

Chapter 1

The conservation context of the Lely, Nassau and Brownsberg Plateaus within Suriname

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SUMMARY

The Lely, Nassau and Brownsberg plateaus are located in eastern Suriname in the Guayana Shield, a region noted for its high biodiversity and extensive tracts of intact Neotropical forest. The 2003 Guayana Shield Priority-Setting Workshop determined that, despite many gaps in information, the three plateaus fall into an area designated as one of the highest priority areas for conservation in the entire Guayana Shield. Specific biodiversity data are lacking for Lely and Nassau, but ecological research and monitoring efforts for the 11,600 ha Brownsberg Nature Park (BNP), which encompasses most of the Brownsberg plateaus, have led to relatively better understanding of certain taxonomic groups, notably plants, mammals, birds, reptiles and amphibians, but little on others such as insects and fishes.

Results of surveys of plant diversity in 2003-2005 (see Chapter 3) on the three plateaus showed that all three areas have high plant diversity compared to most lowland forest plots in western Suriname and suggest that they may constitute a unique ecosystem in Suriname (Bánki et al. 2003; ter Steege et al. 2004, 2005). In addition to high biodiversity, the three plateaus provide many watershed services for local and coastal communities, as well as important sources of food, medicine and building materials for Maroon communities. The BNP is also a very popular tourist destination, particularly for residents of Paramaribo and other population centers on the coast.

All three plateau ecosystems are relatively intact owing to low population density, which presents many unique opportunities for conservation over a relatively large landscape area. However, they face a number of current and potential threats, which include logging, hunting/poaching and small-scale (gold) and large-scale (bauxite and gold) mining. Though a protected area, the BNP has also been impacted by tourism as well. Unresolved conflicts over land rights and poverty, particularly with regards to Maroon communities, complicate the issues of resource use and effective long-term conservation efforts.

THE GUAYANA SHIELD

Suriname is located in the Guayana Shield of northeastern South America, an area of roughly 2.5 million km² (see Map). The Guayana Shield, a 2 billion year old Precambrian geological formation - possibly the oldest on the planet - underlies Guyana, Suriname, and French Guiana as well as parts of northern Brazil, Venezuela, and Colombia. The Guayana Shield is a granitic formation overlaid by the largest expanse of undisturbed tropical rain forest in the world. The region contains high rates of endemism and biological richness, unique tepui formations, and the headwaters of impressive waterfalls.

The population density of the Guayana Shield is the lowest of any tropical rainforest ecosystem (0.6–0.8 people/km) which, coupled with the relative lack of access routes into the interior, contributes to its exceptional degree of intactness, with more than 80% of its ecosystems in pristine or near pristine condition. In addition to its biological richness, the region contains abundant cultural diversity and natural resources. At least 100 Indigenous groups inhabit the