A World Heritage Species Case Study: Cross River Gorillas Tami Santelli, IELP Law Clerk (July 20, 2005)

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I. Introduction

The Cross River gorilla (*Gorilla gorilla diehli*) is the most endangered subspecies of gorilla, with a total population of 250-300 individuals living near the Nigeria-Cameroon border. These gorillas live in isolated subpopulations, generally in forested mountain areas. Although some subpopulations of Cross River gorillas live within protected areas, the immediate vicinity supports villages of people who use the forests for their everyday needs. This human use of the forest has fragmented gorilla habitat as the expansion of roads and agriculture isolate subpopulations. It has also led to opportunistic hunting of Cross River gorillas.

Researchers are already involved in many efforts in Nigeria and Cameroon, and the governments of these two range states have made initial steps towards collaborating on conservation goals. However, enforcement of existing national laws is weak, and the countries lack the funds necessary to fully implement recommendations that arose out of bilateral meetings. To increase conservation efforts for the Cross River gorillas, these governments need the political will and in some cases additional funding for enforcement and continued collaboration, and the local people need incentives to stop exploiting the resources in gorilla habitat.

Cross River gorillas would benefit from a comprehensive conservation scheme that would guarantee the involvement of the national governments, facilitate collaboration between Nigeria and Cameroon, and raise international awareness about the gorillas' conservation status. Designating Cross River gorillas as one of the first "World Heritage Species" would provide a framework for this kind of comprehensive scheme and would add an international component to the now largely local efforts. A World Heritage Species designation would bring international recognition to Cross River gorillas as species of "outstanding universal value," and that these gorillas are in danger of extinction. Cross River gorillas have a "significant relationship or connection to humans" because they provide an evolutionary link between humans and our ancestors. This evolutionary connection is a precious part of our world heritage and its loss would constitute "an impoverishment of the heritage of mankind."

Existing international agreements could help to fill the gaps in current conservation activities. The World Heritage Convention provides a way to protect Cross River gorilla habitat and to acknowledge the international importance of the site and the subspecies. While some Cross River gorillas live in national protected areas, enforcement of national laws in these areas is often weak; other Cross River gorillas currently exist in completely unprotected areas. Designating the entire Cross River gorilla range, including areas in both Nigeria and Cameroon, as a transboundary World Heritage Site would be an important step toward better protecting this subspecies; the development of a proposal for a Transboundary World Heritage Site to protect Cross River gorillas would increase cooperation with respect to enforcement and management between Nigeria and Cameroon. The Convention on the Conservation of Migratory Species (CMS) would also contribute to a more comprehensive, cooperative conservation scheme. CMS protects species that regularly cross international boundaries and facilitates cooperation between range states of migratory species. Given the Cross River gorillas' range, which expands over the Nigeria-Cameroon border, and the budding collaboration between those two countries regarding conservation of the gorillas, inclusion of Cross River gorillas in CMS could have significant positive effects, particularly if an agreement or memorandum of cooperation can be developed through which the CMS Secretariat and Parties could provide technical assistance.

This proposal summarizes the current status of the Cross River gorilla and explores international agreements that should be used for increased conservation. Part II briefly explains the taxonomy of the Cross River gorillas. Part III discusses the status and location of each of the isolated subpopulations, and the specific threats to each of these groups. Part IV synthesizes the opinions of prominent researchers working in the field and makes conclusions about the greatest threats facing the Cross River gorillas. Part V explains the need for international involvement and considers the appropriate international conventions.

II. Taxonomy

Gorilla taxonomy concerning the number of species and subspecies has recently been the subject of much scientific debate. However, it is now increasingly accepted that there are two species of gorilla: Western (*Gorilla gorilla*) and Eastern (*Gorilla berengei*).¹ Cross River gorillas, although once considered to be *Gorilla gorilla gorilla*, have recently been distinguished as a separate subspecies, *Gorilla gorilla diehli*. A 1999 analysis of Cross River gorilla skeletons (skulls) concluded that Cross River gorillas were distinct enough from other Western gorillas to merit classification as a separate subspecies.²

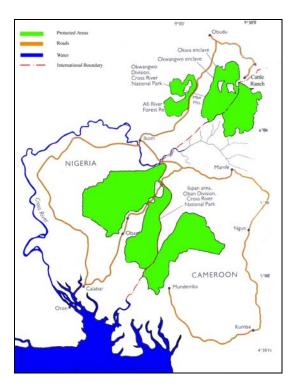
¹ United Nations Environment Programme, Division of Environmental Conventions, *Great Apes Survival Project* (*GRASP*), *Fact Sheets*, *at* http://www.unep.org/grasp/Fact_gorilla.asp (last accessed Apr. 6, 2005).

² John F. Oates, Kelley L. MacFarland, Jacqueline L. Groves, Richard A. Bergl, Joshua M. Linder, & Todd R. Disotell, *The Cross River gorilla: Natural history and status of a neglected and critically endangered subspecies, in* GORILLA BIOLOGY: A MULTIDISCIPLINARY PERSPECTIVE 472, 486–487 (Andrea B. Taylor & Michele L. Goldsmith eds., Cambridge U. Press 2003). *See* Esteban E. Sarmiento & John F. Oates, *The Cross River Gorillas: A Distinct*

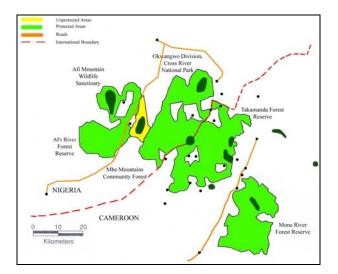
III. Status of Cross River Gorillas

There are approximately ten isolated subpopulations of Cross River gorillas living in the hills around the Nigeria-Cameroon border with a total estimated population of 250-300 individuals. Many of these subpopulations are surrounded by villagers whose farming and use of the forest erodes the borders of the gorilla habitat. Increased development in the region threatens to further isolate these subpopulations and reduce the gene flow between the groups. Hunting has also historically been a threat to these gorillas. This section details the status of each of the subpopulations, threats specific to each group, and existing local conservation efforts. For visualization of the general area discussed, see Map 1 (below). Map 2 illustrates the specific areas inhabited by Cross River gorillas.

Subspecies, Gorilla gorilla diehli *Matschie 1904,* 3304 AMERICAN MUSEUM NOVITATES 2–55 (Oct. 16, 2000) for the complete analysis.



 $\begin{array}{l} Map \ 1 \\ {\rm John \ F. \ Oates, \ Myth \ and \ Reality \ in \ the \ Rain \ Forest: \ How} \\ {\rm Conservation \ Strategies \ Are \ Failing \ in \ West \ Africa, \ 132 \ (U. \ Nature \ Strategies)} \end{array}$ of Cal. Press 1999).



