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Thematic Focus: Ecosystem Management, Disaster and Conflicts, and Resource Efficiency

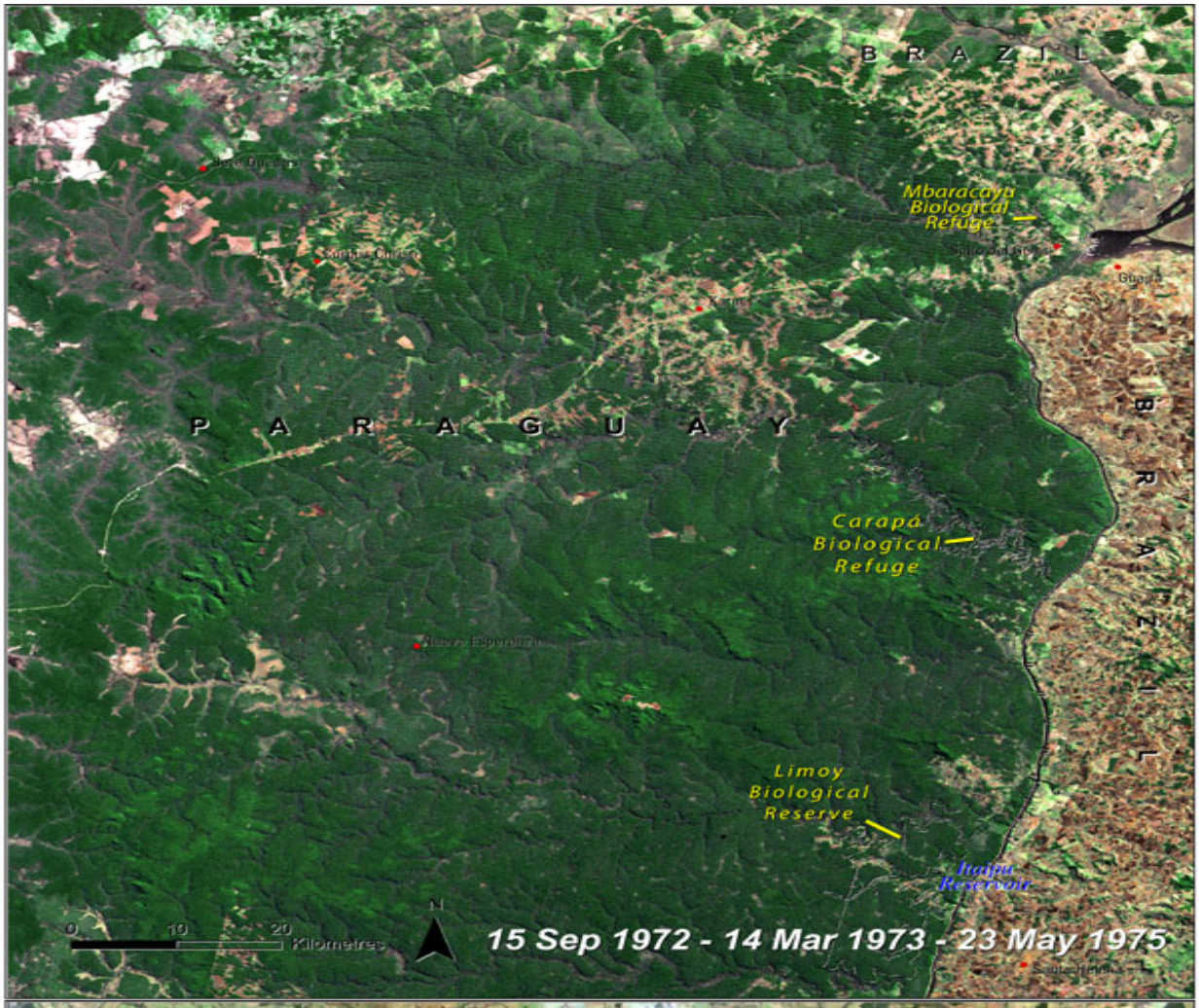
Only Scraps of the South American Atlantic Forest Remain—Eastern Paraguay

Why is this issue important?

Prior to the mid-20th century, an extensive subtropical rain forest covered much of the Brazilian coastal plain, eastern Paraguay and part of northern Argentina. The forest supported over 20 000 plant species, many of them endemic, as well as a diverse array of fauna. Beginning with selective logging prior to the 1940s, deforestation accelerated through the 1970s, leaving less than 10 per cent of the original forest by early in the 21st century (Huang and others 2007, Huang and others 2009, Wayant and others 2010). Where these forests used to cover eastern Paraguay, farmland now dominates the landscape. Most of the forest clearance has been attributed to the advent of larger mechanized farms growing soy, cotton and sugar (Huang and others 2009). These remaining forests are of profound global importance due to both the biodiversity they contain and their potential to sequester carbon from entering the atmosphere.

Hotspot Image Viewer: 1975, 1985 and 2010

LEFT IMAGE 23 May 1975 RIGHT IMAGE 24 June 2010


B R A Z I L
Mbaracayu Biological Refuge
P A R A G U A Y
Carapá Biological Refuge
Limoy Biological Reserve
Itaipu Reservoir
0 10 20 Kilometres
N
15 Sep 1972 - 14 Mar 1973 - 23 May 1975


B R A Z I L
Mbaracayu Biological Refuge
P A R A G U A Y
Carapá Biological Refuge
Limoy Biological Reserve
Itaipu Reservoir
0 10 20 Kilometres
N
24 Jun 2010

Instructions

Compare different satellite images for this Hotspot by selecting different "Left" and "Right" images.
Use the slider located in the middle of the images to change the viewing area for each image.

Download Imagery

What are the findings and implications?

The almost total conversion of eastern Paraguay's subtropical rain forest to agriculture and cattle grazing can be seen in the satellite images spanning the period between 1972 and 2010. The 1970s-era mosaic (Figure 1975) shows largely intact forest on the Paraguayan side, in contrast to Brazilian farms just across the border. By the mid-1980s (Figure 1985), large areas had been converted to farms but forest still dominated on the Paraguayan side. By 2010 (Figure 2010), the remaining forest can be seen as dark-green patches scattered among the large and small farm fields.

It is estimated that 40 per cent of Paraguay's subtropical rain forest was lost between 1989 and 2000. This is slightly less than the loss in Brazil and Argentina, however, leaving an estimated one-quarter of the original forest still largely intact in Paraguay. A handful of national parks, biological reserves, biological refuges and national monuments provide some protection for these remnants, although signifi cant losses have been measured even within protected areas (Huang and others 2007).

Download Images

- 23 May 1975
- 18 May 1985
- 24 June 2010

References

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