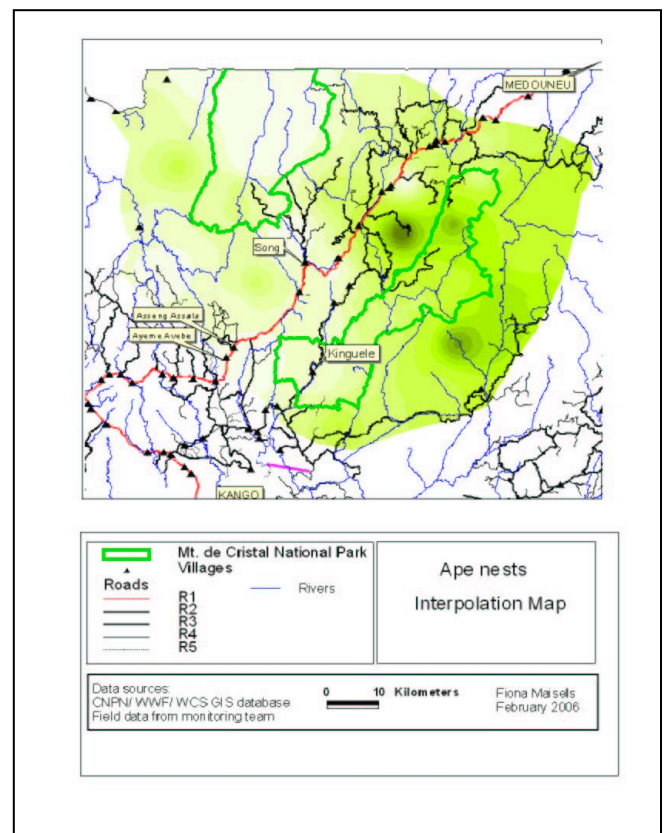
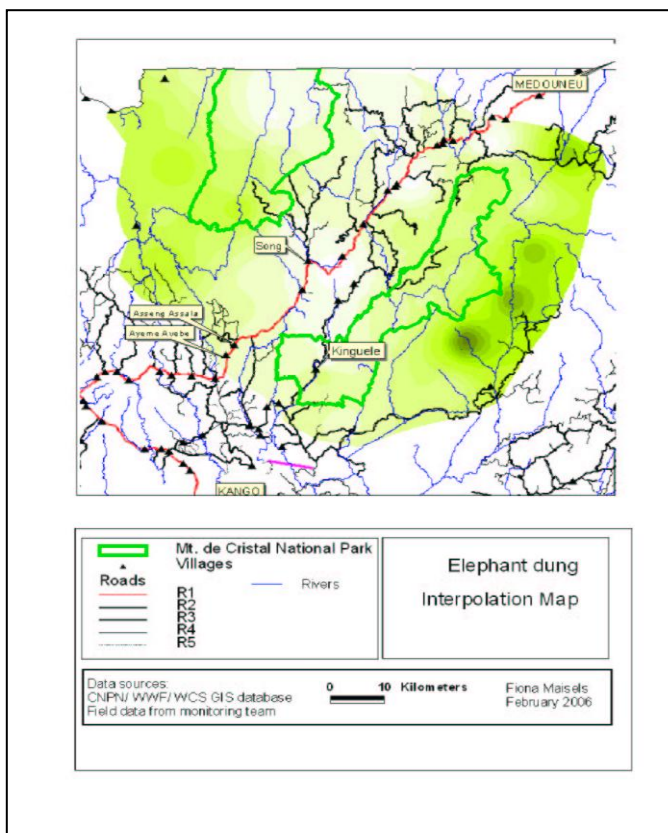
- The ecoguard team has not only patrolled the Park’s limits. It has been used for general reconnaissance of the area (e.g. locating potential tourism sites, mapping access routes), sensibilisation, for building a photo database for the region and helping out with other activities. Given that the team has no law enforcement mandate and only limited funds they have worked hard over the last year to try and use the eyes and ears of locals to report illegal commercial activities in the region. For this to be successful it is vital to win the trust of local communities. We do this by spending time in villages, explaining what is and is not allowed, documenting intensity of human-wildlife conflicts ( elephants, but also gorilla’s and chimps), so as to develop a local information system. The information obtained will feed into targets for anti-poaching missions organized by government authorities with technical assistance from the WCS (and WWF) Landscape team.



