



June 5, 2021

The Champion of Forest Protection

To celebrate World Environment Day, the Embassy of Brazil presents this article by Evaristo de Miranda, general manager of Embrapa Territorial. It was originally [published in Portuguese in the Brazilian magazine Oeste](#). We wish to thank the author and the magazine for authorizing the publication of this abridged English version, as well as Embrapa Territorial for kindly assisting with the graphics.



To the facts: Brazil comprises 6.3% of the planet's continental land mass and has 12.3% of its protected areas. The fifth-largest country in the world, Brazil ranks first in protected areas. (Photo credit: Shutterstock)

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No country devotes more of its territory to the protection of native vegetation than does Brazil, whose tradition of forest maintenance owes a great deal to the Portuguese Crown. In the 16th century, the [Manueline Ordinances](#) unified all of Portugal's laws, with several articles ensuring the protection of forests and even [prohibiting the use of fire](#) (book V, tit. 83). The Portuguese Crown applied these laws in Brazil, requiring that logging have legal authorization. A list of "preserved royal trees" was established; hence the expression *madeira de lei*, evoking legally protected wood dating to the first Portuguese settlements in Brazil.

Royal permits, statutes, ordinances, and other instruments of the governors-general enriched this embryonic environmental legislation. The 1605 Pau-Brasil (brazilwood) Statute was the first forest protection law. Aware of the lawlessness and abuses in brazilwood exploitation, the possible extinction of the species and degradation of the forests, the King instituted the statute after receiving "information from people of experience in those parts of Brazil and passing it on to those of My Council".

[...]

The Statutes provided for heavy penalties for anyone who exceeded what his cutting license permitted. Surpluses were routinely confiscated and a fine of 100 cruzados was applied to any quantity in excess of 10 quintals. For quantities over 50 quintals, the punishment was flogging and banishment for ten years to Angola. Amounts beyond 100 quintals resulted in the death penalty and loss of one's land. The Statute also provided for a kind of independent audit: an annual inquiry by the Crown into the administration and the overseers of brazilwood extraction, including their records and annual authorizations.

These and other measures allowed for the sustainable management of brazilwood forests over the course of three centuries. Contrary to what some people believe, the exploitation of the species was not synonymous with deforestation but ensured the maintenance of the Atlantic forest until the 19th century. The last shipment of brazilwood was exported in 1875. Exploitation did not cease due to the extinction of the species, but for commercial reasons,

especially a shrinking market for the tree's red dye owing to competition with newly introduced anilines for the dyeing industry.

The Portuguese Crown's and the Brazilian Empire's forest policies managed to keep the vegetation cover almost intact up to the end of the 19th century, with few areas altered. In the 20th century, from 1985 to 1995 alone, the Atlantic Forest lost more than one million hectares—more than the area deforested during the entire colonial period.

