

## **Researchers find 24 new species in Suriname** rainforest

## June 4 2007

Scientists exploring the remote highlands of eastern Suriname discovered 24 species believed to be new to science, including a frog with florescent purple markings and other amphibians, fish and insects.

Presented in a report made public today, the findings from a 2005 expedition led by Conservation International's Rapid Assessment Program (RAP) and a follow-up survey in 2006 demonstrate the value of exploring unknown regions such as Suriname's rainforest to assess the need to conserve them.

The study sponsored by two mineral companies – BHP Billiton Maatschappij Suriname (BMS, a subsidiary of BHP Billiton) and Suriname Aluminium Company LLC (Suralco, a subsidiary of Alcoa Inc.) – provides information for policymakers and other stakeholders in deciding how to balance development with protecting important biodiversity that benefits local communities and the global ecosystem.

"Suriname has some of the Amazon's most pristine and intact rainforest, which offers huge potential for scientific research and economic investment in carbon sequestration, as well as the sustenance it has always provided local communities," said Leeanne Alonso, a Conservation International (CI) vice president who heads the RAP program. "Our study will be a vital component in determining how to promote economic development in Suriname while protecting the nation's most valuable natural assets."



The RAP survey, from Oct. 25-Nov. 6 in 2005, included 13 scientists from CI and partner universities and organizations who traveled to the Lely and Nassau plateaus in eastern Suriname, 130 kilometers (80 miles) southeast of Paramaribo, the capital. They found a virtually unexplored region of mountain savannah forest, high dryland rainforest and palm swamp with freshwater sources clean enough to support abundant fish and amphibian life.

Among the 24 species believed new to science are an Atelopus frog with brilliant purple markings, four Eleutherodactylus frog species, six species of fish, 12 dung beetles and an ant species. The scientists also found 27 species endemic to the Guayana Shield region comprising Suriname and neighboring Guyana, French Guiana and northern Brazil, including a rare armored catfish, Harttiella crassicauda, feared extinct because gold mining activities had contaminated a creek where it was last seen more than 50 years ago.

Overall, the survey recorded 467 species at the two sites, including large cats such as panther and puma, various monkeys, and a range of reptiles, amphibians, bats, birds, fish and insects indicative of the lush natural environment.

In their final report, the scientists call for improved conservation management of the region to address and halt threats from hunting and small-scale illegal mining. The report suggests that strategies should focus on protecting freshwater streams and preventing fragmentation of the natural habitat from unchecked or poorly planned development.

The Guayana Shield region contains the largest undisturbed tropical rainforest on the planet, a northern Amazon tract three times larger than the U.S. state of Texas (twice the size of Ethiopia) that is home to 100 indigenous groups. In Suriname, the only former Dutch colony in South America, the forests are at risk from foreign logging and other resource



extraction.

Cutting and burning tropical forests worldwide contributes 20 percent of the total carbon emissions into the atmosphere, more than all the world's cars and trucks, making conservation of the Amazon rainforest a crucial strategy for minimizing climate change.

The burgeoning global carbon market creates new economic value for carbon stored in standing rainforest, providing fresh incentive for developing nations such as Suriname to avoid deforestation.

Source: Conservation International

Citation: Researchers find 24 new species in Suriname rainforest (2007, June 4) retrieved 25 April 2024 from <u>https://phys.org/news/2007-06-species-suriname-rainforest.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.