*Map of active agricultural zones relative to National Park boundaries, used to identify areas of possible human-wildlife conflict.*

- Information and awareness building in MC region is not constricted to native communities. Apart from provincial and departemental authorities, the headquarters and field sites of extractive industries are also visited regularly. Open exchange approach, respecting differential interest in area, is positively welcomed, resulting in good contacts which have lead to collaboration (fuel gifts, logistical help, info on illegal acts) and is a good foundation of willingness to collaborate on sustainable management practices in ERZs, the main focus of CARPE’s next phase.
- Wildlife surveys** – Wildlife surveys have been conducted throughout the national park and surrounding areas and have generated a complete regional picture of the status of mammals and of human activities. We were surprised to discover some of the highest great ape densities in Gabon in forests not previously considered an ape conservation priority. A significant trans-frontier poaching problem was identified. This has been adopted as a priority activity to be addressed in coordination with WWF and CI in the next phase of CARPE-CBFP. Formalities at government level for the establishment of an efficient anti-poaching team (mobile brigade) are complete and will allow for effective poaching deterrent in the Gabonese side of the Landscape.

This assessment will also serve as a baseline to measure conservation effectiveness of CARPE efforts over time.



Interpolation maps illustrating the distribution of elephants and apes in relation to the national park limits in the Gabon segment of the Mt. Allen – Monts de Cristal Landscape..

© **Village resource use (people-parks conflict).** Extensive socio-economic surveys resulted in a regional picture of the distribution and intensity of overlap between traditional activities and the new National Park, providing a foundation for adaptive management (prioritizing these villages in development projects, staff recruitment). Overlap /conflict between conservation and resource extraction turns out to be low. This work has enabled us to develop a stronger collaboration with SEEG, the hydroelectric company active in the landscape, whose senior management was unaware of illegal employee activities in and around NP. New measures have been adopted by the company to reduce conflict with the park.