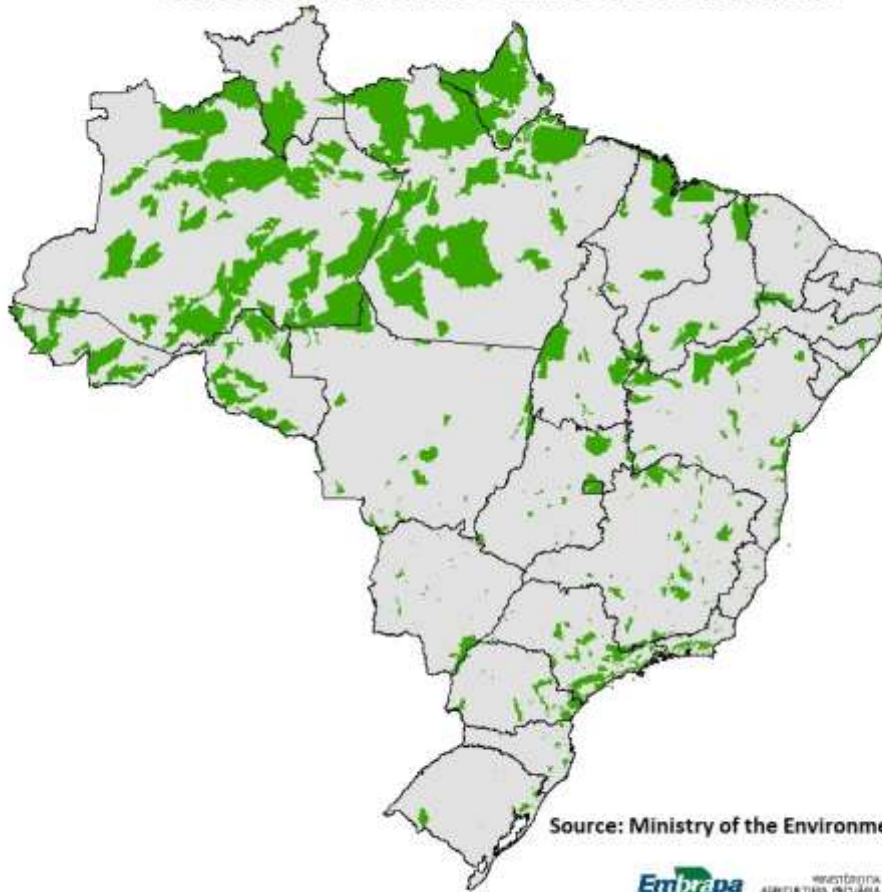
According to Carlos Castro, author of a doctorate dissertation at the University of Brasilia on forest management in Brazil from 1500 to the present, "instead of blaming Portugal for having left us a predatory heritage, perhaps we should learn from the conservationist practices that the Portuguese advocated and become aware that the destruction of Brazilian forests did not happen over 500 years, but mainly in this generation."

Over the last three decades our forest heritage has become more secure with the establishment of protected areas by the government. The United Nations Environment Program (UNEP) defines protected areas as nature conservation units and the lands designated for traditional peoples, such as Eskimos, Aborigines, and indigenous peoples.

What defines a nature conservation unit varies greatly from country to country and includes several categories of protection. In European natural parks, human and economic activity—including towns and agriculture—are allowed with certain restrictions. In Brazil, only Environmental Protection Areas (APAs)—and, to a lesser extent, extractive reserves—allow activities of this kind. Full protection conservation units such as ecological stations or national parks prohibit public access or economic activity of any kind.

When the 1988 Federal Constitution was promulgated, there were 248 conservation units in Brazil occupying a total area of 198,599 square kilometers, or 2.3% of the country's landmass. In 30 years, these units have multiplied eightfold. Today there are 1,871 federal, state, and municipal conservation units, including APAs, covering 1,544,333 square kilometers, or 18% of the country.

CONSERVATION UNITS DISTRIBUTION IN BRAZIL

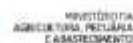


By the time the 1988 Federal Constitution was promulgated, 60 indigenous lands had been decreed, comprising a total of 161,726 square kilometers, or 1.9% of Brazil's landmass. Today there are 600 indigenous lands covering 1,179,561 square kilometers, or 14% of Brazil.