Map 2

Oates et al., *The Cross River gorilla: Natural history and status of a neglected and critically endangered subspecies*, in GORILLA BIOLOGY: A MULTIDSCIPLINARY PERSPECTIVE 474, 486–487.

A. Nigeria

1. Cross River National Park

The Cross River National Park (CRNP) was created by federal decree in 1991, consolidating the existing Oban and Boshi-Okwangwo Forest Reserves. CRNP consists of two separate areas named after these reserves—the Oban division in the south and the Okwangwo division in the north. Gorillas live only in the northern Okwangwo division. The Okwangwo division spans approximately 1,000 km² and is contained by the Cross River, the Ikom-Obudu highway, and the Nigeria-Cameroon border (and the Takamanda Forest Reserve in Cameroon). Okwangwo is surrounded by 66 villages with a population of approximately 36,000 people.³ At least two villages, Okwa and Okwangwo, lie within the division. They have an estimated population of 2,500 people.⁴

Within Okwangwo, there are two distinct subpopulations of gorillas, which researchers believe are completely isolated from each other today.⁵ These two subpopulations live in areas of only about 25–30 km², and they live in the least accessible places of Okwangwo.⁶ Another subpopulation of 20-30 gorillas, probably living in small groups, lives in an area straddling the Nigeria-Cameroon border, in both the CRNP and the Takamanda Forest Reserve. Another subpopulation lives in the area formerly known as the Boshi Extension, in the northeastern area of Okwangwo. This subpopulation consists of approximately 20 gorillas.⁷ Although some studies of the gorillas in CRNP have been done, development of an ongoing research project has been challenging.⁸

Recent conservation efforts in CRNP have been relatively unsuccessful. A project that began in 1991 emphasized sustainable development as a means to conserve the resources in the area. Support zones were set up around the park and village liaisons worked to educate villagers and answer questions about the park. Efforts were made to increase agricultural productivity and lessen villagers' dependence on the forest. This project included a proposal to relocate the two enclaves, Okwa and Okwangwo, to an area outside of the park, due to fears that excessive

³ Uwem E. Ite, *The Challenge and Imperatives of Conservation-with-Development in Cross River National Park, Nigeria, at* http://www.earthwatch.org/europe/limbe/upt.html (last accessed Oct. 30, 2004).

⁴ JOHN F. OATES, MYTH AND REALITY IN THE RAIN FOREST: HOW CONSERVATION STRATEGIES ARE FAILING IN WEST AFRICA, 157 (U. of Cal. Press 1999).

⁵ John F. Oates, *A Report from Nigeria*, 16 GORILLA JOURNAL 2 (June 1998), *available at* http://www.berggorilla.de/english/frame.html (last accessed Nov. 8, 2004).

 $^{^{6}}_{7}$ Oates et al., *supra* note 2, at 486–487.

 $^{^{7}}$ Id.

⁸ See Edem A. Eniang, *The Role of Cross River National Park in Gorilla Conservation*, 22 GORILLA JOURNAL (June 2001), *available at* http://www.berggorilla.de/english/gjournal/texte/22cross.html (last accessed Feb. 3, 2005); *see also* Edem A. Eniang, *Bushmeat Trade and Primate Conservation around Cross River National Park*, 23 GORILLA JOURNAL (Dec. 2001), *available at* http://www.berggorilla.de/english/gjournal/texte/23crossr.html (last accessed Feb. 3, 2005); *see also* Edem A. Eniang, *Bushmeat Trade and Primate Conservation around Cross River National Park*, 23 GORILLA JOURNAL (Dec. 2001), *available at* http://www.berggorilla.de/english/gjournal/texte/23crossr.html (last accessed Feb. 3, 2005). John Oates, a professor at the City University of New York, has a long history of research and conservation efforts in Nigeria. He has completed surveys of the Cross River gorillas in Nigeria, and is the doctoral advisor of Kelley McFarland (researching at Afi Mountain, Nigeria) and Rich Bergl (researching in Cameroon). However, Eniang notes that aside from isolated studies by visiting researchers, there has been no long-term research in CRNP in recent years. Eniang is a researcher for the Biodiversity Preservation Group (BPG), a group that has been working with CRNP to maintain a research presence there. BPG has undertaken studies of primates in both CRNP and the nearby Mbe Mountains.

farming in these communities might completely divide the park.⁹ However, much of the projected funding for this project fell through, and the development projects were ineffective. Many of the villagers, who viewed the creation of CRNP as something that could bring aid to their villages, were disillusioned when they saw little improvement in their lives.¹⁰ Due to this frustration over the 1991 conservation and development plan, local villagers have become less receptive to conservation attempts in the future.¹¹

CRNP suffers from what has been called the "paper park" problem: it is listed as a protected area, but receives very minimal protection on the ground.¹² Rangers historically have not been well trained or well equipped, and made few detailed excursions into the park.¹³ As a result of this lax enforcement, hunting continues to be a threat to the gorillas living in the park. However, recent interest in the Cross River gorilla subpopulations in Nigeria seems to have played some role in reducing hunting of gorillas: There have been no reports of gorillas killed in Nigeria since 1998.¹⁴ The gorillas in the Boshi Extension area of Okwangwo are also threatened by forest fires. This subpopulation lives on the edge of the Obudu plateau, the home of the Obudu Cattle Ranching Company and an area increasingly used for farming. Fires often sweep through the grassy plateau in the dry season and threaten the nearby forest.¹⁵ The World Conservation Society has now agreed to assist park authorities with preparation of a management plan for Okwangwo Division.

2. Afi River Forest Reserve

The Afi River Forest Reserve is located directly west of CRNP, and is connected to the Park by the Mbe Mountains Community Forest. The entire Afi River Forest Reserve is 383 km² and contains at least two major village enclaves, Buanchor and Kanyang.¹⁶ The gorillas in the Afi River Forest Reserve live on Afi Mountain, an area that was designated a wildlife sanctuary in May 2000. The sanctuary spans 85 km²; however, the gorillas live in an area of just 35 km².¹⁷ There are an estimated 25–30 gorillas living in the Afi Mountain Wildlife Sanctuary.¹⁸

Conservation efforts at Afi Mountain have been more successful than those at CRNP, perhaps because they have been implemented on a much smaller scale and because the area is smaller.¹⁹ While efforts at CRNP involved foreign investors, large amounts of money, and international NGOs, conservation work at Afi has largely been carried out by the researchers in the reserve. Even before creation of the sanctuary in 2000, researchers had established an informal team to track the gorillas and report any poaching and encroachments. This effort

⁹ OATES, MYTH AND REALITY, *supra* note 4, at 157–162.

