

Amazing diversity documented in national park

September 12 2012



This is a parrot snake, one of at least 50 species of snake in Madidi National Park. Credit: Mileniusz Spanowicz/WCS

A remote park in northwest Bolivia may be the most biologically diverse place on earth, according to the Wildlife Conservation Society (WCS), which helped put together a comprehensive list of species found there. The announcement was released at the IUCN World Conservation Congress, an international gathering of conservationists meeting through Sept. 13 in Jeju, South Korea.



The list, published in a compendium by the Bolivian Park Service (SERNAP) and funded by WCS, shows that Madidi National Park contains 11 percent of the world's birds, more than 200 species of mammals, almost 300 types of fish, and 12,000 plant varieties. The 19,000 square-kilometer (7,335 square mile) park is known for its array of altitudinal gradients and habitats from lowland tropical forests of the Amazon to snow-capped peaks of the High Andes.

The report compiles the work of more than 50 scientists from WCS, Bolivian Fauna Collection, Bolivian National Herbarium, Amazon Conservation Association, Armonia, Missouri Botanical Garden, and others – some of whom have worked in the park for 15 years. At the request of the Bolivian Park Service (SERNAP), the scientists gathered at a workshop in late 2008 to collectively summarize what is known about the park, including how many species Madidi contains and its conservation needs for the future.

The resulting compendium estimates 1,868 vertebrates for Madidi, including 1,088 species of birds. Only eleven countries have more bird species than Madidi National Park; the entire U.S. contains less than 900 bird species. Mammals range from the 300-kilogram (661-pound) lowland tapir, an Amazonian herbivore, to the tiny insectivorous Spix's disk-winged bat that weighs just 4 grams (.14 ounces). Bird species range from the harpy eagle, one of most powerful birds of prey in the world whose diet includes sloths and monkeys, to the diminutive festive coquette, one of 60 species of hummingbird expected to occur in the park.

"With Madidi's almost 6,000-meter (19,685 feet) altitudinal range, no other protected area captures the diversity of South American habitats that pushes these numbers through the ceiling. All the scientists who contributed to this compendium feel privileged to work in Madidi, and we are all very happy to help SERNAP promote the national and



international conservation importance of the area," said WCS's Madidi Landscape Program Director Dr. Robert Wallace.

Still much is unknown about the park – particularly in the tropical montane or cloud forests between 1,000 and 3,000 meters (3,280 and 9,842 feet). Despite significant efforts from the scientific team, two thirds of the park's total biodiversity has yet to be formally registered or observed by scientists, highlighting the need for further research in the region. This is particularly relevant given the looming threat of climate change to the biodiversity of the world's mountains.

Dr. Cristián Samper, President and CEO of the Wildlife Conservation Society, said: "The Wildlife Conservation Society is proud to be assisting the Bolivian government in the conservation of these magnificent places. This important compendium emphasizes just how poorly known the cloud forests of the Tropical Andes really are. Apart from their biodiversity and wildlife importance, they are critical from a watershed management perspective and are aesthetically beautiful."

Madidi National Park is one of the top tourist attractions in Bolivia and part of a larger protected region known as the Madidi-Tambopata Landscape, one of the largest such complexes in the world. WCS has worked in this landscape since 1999 to develop local capacity to conserve the landscape and mitigate a variety of threats, including development such as road construction, logging, and agricultural expansion.

Provided by Wildlife Conservation Society

Citation: Amazing diversity documented in national park (2012, September 12) retrieved 29 April 2024 from https://phys.org/news/2012-09-amazing-diversity-documented-national.html



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