INDIGENOUS LANDS DISTRIBUTION IN BRAZIL

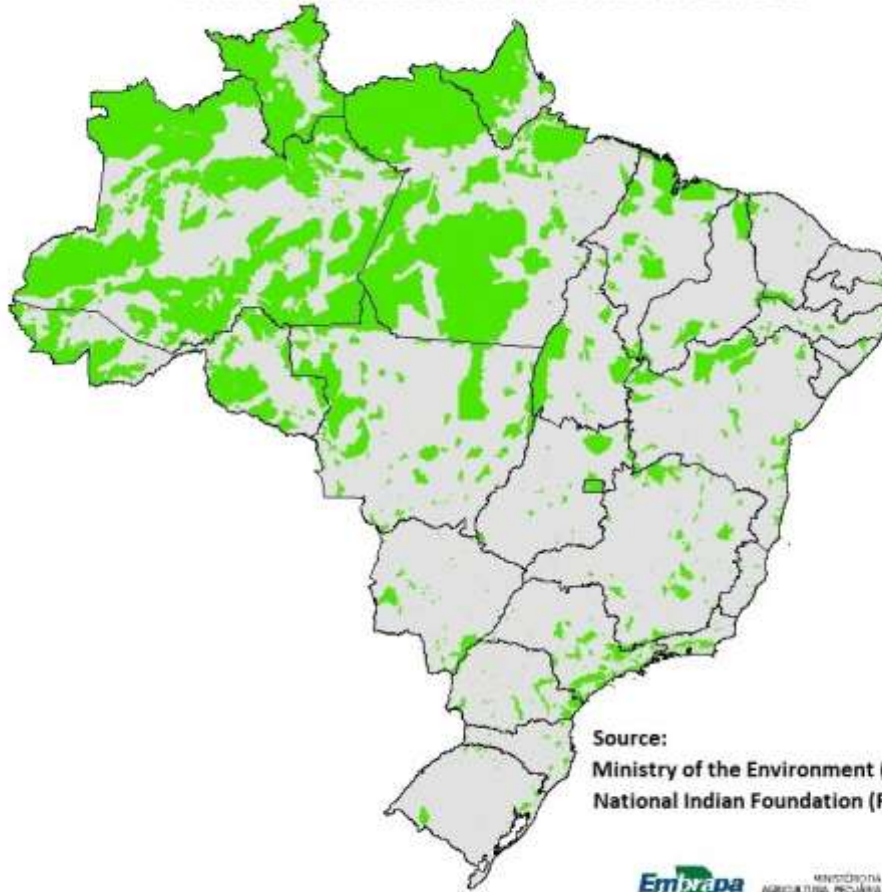


Source: National Indian Foundation (FUNAI), 2019



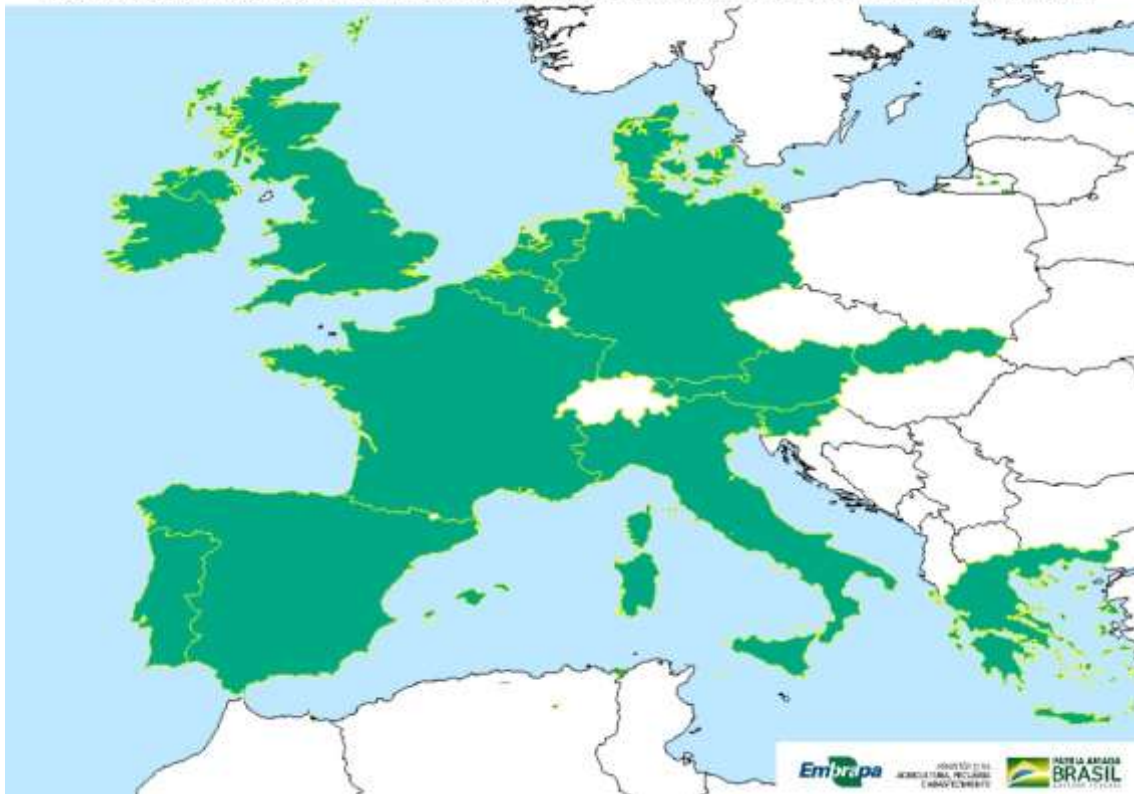
Brazil's protected areas are made up of conservation units and indigenous lands. Excluding overlapping boundaries found mainly in the Amazon, there are 2,471 protected areas covering a total of 2,584,808 square kilometers, or 30.3% of the national territory. Most of these areas are public lands classified and decreed by the government.

