Chapter 10

A rapid assessment of the avifauna of the upper Palumeu watershed, Southeastern Suriname

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SUMMARY

We present the results of ornithology surveys carried out during the SE Suriname RAP expedition, 8–29 March 2012. Birds were surveyed using line transect counts and casual observation in lowland forest around the Juuru and Kasikasima camps. A limited survey using mist nets was undertaken in high-elevation (800 m) savanna forest and scrub in the Grensgebergte. Our list of 313 species includes all birds seen or heard at the two RAP camps, the high-elevation satellite camp, the village of Palumeu, and during excursions along the Palumeu River. We recorded fourteen species listed as Vulnerable or Near-Threatened on the IUCN Red List, and consider another seven species as likely to occur in the region. Our records of several species represent range extensions within Suriname and the Guiana Shield. Whereas the lowland forest avifauna was broadly similar at the different localities, 32% of species were only observed at one of the four survey sites. The abundance of parrots and cracids was particularly noteworthy, especially compared to the more populated Kwamalasamutu region that we surveyed in 2010. The high-elevation savanna forest harbored several species not known to occur in the adjacent lowlands, and therefore had the most unique species assemblage of any site. Our results indicate that the lowland forest of SE Suriname probably contains the vast majority of bird species known to occur in the country's interior, including many species of high conservation value, arguing strongly for protection of the region's forests. We recommend further surveys of high-elevation sites in the Grensgebergte and other mountain ranges in southern Suriname, to better determine the range limits of species restricted to high-elevation forests.

INTRODUCTION

Birds are an important component of the ecology of tropical forests — they are major predators of arthropods and small vertebrates, and function as the primary dispersers of many tree species. As in many other taxonomic groups, species diversity is generally high at forested lowland sites in the tropics. Because most birds are diurnal and many can be identified by sound alone, they can be surveyed relatively quickly. In addition, birds are generally ubiquitous, and many species are colorful — traits that render them appealing to nature-oriented tourists, whose revenue can provide an important contribution to local economies. Birds are therefore an ideal study group for rapid biodiversity surveys.

The avifauna of Suriname is well known (Ottema et al. 2009) though new records continue to accumulate as more interior localities are inventoried, particularly in the southern half of the country (O'Shea 2005, Mittermeier et al. 2010, Zyskowski et al. 2011, O'Shea and Ramcharan 2011). Much of the interior of Suriname is covered by unbroken tropical moist forest with few human settlements. Accordingly, the avifauna is diverse, and the country's forests support healthy populations of species that are of global conservation concern, such as large raptors, guans and curassows (Cracidae, hereafter "cracids"), and parrots. Many lowland species, though not endemic to Suriname itself, are nonetheless restricted to the Guiana Shield; the forests of Suriname are vital for the persistence of these species.

In addition to widespread lowland species, the mountains and plateaus of interior Suriname support a suite of species with highland affinities, tending not to occur below approximately 400 m. The distribution of these species within Suriname is not well understood, primarily because many highland areas in central and southern Suriname are extremely difficult to access. Highland species are particularly interesting because they persist as more-or-less isolated populations across the Guiana Shield, yet none of these species have been sampled adequately to determine the extent of morphological and genetic variation among their populations. Because little is known of their ecology and distribution, their vulnerability to climate change is difficult to assess, though this is an urgent priority in conservation planning for these species in the Guianan highlands.

The goal of this survey was to develop baseline data on the avifauna of selected localities in SE Suriname, with a particular focus on high-elevation forests in the Grensgebergte. This RAP was the second in a series of expeditions documenting the flora and fauna of southern Suriname; therefore, a