¹⁰ *Id.* at 168., Ite, *supra* note 3, at 4–5.

¹¹ Oates et al., *supra* note 2, at 491.

¹² *Id.* at 490–191.

¹³ OATES, MYTH AND REALITY, *supra* note 4, at 168–169.

¹⁴ Oates, et al., *supra* note 2, at 489–490.

¹⁵ OATES, MYTH AND REALITY, *supra* note 4, at 156–157.

¹⁶ Oates et al., *supra* note 2, at 474.

¹⁷ WesternGorilla.org, *Afi Mountain Wildlife Sanctuary (AMWS)*, *at* www.westerngorilla.org/Afi.htm (last accessed Apr. 23, 2005); Oates et al., *supra* note 2, at 486.

¹⁸ Oates et al., *supra* note 2, at 488.

¹⁹ *Id.* at 491.

continues, and steps have been taken recently to build a more long-term conservation program.²⁰ However, things have not moved forward that well. Due to management problems, the research effort was reduced last year and researchers are working with the state government and NGOs to establish a permanent system of management and protection system. Research for now has been reduced to a mountainwide gorilla census every 3-6 months.

The gorilla habitat at Afi has remained relatively undisturbed, in large part because the mountainous terrain makes logging nearly impossible. Hunting has historically been the greatest threat to these gorillas. Two gorillas were killed in Afi in 1993, and another gorilla was killed in October 1998.²¹ However, the protection team established by the Afi researchers, along with other conservation efforts, seems to have been somewhat successful. Researchers in the area say that these gorillas are not currently targeted by hunters.²²

3. Mbe Mountains

The Mbe Mountains area is a community-owned forest located between the Afi River Forest Reserve and the CRNP. This area consists of approximately 100 km², with a subpopulation estimated to contain about 30 gorillas inhabiting 25–30 km² of the region.²³ Currently, this area is not protected. When CRNP was created in 1991, contributors to the conservation and development project suggested it include the Mbe Mountains, but the CRNP boundaries were drawn along the existing boundaries of the Oban and Boshi-Okwangwo areas, excluding Mbe.²⁴ Since 1991, this proposal has remained on the table, and park officials expect this area will eventually be incorporated into CRNP.²⁵ However, as a result of the raised expectations and failures of the conservation and development project, local communities have resisted Mbe's incorporation into the park, holding out for compensation or development assistance.²⁶ A USAID-supported agricultural development project in the area plans to assist communities with the development of a community-based management system and the idea of incorporation into the park has been dropped.

There are at least nine villages around the Mbe Mountains and agricultural encroachment from these villages has been the primary threat to the gorillas.²⁷ Increased farming continues to erode the borders of the forest and farmlands threaten to sever the forest connection between the Afi River Forest Reserve and the Mbe forest.²⁸ However, hunting does not seem to be a major problem in Mbe–there is no evidence of a gorilla being killed since 1991.²⁹ Hunting of other

²⁰ *Id.* The Afi Gorilla Research Project is led by Kelley McFarland, a doctoral student at City University of New York. Pandrillus, a local NGO that runs a sanctuary and rehabilitation center for chimpanzees and drills, is also involved in conservation efforts around Afi Mountain.

²¹ Kelley McFarland, *Gorilla Killed in Nigeria*, 17 GORILLA JOURNAL (Dec. 1998), *available at* http://www.berggorilla.de/english/frame.html (last accessed Nov. 8, 2004).

²² WesternGorilla.org, *supra* note 17.

²³ Oates et al., *supra* note 2, at 488.

²⁴ Oates, *Report from Nigeria, supra* note 5, at 2.

²⁵ Id.

²⁶ Oates et al., *supra* note 2, at 491.

²⁷ Ite, *supra* note 3, at 5, Oates et al, *supra* note 2, at 490.

²⁸ Oates et al., *supra* note 2, at 490.

²⁹ *Id.* at 489.

wildlife in the area, however, as well as at other sites, with wire snares can potentially result in injuries or death to gorillas.

B. Cameroon

1. Takamanda Forest Reserve

The Takamanda Forest Reserve covers 676 km² along the Nigeria-Cameroon border in southwest Cameroon and is contiguous to the Okwangwo Division of CRNP.³⁰ Takamanda was created by the British trusteeship administration in 1934 as part of a system of forest reserves in the British-administered Cameroons.³¹ This region is still relatively isolated and the local people rely heavily on forest resources for their livelihood. There are three villages within Takamanda (Kekpane, Obonyi I, and Obonyi III) and at least five more villages surrounding the reserve.³² A 2001 census of 43 villages within and surrounding Takamanda (including 12 villages across the border in Nigeria) showed a population of 15,707 people.³³

There are an estimated 75–100 gorillas living in and immediately around Takamanda in at least four subpopulations. One of these groups lives in the Obonyi-Okwa hills straddling the border of the CRNP and Takamanda, and was described above. This subpopulation consists of 20–30 gorillas undoubtedly, which undoubtedly moves between the two countries (within CRNP and the Takamanda Forest Reserve). A second subpopulation of 15–20 gorillas inhabits roughly 10 km² on the eastern edge of the reserve in the Basho Hills. A recent estimation of gorillas in Takamanda also includes at least one other subpopulation of approximately 25 gorillas located in the highlands close to the village of Atolo. Just south of Takamanda in the Takpe Hills lives the fourth of 10–15 gorillas that is restricted to an estimated 4 km².³⁴

Historically, Takamanda has been relatively protected, mostly due to its isolation. Because local human populations had been granted the right to hunt using traditional methods (not firearms) to meet their subsistence needs, hunting posed the biggest threat to gorillas.³⁵ In 1998, a Takamanda researcher found ten gorilla skulls in the reserve and surrounding villages reported to have been killed between 1990 and 1998.³⁶ However, in 1998, villages in Takamanda adopted a local ban on hunting gorillas. Since then, there have been no additional

³⁰ Jacqueline L. Sunderland-Groves, Fiona Maisels & Albert Ekinde, *Surveys of the Gross River Gorilla and Chimpanzee Populations in Takamanda Forest Reserve, Cameroon*, in *Takamanda: The Biodiversity of an African Rainforest* 129, 136 (J.A. Comiskey, C.H. Sunderland & J. Sunderland eds., Smithsonian Institution 2003), *available at* http://nationalzoo.si.edu/ConservationAndScience/MAB/researchprojects/appliedconservation/ westafrica/Takamandabook/Chapter_9.pdf (last accessed Nov. 8, 2004).