PROTECTED AREAS DISTRIBUTION IN BRAZIL



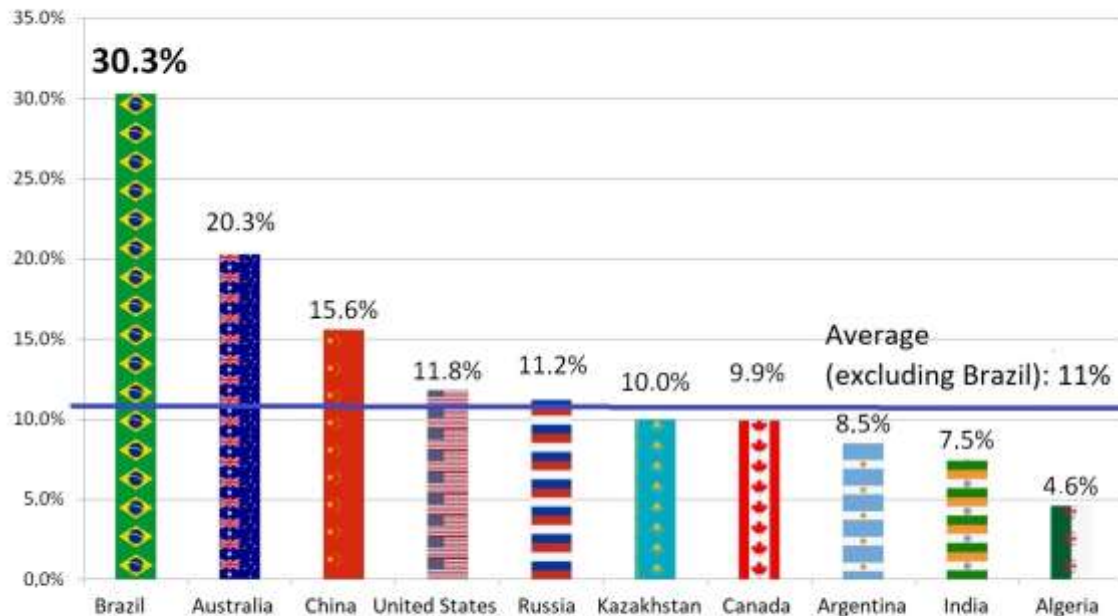
The expanse of these protected areas is equivalent to 54% of the European landmass, or the sum of the areas of 15 countries: Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Liechtenstein, the Netherlands, Portugal, Slovakia, Slovenia, Spain and the United Kingdom.

TERRITORIAL DIMENSION OF PROTECTED AREAS IN BRAZIL SUPERIMPOSED ON THE EUROPEAN LANDMASS



Brazil occupies 6.3% of the planet's continental land mass and contains 12.3% of its protected areas. The fifth nation in territorial expanse, Brazil [ranks first in protected areas](#). Among the ten largest countries – Russia, China, United States, Canada, Australia, India, Argentina, Kazakhstan, and Algeria – Brazil protects the most. The average of the protected areas of these countries is 11%, against 30.3% in Brazil. Brazil's environmental protection is almost three times greater.

