## **CHAPTER 3**

## **Biodiversity**



The Amazon, Andes and Cerrado are among the richest and most diverse regions of the planet. (Top: ©Haroldo Castro/Cl; Bottom: ©John Martin/Cl)

Collectively and individually, IIRSA projects represent an enormous threat to the conservation of the biodiversity of the South American continent. All but one of the ten IIRSA corridors intersects with a Biodiversity Hotspot (Andes, Cerrado, Atlantic Coastal Rainforest) or Wilderness Area (Amazon, Pantanal, Gran Chaco, Caatinga). The IIRSA highway corridors planned for Bolivia, Ecuador, and Peru, the Arco Norte in the Guayana Shield region, and the PPA investments in the Brazilian Amazon are particularly worrisome because they will radically increase access to wilderness areas with very high levels of biological endemism. IIRSA will expose the western Amazon and the Andean foothills to potent global and regional economic forces, and the region's interconnected ecosystems will be inalterably changed. Climate change and geological history have left their mark on today's ecosystems and their species. The distribution of biodiversity is radically different in each of the region's major biomes due to the distinct physical attributes of mountains versus lowlands, and terrestrial versus aquatic ecosystems. Consequently, IIRSA and other development phenomena will have variable impacts across the Amazon, Andes, and the Cerrado biomes. Designing mitigation programs and conservation strategies must be predicated on a thorough understanding of the regional nature of biodiversity.