³¹ Jacqueline L. Sunderland-Groves, Terry C. H. Sunderland, James A. Comiskey, Julius S. O. Ayeni & Marina Mdaihli, *Takamanda Forest Reserve, Cameroon, in* TAKAMANDA: THE BIODIVERSITY OF AN AFRICAN RAINFOREST 1, 1 (J.A. Comiskey, C.H. Sunderland & J. Sunderland eds., Smithsonian Institution 2003), *available at* http://nationalzoo.si.edu/ConservationAndScience/MAB/researchprojects/appliedconservation/westafrica/ Takamandabook/Chapter_1.pdf (last accessed October 15, 2004).

³² *Id.* at 5.

³³ Sunderland-Groves et al., *Surveys of the Cross River gorilla, supra* note 30, at 130.

³⁴ Oates et al., *supra* note 2, at 488–489.

³⁵ Sunderland-Groves et al., *Takamanda*, *supra* note 31, at 5.

³⁶ Oates et al., *supra* note 2, at 490.

reports of killings.³⁷ As Takamanda becomes more easily accessible, though, new threats are emerging. The construction of a new road from Mamfe to Akwaya has already divided Takamanda from the neighboring Mone River Forest Reserve, and, if completed, will also divide Takamanda from Mbulu forest. Both the Mone River Forest Reserve and Mbulu provide habitat for subpopulations of gorillas (see below). This road will open the forest up to more traffic, and will increase access to the reserve for further exploitation of resources. Forest is already being cleared and converted into agricultural fields in anticipation of further development in the area.³⁸

Most conservation efforts in Takamanda seem to come from a long-term research project in the reserve.³⁹ Takamanda apparently does not receive much protection from national laws, although increasing its status from "forest reserve" to "wildlife sanctuary" or a natinal park is being considered.⁴⁰ Today, Takamanda's status as a Forest Reserve does not foreclose commercial logging in the future.⁴¹

2. Mone River Forest Reserve

The Mone River Forest Reserve is an area of approximately 538 km² located southeast of the Takamanda Forest Reserve and connected to Takamanda by a corridor of ungazetted forest.⁴² The Mamfe-to-Akwaya road development runs along this corridor and has bisected the area of Takamanda from both Mone and Mbulu. Gorillas in Mone receive no additional protection beyond those already provided by national law (which does include a ban on killing gorillas), but these laws are often poorly enforced. Because researchers discovered gorillas in this area only in 2001, little data exists about their population and distribution. To date only one subpopulation has been located in the southern section of Mone. Surveys of this area are ongoing.

3. Mbulu Forest

The Mbulu Forest, currently a non-classified forest, is directly east of Takamanda and is contiguous to the Mone River Forest Reserve. The area is topographically diverse and thus still relatively inaccessible, although the Mamfe-Akwaya road will impact this. Because researchers identified the presence of 2 or 3 subpopulations in upper Mbulu only in 2001,⁴³ the numbers and distribution of these gorillas is still being determined.⁴⁴ However, it is known that one

³⁷ Sunderland-Groves et al., *Surveys of the Cross River Gorilla, supra* note 30, at 138.

³⁸Terry C. H. Sunderland, Jacqueline L. Sunderland-Groves, James A. Comiskey, Julius S. O. Ayeni & Marina Mdaihli, *Future Conservation and Management of the Takamanda Forest Reserve, Cameroon in* TAKAMANDA: THE BIODIVERSITY OF AN AFRICAN RAINFOREST 181, 181 (J.A. Comiskey, C.H. Sunderland & J. Sunderland eds., Smithsonian Institution 2003), *available at* http://nationalzoo.si.edu/ConservationAndScience/MAB/

researchprojects/appliedconservation/westafrica/Takamandabook/Chapter_13.pdf (last accessed Nov. 8, 2004). ³⁹ A comprehensive survey of the gorillas in Takamanda led by Jacqueline Sunderland-Groves was completed in 2003. Rich Bergl, doctoral student of John Oates, is also working in the area.

⁴⁰ Sunderland et al., *Future Conservation, supra* note 38, at 182; Personal communication with Terry Sunderland (June 9, 2005).

 $^{^{\}hat{4}1}$ *Id.* at 181.

⁴² Sunderland-Groves et al., *Surveys of the Cross River Gorilla, supra* note 30, at 130.

⁴³ Oates et al., *supra* note 2, at 489. The presence of these gorillas was confirmed by Jacqueline Sunderland-Groves, Rich Bergl, and Joshua Linder (graduate student at City University of New York).

⁴⁴ Oates et al., *supra* note 2, at 489. The 2001 survey was done by Jacqueline Sunderland-Groves.

subpopulation inhabits the hills of Badshama while another inhabits the hills close to the village of Ashunda; researchers believe these two subpopulations are still connected. This second subpopulation is the most easterly subpopulation recorded to date on the Kagwene Mountain. Kagwene is located along the boundary of South West Province (Mbulu forest) and North West Province (Njikwa forest). One research team found one group of approximately 13 individuals; the entire subpopulation size could be between 20-30 individuals. WCS has been working with Cameroon government to create a Gorilla Sanctuary in this area. The government issued a public notice to announce its intention to create the Kagwene Mountain Cross River Gorilla Sanctuary in January 2005.⁴⁵

4. Takamanda-Mone Technical Operations Unit

Researchers are currently working in partnership with other agencies and Cameroon government to propose the boundaries of a Technical Operations Unit ,which covers Takamanda, Mone, and Mbulu entirely. They plan to complete this work by October 2005. Once the boundaries of the Technical Operations Unit are established, a land-use plan for the area will be designed that includes a network of protected areas and corridors and community forests. The land-use plan will include the Takamanda National Park, a review of the status for Mone, and identification of key areas for protection within Mbulu, based on biological information. An investment bank has pledged funds to support development initiatives for local communities providing they contribute to conservation of the area, which will include active protection for wildlife.⁴⁶

5. Other Gorilla Populations

A gorilla population has been found in the forests of Bechati-Fossimondi about 45km east of Mone. $^{\rm 47}$

IV. Threats to Cross River Gorillas

Recent estimates of the Cross River gorilla population show that there are a total of 70–90 gorillas in Nigeria and perhaps another 150–195 in Cameroon.⁴⁸ While the minimum

⁴⁵ Personal communication with Jacqueline Sunderland-Groves (June 9, 2005). This Kagwene group may be the same as the two new gorilla groups discovered in 2001in the western Bamenda Highlands, in an area east of the Mbulu Forest.

⁴⁶ Personal communication with Jacqueline Sunderland-Groves (June 9, 2005).