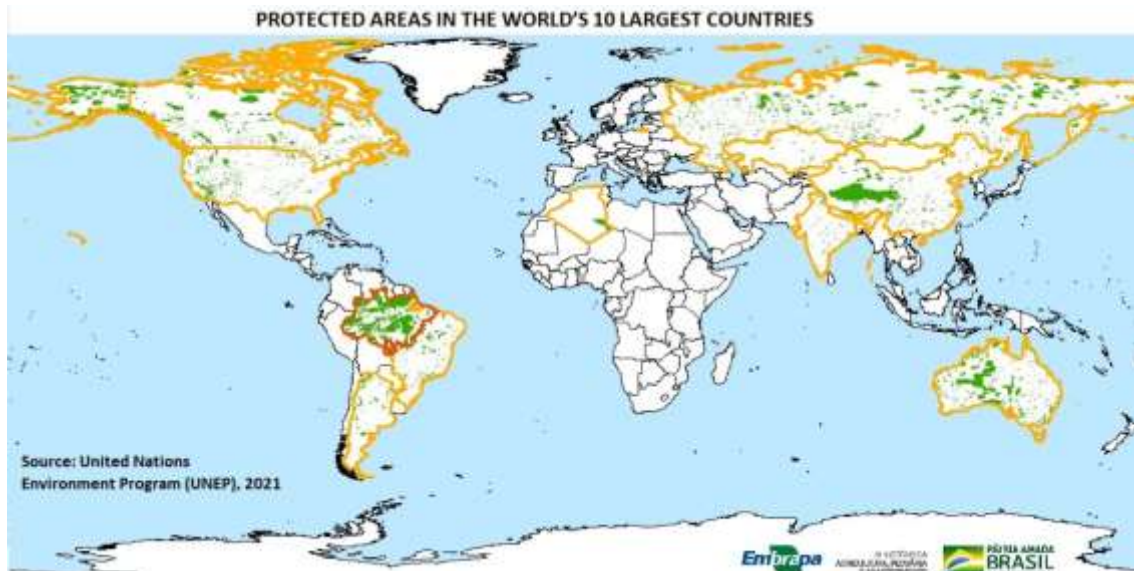
PROTECTED AREAS OF THE WORLD'S 10 LARGEST COUNTRIES (in % of territory)



Source: United Nations Environment Program (UNEP), 2021

According to [UNEP data](#), most protected areas are located in marginal lands: uninhabited deserts (China, Australia, Algeria, United States), polar and subarctic regions (Alaska, Siberia), and mountainous regions unfit for human habitation (Andes, Rockies).

In Brazil, however, most of the protected areas contain land with logging, farming, and mining potential. The difficulty in maintaining their integrity is great in face of social demands and economic pressures, especially in the Amazon. Caring for this territorial expanse is an enormous administrative challenge.



Who is helping Brazil meet this challenge? As the [UNEP Protected Planet Report](#) states: "*The most extensive coverage achieved at a regional level is for Latin America and the Caribbean (...). Half of the entire region's protected land is in Brazil, making it the **largest national terrestrial protected area network in the world.***"

The fact that Brazil devotes more territory than does any other country to the protection of native vegetation is neither recognized nor acknowledged. Paradoxically, Brazil leads the world in convictions in the courts of both environmentalists and the media and is ever the target of criticism from foreign governments and organizations. They demand greater protection for the Brazilian forests, to a degree never dreamed of in their own countries. How would the governments of Canada, India, Russia, or the United States react to the proposition that they abandon all economic activity in more than 30% of their territory?

With native vegetation covering 66.3% of its territory, Brazil can address this issue with authority in the face of criticism from the champions of global deforestation. Brazil must also act responsibly to revive, through long-lasting policies and practices, effective historical forest management and exploitation measures—applied since the time of Portuguese Crown rule—that ensure the maintenance of the country's virgin forests.

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