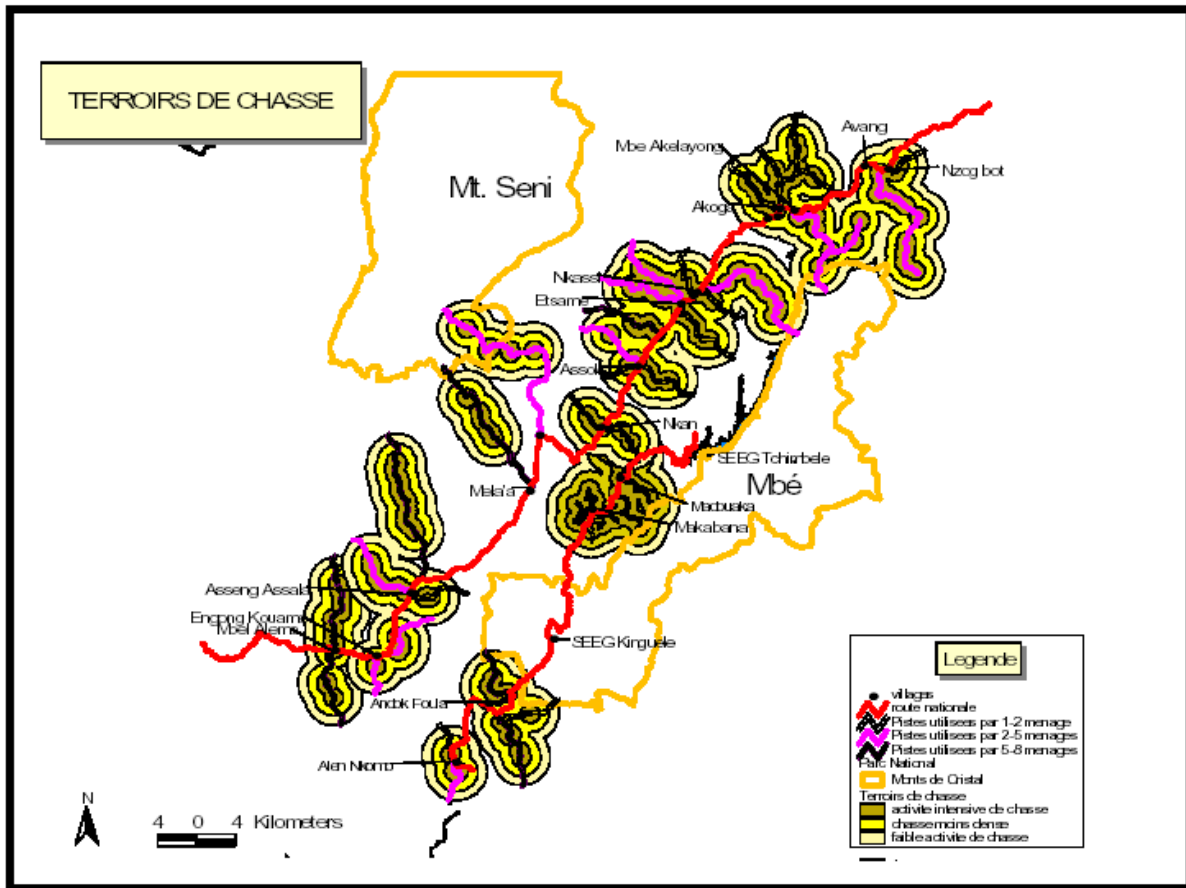


Figure illustrating traditional hunting zones used by settlements around the Monts de Cristal National Park

## **Conclusions:**

The WCS lead, Monts de Cristal Gabon segment project has focused on 1) improving knowledge of and promoting sound management in the Monts de Cristal National Park and surrounding areas and 2) promoting sound natural resource extraction elsewhere in the Landscape (see the WWF report).

We now have sound information on which to base a management and monitoring plan for the National Park and we have established the physical limits of the park, thereby stamping the parks identity into the mindset of local people living in the area and natural resource users.

Given the exceptional biodiversity of this region we believe strongly that it should be a priority for investment both in protected area management and in the integration of biodiversity conservation principals in natural resource extraction. Reduced funding for this landscape in the next phase of CARPE suggests we have not been able to convince USAID of the importance of this landscape. We are now working actively to secure additional funding to compliment baseline funds from USAID for activities over the next 5 years.

The Landscape philosophy championed by USAID in CARPE-CBFP is entirely appropriate as an approach to reducing biodiversity loss and climate change in this highly biodiverse area of refuge rain forest. However, our experiences with trying to accompany the Gabonese authorities through a process of institutional reform in the national parks sector suggest that it will only be at the end of the next 5-year phase of the program that we will be able to start to assess whether short-term achievements are likely to result in lasting improvements in natural resource management.

## **Lessons Learned:**

Coordination of Landscape partners' activities in the first phase of CARPE-CBFP in this Landscape has been cordial but relatively loose and ineffective. In order to affect shifts in landscape-level natural resource management strong coordination between NGO partners and governments is needed. To that end we expect the next phase of CARPE-CBFP to be better with one clearly mandated Landscape leader responsible for the whole Landscape.

Over the first phase of CARPE-CBFP there has been a certain degree of friction between the National Park authorities and the forestry administration responsible for land use planning in the greater landscape. This is not unheard of in the USA, and reminds us of the complexity of the task in hand and the long-term commitment it will require to make lasting headway. There are encouraging signs – a new National Parks law in the final stages of adoption; newly harmonized National Parks and Forestry administrations; raised profile of mineral extraction issues generally (there are some specific iron, platinum and diamond related issues in the Monts de Cristal landscape) which results in a greater degree of communication about mining activities that might impact on natural resource



management. Renewed support for the national administration, perhaps through Forest Service personnel who have done a great job helping with management planning in Lopé National Park, will be required. As Chinese natural and mineral extraction companies become more active sustained support for CARPE-CBFP activities from US diplomats could prove particularly influential and should be encouraged in the second phase of CARPE-CBFP.

**Recommendations:**

- 1) We recommend increased funding levels for this Landscape. The Gabonese segment is close to Libreville, and therefore is within 3-hours travel by bush taxi of over 60% of Gabon's human population. For this reason it has disproportionate pressure compared to other Gabonese Landscape segments but it also impacts the lives of a great many more people – providing 2/3 of Libreville's electricity, all of its water, and regulating local climate. On the Equatorial Guinea side the Landscape covers almost half of the country and most of the remaining intact forest on the mainland.
- 2) In line with CARPE-CBFP phase 2 we support the idea of one clearly mandated landscape leader.
- 3) We recommend that CARPE-CBFP program managers (Washington and Kinshasa based) spend more time working with Government authorities in Gabon to develop buy-in for CARPE-CBFP land use management principals, and that US Embassy staff are actively solicited to support the program.
- 4) The reporting requirements of CARPE-CBFP have been time consuming. The reporting requirements have helped WCS Gabon to become better organized with regards to reporting and particularly systematic documentation of means of verification – so we congratulate CARPE-CBFP for helping to make us more accountable – but we also encourage simplification of reporting requirements through mutual identification of specific deliverables.