⁴⁷ In late 2002, yet another gorilla population was discovered in the Ebo Forest, an area approximately 200 km south of the Takamanda/Mone/Mbulu area, and 100 km north of the lowland gorilla population in southern Cameroon. At this point, there is no genetic or other evidence to ally these animals with the "Cross River" gorillas of the border region. Indeed, study of one skull shows it to be significantly different. The Ebo Forest consists of 1,424 km² of hills and mountains and historically contained several villages. Community conflicts in the 1960s led to abandonment of these villages, and today the area is relatively uninhabited. Because the mountainous terrain of Ebo is not conducive to logging, the area is also fairly undisturbed. The Ebo Forest was supposed to have been gazetted as a protected area by the end of 2004. Researchers speculate that this population might indicate the gorilla range used to extend from the current Cross River gorilla habitat on the Nigeria-Cameroon border all the way to the lowland gorilla habitat in southern Cameroon. Bethan Morgan, *The Gorillas of Ebo Forest, Cameroon*, 28 GORILLA JOURNAL (June 2004), *available at* http://www.berggorilla.de/english/frame.html (last accessed Nov. 4, 2004).

viable population figure for Cross River gorillas is unavailable, the understanding of scientists in the field is that these subpopulations are still viable.⁴⁹ In Nigeria, all gorillas except those located in the Mbe Mountains live within protected areas. In Cameroon, however, four gorilla subpopulations live in completely unprotected regions, although recent studies of the area might also lead to an increase in conservation status for some of Cameroon's forests. At present, researchers working in the area do not consider either Takamanda or Mone as adequately protected, although the creation of the Takamanda-Mone Technical Operations Unit may improve the management and conservation status of these gorillas.⁵⁰

Scientists agree that the biggest threats to the Cross River gorillas are population fragmentation, habitat destruction, and hunting. Jacqueline Sunderland-Groves, who has led a research project in Takamanda and other parts of southwest Cameroon since 1997, believes that habitat fragmentation is the biggest threat to the Cameroonian gorillas now that hunting has almost ceased.⁵¹ She notes that the subpopulations are increasingly isolated from each other as these areas are developed, and gorillas in the different groups are unlikely to meet and breed. In particular, the road being constructed between the towns of Mamfe and Akwaya in Cameroon threatens to cut off all movement between the gorilla groups in Takamanda and those in Mone and Mbulu.

However, the fragmentation of these subpopulations may not be as much of an immediate threat as the small numbers of these subpopulations suggest. Dr. John Oates, an anthropology professor at the Hunter College of the City University of New York and longtime researcher in Nigeria, acknowledges that these subpopulations are very small and there is a risk of inbreeding and loss of genetic variation. But he notes that historical accounts suggest these groups have been isolated for years, and that many of the same areas that were inhabited by gorillas in the early 1900s are still home to gorillas today.⁵² Although the groups are fragmented, forested corridors still connect most groups and so-called "wandering males" may be contributing to at least some level of gene flow between these groups.⁵³ Richard Bergl, one of Dr. Oates' doctoral students, agrees that substantial forest still exists between many of the subpopulations, allowing for contact between the groups.⁵⁴ Maintenance of these corridors will be necessary for the survival of the Cross River gorillas, as will the creation of new corridors to reconnect completely isolated groups.

Dr. Oates emphasizes hunting and habitat destruction (which causes this fragmentation) as major threats to the Cross River gorilla.⁵⁵ Although hunting seems to have decreased in this

- ⁵² Oates et al. *supra* note 2, at 492.
- ⁵³ *Id*.

⁴⁸ Personal communication with Jacqueline Sunderland-Groves (June 9, 2005); personal communication with John Oates (May 31, 2005).

⁴⁹ Email from Rich Bergl, doctoral student, City University of New York, to Tami Santelli (Jan. 25, 2005) (on file with IELP). Bergl explained that determining a "minimum viable population" for any group is hard to do and is often not an accurate indicator of how the population is doing. For comparison, he noted that there are approximately as many Cross River gorillas as Bwindi or Virunga gorillas, and that most people consider these populations "viable."

¹⁵⁰ Oates et al., *supra* note 2, at 490; personal communication with John Oates (May 31, 2005).

⁵¹ Sunderland-Groves et al., *Takamanda*, *supra* note 31, at 6.

⁵⁴ Bergl Email, *supra* note 48.

⁵⁵ Oates et al. *supra* note 2, at 489.

region, it has not ceased, and Bergl agrees that even a low level of hunting could have a significant impact on such a small population.⁵⁶ Further measures to control hunting will be important for the conservation of these gorillas. Habitat destruction also remains a threat to these gorillas as the surrounding areas are developed, but currently the total range of these gorillas is large enough to support a much bigger population than exists today.⁵⁷ Large tracts of continuous forest still exist throughout the gorillas' range, so perhaps as long as the existing forest is protected, the threat of habitat destruction can be minimized.

V. Proposals to Implement the World Heritage Species Concept for Cross River Gorillas

As noted above, ongoing research projects in these areas seem to provide a base level of conservation and protection for the Cross River gorillas. Researchers patrol gorilla habitat, report poaching and encroachment in some areas, and are working with local communities and with government agencies to increase support for conservation efforts. Researchers are also investigating the possibility of developing corridors to reconnect isolated subpopulations and are working in both Cameroon and Nigeria to design a system of corridors and larger protected areas within Cross River gorilla habitat.⁵⁸ The participation of Cameroon and Nigeria in two conferences specifically addressing the conservation of the Cross River gorillas suggests that the two countries have begun taking a more collaborative approach to conserving these gorillas.

However, funding to implement some of these conservation efforts is lacking,⁵⁹ and enforcement of already existing national laws has been weak. Using existing international agreements to augment local efforts could potentially raise the profile of the Cross River gorilla and secure greater involvement of the national governments. International involvement could also help attract funding for some major conservation projects, which might in turn contribute to the development of the region in a way that will not adversely affect the gorilla population. The two biggest threats to the Cross River gorilla are habitat destruction/fragmentation and local hunting. Two international agreements, the World Heritage Convention and the Convention on the Conservation of Migratory Species, specifically address these threats while also providing the framework and incentives for range states to collaborate on conservation issues.

A. Protecting Habitat of the Cross River Gorilla

1. National Protected Areas

Although many of the Cross River gorillas live in nationally protected areas, the level of national protection and enforcement of laws in these areas is unclear. In Nigeria, gorillas live in four different areas with four different designations: forest reserve, national park, wildlife sanctuary, and community forest. In Nigeria, forest reserves are production areas managed by

⁵⁶ Id.

⁵⁷ Oates et al. *supra* note 2, at 492.

⁵⁸ Bergl Email, *supra* note 48; Email from Jacqueline Sunderland-Groves, researcher, Takamanda Forest Reserve, to Tami Santelli (Jan. 25, 2005) (on file with IELP).

⁵⁹ Funding has been provided for several projects from several sources, including the U.S. Fish & Wildlife Service, World Conservation Society, and World Wildlife Fund, among others, based on the recommendations from earlier workshops on Cross River gorilla conservation. Personal communication with John Oates (May 31, 2005).

the states in order to generate revenue. In general, when these areas were gazetted, the state government granted the local people the right to continue to use these forests for their subsistence needs. Additionally, some royalties from the revenue generated by the exploitation of these forest resources often is given back to the local populations by the state government. In the case of the Afi River Forest Reserve, the only Nigerian forest reserve that harbors Cross River gorillas, the gorillas live in its Afi Mountain Wildlife Sanctuary. Although this sanctuary is managed by the state, it has a status similar to that of a national park—all exploitation is prohibited. Nigerian national parks, such as Cross River National Park, are managed by the Nigerian government and all exploitation is prohibited without a permit, although enforcement of this prohibition appears to be weak. Mbe Mountains Community Forest is currently not managed by either the state or federal government, although discussions are ongoing regarding increased protections in this area. The name "community forest" was created by NGOs in the area with the intern of fostering some sense of identity among the villages and recognition of the area by the international community.⁶⁰ The Nigerian state of Cross River also has a legal designation of Community Forest covering such areas.

In Cameroon, four subpopulations of gorillas live in completely unprotected forests. The other groups live in areas designated as "forest reserves," which are, as in Nigeria, managed as production areas. While exploitation of Nigerian forests occurs on a small scale, which has occurred on a large scale in places and in the past, the timber industry is a major force in Cameroon. Because of this, exploitation of Cameroonian forests occurs on a large scale and involves well-organized actors.

2. The World Heritage Convention

The entire Cross River gorilla habitat, spanning across an international boundary and into both Nigeria and Cameroon, should be designated a natural World Heritage Site under the World Heritage Convention (WHC). The WHC defines a "natural heritage" site as a site with "geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation."⁶¹ Under this definition, it seems that all of the Cross River gorilla habitat could be designated as a natural heritage site.

Once a site is designated a World Heritage Site, the designating party is subject to some flexible conservation obligations, and the site becomes a potential recipient of international assistance from the World Heritage Fund.⁶² This fund is available to aid parties in preparatory assistance, training assistance, technical cooperation, emergency assistance, and promotional and educational assistance.⁶³ However, with a total of 788 sites and an annual budget of about \$4 million (i.e., about \$5,000 per site), this fund obviously cannot meet all the needs of all the sites. Nonetheless, the funds appear sufficient to bring Cameroon and Nigeria together to prepare a joint management plan for Cross River gorillas; several hundred thousand dollars per year have

⁶⁰ Interview by Tami Santelli with Liza Gadsby, Pandrillus Foundation, Portland, OR (May 4, 2005).

⁶¹ Convention Concerning the Protection of the World Cultural and Natural Heritage, Nov. 23, 1973, art. 2, 27

U.S.T. 40, *available at* http://whc.unesco.org/pg.cfm?cid=182.

⁶² Id. at art. 19–20.

⁶³ Id.

been committed for Cross River gorilla research and the development of management plans.⁶⁴ The WHC also has a mechanism for recognizing sites that are experiencing more immediate threats. By including sites on the List of World Heritage Sites in Danger, these sites receive priority in international attention and financial aid.⁶⁵ This two-tiered structure of the WHC provides a base level of international support to all sites, while effectively focusing international attention and financial aid.

Because the WHC currently has recognized fourteen transboundary World Heritage Sites, designating the entire Cross River gorilla habitat as a protected site under the WHC would not be unprecedented. In fact, transboundary protected areas have received greater attention in recent years with the growing awareness of the importance of ecosystems and the knowledge that ecosystems extend beyond international boundaries. Illustrating this growing interest in transboundary protected areas, the theme of the 5th IUCN World Parks Congress, held in Durban, South Africa in September 2003, was "Benefits Beyond Borders." This Congress launched a Transboundary Protected Area Global Programme with the goal of developing a Global Transboundary protected areas.

The WHC also recently established a periodic reporting system to facilitate enforcement of Parties' obligations under the Convention and to provide a means by which to monitor the conservation status of the regions.⁶⁶ This system ensures that after Parties nominate national sites for inclusion on the World Heritage list, the will be responsible for documenting their progress and reporting to an international body. Parties submit reports by region and these reports are examined by the World Heritage Committee, which makes its own findings about the successes and concerns in the region and issues recommendations.⁶⁷ For example, after Africa submitted its first Periodic Report in 2001, the Committee adopted an Africa Regional Programme to improve training, management, research, reporting, participation, networking and cooperation in the region.⁶⁸ This Regional Programme sets up annual training for management personnel and national administrators of the WHC. This series of events-the submission of the Periodic Report followed by recommendations by the Committee and the establishment of the Regional Programme-illustrates that the WHC has a mechanism in place to monitor and address conservation concerns that arise in the management of World Heritage Sites. In light of concerns that enforcement has been lacking in Cameroon and Nigeria, international reporting and international scrutiny of conservation and enforcement efforts may encourage stronger enforcement.

⁶⁴ Personal communication with John Oates (May 31, 2005)

⁶⁵ *Id.* at art. 11.

⁶⁶ World Heritage Convention, World Heritage Committee, 22d Sess., *Methodology and Procedures for Periodic Reporting*, WHC-98/CONF.203/6 (Dec. 5, 1998), *available at* http://whc.unesco.org/archive/1998/whc-98-conf203-6e.pdf (last accessed Apr. 22, 2005).

⁶⁷ UNESCO, *World Heritage*, *Periodic Reporting*, http://whc.unesco.org/pg.cfm?cid=172&1=en (last accessed Apr. 22, 2005).

⁶⁸ World Heritage Convention, World Heritage Committee, 27th Sess., *Africa Regional Programme 2004-2007*, WHC-03/27.COM/INF.20C at 1 (May 19, 2003), *available at* http://whc.unesco.org/archive/2003/whc03-27com-inf20ce.pdf (last accessed Apr. 22, 2005).

The designation of "World Heritage Site" is well-recognized around the world and brings international legitimacy, attention, and support to conservation efforts in the area. This designation can increase the importance of the site to the national government and result in the involvement of more governmental institutions in conservation efforts.⁶⁹ It can also sometimes be used as "leverage to influence development decisions and legislation affecting protected areas."⁷⁰ One site manager noted that the inclusion of the site in the World Heritage list was used "to stop bad ideas even before they became projects," and added that "promoting and announcing that the site is 'under the watch' of the global community reduces the risk of making decisions without technical analysis and previous consultation."⁷¹ In addition to affecting development decisions, a World Heritage designation can lead to increased funding from international funding sources. Another site manager stated that he noticed a "demonstrable step change in the attitude of funding bodies in the wake of World Heritage designation."⁷² In addition to direct funds, a World Heritage designation can lead to the creation of other sustainable development projects funded by UNESCO or other international agencies.⁷³ A World Heritage designation also provides site managers and national governments with access to the World Heritage network and management workshops, trainings, and other exchanges of information.⁷⁴

Despite these benefits, the presence of large numbers of people in the habitat of Cross River gorillas may pose a potential problem. While most natural World Heritage Sites have no resident human population, human population does not seem to automatically disqualify a site. The IUCN Natural Heritage Program prepared a working paper on this specific issue in September 1998.⁷⁵ IUCN researchers obtained data from 120 of the 126 natural or mixed World Heritage sites and found that while 73 of the sites did not support human populations, 47 did. The human population in these sites ranged from 38 to 50,000, with an average of 6,268 per site.⁷⁶ This paper also notes that natural World Heritage sites in developed countries rarely have human populations, while the majority of natural World Heritage sites in developing countries do.⁷⁷ With an estimated 38,500 people living around Cross River National Park in Nigeria, and another 15,000 people surrounding Takamanda Forest Reserve in Cameroon, along with various un-censused villages⁷⁸ and many more people throughout the Mbulu area, the number of people in this region exceeds the outer range noted by IUCN. While such a large human populations in and around the Cross River gorilla habitat may pose management difficulties and perhaps closer

⁷³ UNESCO, World Heritage, Sian Ka'an – Mexico, supra note 69.

⁶⁹ See UNESCO, World Heritage, Sian Ka'an – Mexico, at http://whc.unesco.org/pg.cfm?cid=284 (last accessed Apr. 23, 2005) (site manager discussing Sian Ka'an's importance in national conservation efforts after its World Heritage designation).

⁷⁰ *Id*.

⁷¹ Id.

⁷² UNESCO, *World Heritage*, *Dorset and East Devon Coast – United Kingdom, at* http://whc.unesco.org/ pg.cfm?cid=282 (last accessed Apr. 24, 2005).

⁷⁴ Id.

⁷⁵ Jim Thorsell & Todd Sigaty, IUCN Natural Heritage Program, *Human Use of World Heritage Natural Sites: A Global Overview* (September 1998), *available at* http://www.unep-wcmc.org/index.html?http://www.unep-wcmc.org/wh/reviews/human/~main (last accessed Jan. 23, 2005).

 $^{^{76}}_{--}$ *Id.* at 7.

 $^{^{77}}_{79}$ Id.

⁷⁸ Ite, *supra* note 3; OATES, *supra* note 4, at 157; Sunderland-Groves et al., *supra* note 30 at 130.

scrutiny from the World Heritage Committee, it does not automatically disqualify Cross River gorilla habitat from designation as a natural World Heritage Site.

Historically, the protection of specific sites has sometimes resulted in the displacement of the indigenous populations and restrictions on how those populations can use the natural resources. Because of this, designation and protection of sites is often greeted with hostility by the local people. However, in August 2002, as a part of the World Summit on Sustainable Development, a group of African experts on heritage management adopted the Johannesburg Declaration on World Heritage in Africa and Sustainable Development. This declaration, approved under the auspices of the World Heritage Committee, emphasized the importance of involving local communities in conservation efforts and affirmed the importance of heritage management in sustainable development.⁷⁹ The World Heritage Committee, in setting out the Africa Regional Programme, recognized that, while conservation is important, it should not obstruct sustainable development and poverty alleviation in Africa.⁸⁰ This suggests that a more inclusive approach that is sensitive to the needs of the local populations has been adopted by the World Heritage Committee and the designation of sites need not result in displacement of local people.

B. Hunting and other Threats: Facilitating Cooperation Between Nigeria and Cameroon

1. National Laws and Transboundary Collaboration

Hunting gorillas is prohibited by law in both Cameroon and Nigeria. Cameroon law divides wildlife into Class A, Class B, or Class C animals, with Class A animals receiving the most protection. Hunting of these animals is prohibited, and violation of this prohibition is punishable by a fine of up to CFA 200,000 and/or a jail sentence of 20 days to 2 months. Gorillas and chimpanzees are both listed as Class A animals.⁸¹ Although hunting gorillas is illegal, Cross River gorillas have historically been targets for local hunters. However, a local ban on hunting gorillas adopted in 1998 in Takamanda has significantly cut down on the numbers of gorillas being killed by hunters. The Nigerian Endangered Species Act of 1985 also prohibits the hunting, capture, or trade of gorillas in Nigeria.⁸² However, as in Cameroon, despite this law, Cross River gorillas have been hunted in the past. Recent international interest in Cross River gorillas and local protection efforts initiated by researchers seem to have slowed hunting somewhat.

Nigeria and Cameroon have been involved in two International Conferences and Workshops on the Conservation of the Cross River Gorilla, one in 2001 and the most recent in August 2003. The objective of the 2003 conference was to update information on the population

⁷⁹ The Johannesburg Declaration on World Heritage in Africa and Sustainable Development, *available at* http://whc.unesco.org/archive/02-wssd-decl.pdf (last accessed Apr. 23, 2005).

⁸⁰ World Heritage Committee, Africa Regional Programme 2004-2007, supra note 68.

⁸¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, *Summary Report of the Technical Meeting of the CITES Bushmeat Working Group in Central Africa* (July 5-6, 2001), *available at* http://www.cites.org/eng/ prog/BWG/0107_wg_report.shtml (last accessed Jan. 23, 2005).

⁸² Endangered Species (and Control of International Trade and Traffic) Act, art 1 (Apr. 20, 1985), *available at* http://faolex.fao.org/docs/texts/nig18379.doc (last accessed Jan. 31, 2005).

and distribution of Cross River gorillas and review the threats and conservation actions discussed at the first meeting in 2001. The participants, including government Ministers responsible for environment and wildlife, approved ten recommendations for the protection of Cross River gorillas, which included establishing a transboundary protected area and setting up gorilla management committees.⁸³ Although a relatively large maount of funding is available right now for conservation of Cross River gorillas, long-term or longer-term funding to implement these recommendations may be necessary.⁸⁴ These meetings, partially funded by GRASP, could provide an important framework for a more comprehensive conservation program.

2. The Convention on Migratory Species

The Convention on the Conservation of Migratory Species (CMS) should be used to bolster these domestic attempts to protect Cross River gorillas from illegal hunting and other threats and could also promote collaboration between Nigeria and Cameroon. This convention is intended to facilitate the protection of migratory species, defined as "the entire population or any geographically separate part of the population of any species . . . a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries."⁸⁵ CMS lists migratory species in two appendices with varying protection goals and approaches. Currently, Cross River gorillas are not listed under either Appendix. However, mountain gorillas have been listed under Appendix I since the ratification of the treaty in 1979 due to their presence across the borders between Rwanda, Uganda, and the Democratic Republic

⁸³Jacqueline L. Sunderland-Groves & John F. Oates, *Protection Strategies for Cross River Gorillas*, 27 GORILLA JOURNAL (December 2003), *available at* http://www.berggorilla.de/english/ frame.html (last accessed Nov. 4, 2004). A complete list of the recommendations from this workshop includes:

^{1.} establishing a trans-boundary protected area for the Takamanda-Okwangwo complex, in particular by upgrading the protection status of the Takamanda Forest Reserve,

^{2.} strengthening protection and law enforcement measures for all Cross River gorilla populations,

^{3.} developing land-use plans for the Takamanda-Mone-Mbulu area in Cameroon, including a network of protected areas and corridors and a plan for the conservation of Afi-Mbe-Okwangwo area in Nigeria, including both a review of the management status for the Mbe Mountains and the maintenance of forested connections between gorilla habitats,

^{4.} maintaining and expanding basic research into the ecology, distribution and population biology of the gorillas,

^{5.} strengthening and expanding conservation education and awareness programmes at all levels,

^{6.} establishing Cross River gorilla management committees in Cameroon and Nigeria,

^{7.} building the capacity of relevant institutions in Nigeria and Cameroon (including Government departments, universities, NGOs),

^{8.} incorporating local community needs into the development of management strategies, including the study of alternative livelihoods options,

^{9.} reinforcing collaboration amongst all stakeholders,

^{10.} delegating a working group to formulate more detailed recommendations based on the deliberations of the workshop.

⁸⁴ Id.

⁸⁵ Convention on the Conservation of Migratory Species of Wild Animals, June 23, 1979, art. I, § 1(a), *reprinted in* 19 I.L.M. 15, *available at* http://www.cms.int/documents/convtxt/cms_convtxt.htm (last accessed Mar. 6, 2005).

of Congo.⁸⁶ Since the Cross River gorilla range spans the border of Nigeria and Cameroon, they are good candidates for protection under CMS.⁸⁷

Appendix II of CMS lists migratory species "which have an unfavourable conservation status and which require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international co-operation that could be achieved by an international agreement."⁸⁸ Cross River gorillas unquestionably fit into this definition and should be listed under Appendix II of CMS. Once these gorillas are listed, Nigeria and Cameroon should conclude an Article IV Agreement to provide a specific action plan and facilitate transboundary conservation efforts. Article IV agreements provide a framework for collaboration between range states for the increased conservation of a specific species. These agreements lead to specific action plans for the protection of the species and habitat, and include provisions requiring coordination of research, review, and the exchange of information between range states.⁸⁹

Article IV allows for the creation of either a binding Agreement, similar to other binding international treaties, or a less formal Memorandum of Understanding (MoU). Parties that create a formal Article IV Agreement set up their own meetings, secretariat, and advisory bodies and operate independently from CMS, although they must still submit reports on their activities to the CMS COP. This format could lead to a very detailed and highly effective conservation plan for a specific species. However, this kind of formal agreement also requires that the individual parties have the resources to organize meetings, fund a secretariat, and maintain an additional institutional body. The governments of developing countries such as Nigeria and Cameroon may find sustaining this kind of Agreement difficult.

While Article IV Agreements function as an independent treaty, most MoUs remain under the auspices of CMS.⁹⁰ The CMS Secretariat organizes meetings for the range states, receives reports, and undertakes any other ministerial duties that are necessary. Although MoUs do not generally establish independent bodies and they are not considered binding, MoUs appear to operate very similarly to the more formal Article IV Agreements. All seven MoUs have regular meetings and reporting requirements. They also include fairly detailed action plans, some of which include specific tasks to be implemented by each range state. In addition, working groups or advisory committees have been established for some of the MoUs, which allows for research and other activities to take place between meetings.⁹¹ Since CMS provides

⁸⁶ Convention on Migratory Species, *CMS Support for UNEP's Great Apes Survival Project (GRASP), at* <u>http://www.cms.int/news/PRESS/nwPR2001/nw240901greatapes.htm</u> (last accessed Jan. 22, 2005).

⁸⁷ Global Register of Migratory Species, *Mammalia: Terrestrial Mammals, at* http://www.groms.de/groms/ Getting_Started/Results/Terrestrials.html (last accessed Mar. 6, 2005).

⁸⁸ Convention on Migratory Species, *supra* note 85, at art. IV, § 1.

⁸⁹ *Id.* at art. V §§ 4–5.

⁹⁰ The signatories to the MoU on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia established an independent, regional secretariat to coordinate activities under the MoU. Convention on Migratory Species, *Marine Turtles – IOSEA*, *at* http://www.cms.int/species/iosea/IOSEAturtle_bkgd.htm (last accessed Apr. 23, 2005).

⁹¹ The Marine Turtle IOSEA MoU has its own Secretariat and Advisory Committee; the Slender Billed Curlew MoU has a separate working group.

the institutional support for signatories to MoUs, this format might prove more effective for Nigeria and Cameroon.

VI. Conclusions

While local conservation efforts have been somewhat successful, more comprehensive and collaborative efforts are essential for the long term survival of the Cross River gorillas. Designating Cross River gorillas a World Heritage Species would recognize the importance of this subspecies as a part of our world heritage, highlight their plight on the international stage, and provide a framework for increased protection. Though there are dedicated individuals who are working locally, finding ways to facilitate greater involvement by the Nigerian and Cameroonian governments—and between these governments—would contribute much to the ongoing efforts. Existing international agreements could provide both the support and funding that would allow more effective involvement by the national governments.

Designating the gorilla habitat a World Heritage Site would recognize the international importance of the gorillas and their habitat and could potentially provide many tangible benefits for the gorillas, the local populations, and the nations as a whole. World Heritage Sites may be able to generate increased funding for conservation and development, and site managers are included in a world network of sites that often offers training opportunities and other support. While the WHC is specifically designed to protect sites and habitat, CMS provides a tool specifically tailored to facilitate transboundary cooperation between range states for the conservation of a specific species. Listing Cross River gorillas on Appendix II and concluding an Article IV Agreement would provide a framework for Nigeria and Cameroon to develop a comprehensive action plan. Regular meetings and reporting requirements could help ensure that this action plan was implemented and CMS would be available for institutional support. Together, WHC and CMS fill in the gaps in the current scheme for the protection of Cross River gorillas.