

Pantanal

Considered the largest continental wetland and one of the best preserved biomes of the world, the Pantanal is characterized by an impressive variety of flora and fauna for that reason is considered the floodplain that holds the greatest biodiversity in the world. The Pantanal is known as the "kingdom of the waters" and this vast freshwater reservoir plays an important role in biodiversity conservation in the heart of South America. In addition to hosting various species, the biome is also responsible for providing important ecosystem services, as maintaining the cycle of floods and droughts, essential for the renewal of nutrients across the Pantanal basin, and soil and water conservation, fishing supply, climate regulation, among others.

WWF has been working in Pantanal since 1998. From 2008, the organisation has adopted a integrated view of the entire Upper Paraguay River Basin (UPRB). It is a region with an area of 624,320 km² that includes the Pantanal, the Cerrado and portions of the Chiquitano forest and the Chaco. Of this total, approximately 62% is located in Brazil, in the states of Mato Grosso and Mato Grosso do Sul, 20% in Bolivia, in the state of Santa Cruz and 18% in Paraguay, in the states of Alto Paraguay, Boqueron and Presidente Hayes.

An integrated vision of conservation in one of the most important regions of South America is the focus of this shared strategy among Brazil, Bolivia and Paraguay, aiming at the conservation of the Cerrado and the Pantanal, working to reduce the impact of major threats to these biomes.

This trinational conservation initiative is based on the protection and conservation of aquatic ecosystems, specially of the region's main headwaters; on the development and dissemination of sustainable chains of production, which embraces environmental assets in their development; and on territorial planning, for the adoption of environmental criteria in economic development and infrastructure deployment in the region. It also supports the management of protected areas, as well as their gradual increase and awareness of consumer choices and the environmental impact they can cause. The strategy also seeks to ensure the conservation of the Cerrado and the Pantanal in an integrated and shared way among the three countries, their governments and their inhabitants or civil society, whose livelihoods depend upon this region.





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THREATS

Although it renders a vital environmental service by providing water for important Brazilian rivers, the Cerrado biome is suffering from devastation: currently, crops and pastures have replaced more than 50% of its original cover, and only 3% of its area has effective protection.



Pampas Deer (Ozotoceros bezoarticus)

The current situation of the Pantanal also calls for attention. Despite the landscape's exuberance, the high part of the basin has lost 58% of its original vegetation, a worrisome issue because it is precisely on the plateau that most of the springs that feed the biome are concentrated. For the conservation of the Pantanal, it is important to consider the Upper Paraguay River Basin as a whole and the interdependent relationship of the floodplain area with the Cerrado biome. Everything is connected. The water emerges in the high parts of the Cerrado and flows down to the wetlands of Pantanal. About 80% of the Pantanal is covered by the annual floods and this water cycle brings environmental balance, providing conditions for the living conditions of fauna and flora.

This important region suffers from common threats in all three countries caused by activities developed in an irresponsible manner. The main threats are deployment of large infrastructure projects (construction of hydroelectric dams, rail and shipping); expansion of agricultural activities (soybean, sugarcane, cotton) and their correlative forms of unsustainable production (lack of soil and water protection and excessive use of pesticides and deforestation and livestock); hunting and urban sprawl.

WWF's strategy is to support the development of productive activities that reduce the impact on the environment, by promoting the conservation of the Cerrado and the Pantanal biomes through sustainable production and rational use of natural resources.



Soy plantation

OUR VISION AND SOLUTION

Maintain biological diversity and ecological processes in the Cerrado Pantanal Priority Place, while providing sustainable development opportunities for the region as an example for sustainable landscapes world-wide.

Five key strategies have been proposed and organised in modules that correspond our goals, which are:

1. BUILDING RESILIENCE OF FRESHWATER ECOSYSTEMS

WWF contributes to the restoration and conservation of spring water and wetlands of the Upper Paraguay River Basin, in key areas of the Cerrado and the Pantanal, by implementing adaptation plans and mitigation measures to protect the wetlands' ecosystems.

2. SUSTAINABLE PRODUCTION AND MARKETS

Measures are taken to improve agricultural, livestock and forestry practices, in order to minimise conversion of natural ecosystems, to reduce the impact of deforestation and changes in the use of land, especially in areas considered of high ecological risk in the region.

3. TERRITORIAL PLANNING

WWF works to mitigate social and environmental impacts brought by the land use developed in the Cerrado and the Pantanal, embracing an integrated vision of expanding markets, infrastructure works and climate change.

4. PROTECTED AREAS AND SPECIES

The management systems of public and private protected areas in both biomes are improved not only targeting their effective deployment but also to support the creation of new areas for the conservation of relevant species in the region.

5. SUSTAINABLE SOCIETIES

WWF encourages the debate on responsible consumer choices and use of resources, promoting the governance of natural resources and reporting on consumer habits and its connection with sustainable production and markets.

ENVIRONMENTAL RELEVANCE AND BIODIVERSITY

For its environmenal relevance, the Pantanal was declared a World Heritage Site and Biosphere Reserve by the United Nations in the 2000s, and recognised as an internationally relevant area by the Ramsar Convention in 2001. There has been registered at least 4,700 species in the Pantanal, including plants and vertebrates. Of this total, 3,500 are plants species (aquatic and terrestrial vegetation), 325 fish species, 53 amphibian species, 98 reptile species, 656 bird species and 159 mammals.

It is estimated that one in every five species are exclusive to the Cerrado. The biome is home to 5% of the world's species and to 30% of the Brazilian biodiversity. It covers one-forth of the Brazilian territory with over 2 million km². It is the second largest natural formation of South America and the richest savanna in the world. The Cerrado is connected to four of the five Brazilian biomes: Amazonic, Caatinga, Mata Atlântica and Pantanal.

Among the eight largest Brazilian river basins, six are located in the Cerrado biome: the Amazon basin, the Tocantins basin, the North Atlantic/Northeast basin, the São Francisco basin, the East Atlantic basin, and the Paraná/Paraguay basin. This water production vocation is due to a particular combination of topography, geology and vegetation, which is established over deep soils and have roots that can reach the deepest layers of that soil, acting as large sponges, promoting the accumulation of water in the subsoil.



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Bento Viana / WWF-Brasi



Cerrado

BRAZIL

- Supporting the creation and deployment of protected areas through public policy for conservation.
- Encouraging good environmental practices in livestock production and sustainable consumption.
- Liaising with research institutions for the conservation of the Pantanal, to disseminate scientific knowledge about the region.
- Training teachers in environmental education and encouraging civil society to participate in debates on environmental issues.

BOLIVIA

- Supporting management and protection of national protected areas (San Matías Integrated Management Natural Area and the Otuquis National Park and Integrated Management Natural Area)
- Monitoring protected areas such as the Otuquis National Park, which is home to the largest mash deer population (*Blastocerus dichotomus*).



- Supporting local governments to develop environmental management tools through the formulation of strategies and development plans.
- Promoting the use of good agricultural practices with the development and promotion of financial and environmental benefits of sustainable means of production.
- More than 8,000 students have benefited from the project, implemented in the national curriculum with the support of the Ministry of Education through Environmental Education.

PARAGUAY

- Preparing a Social and Environmental Guide for financing livestock production cattle farming with the support of the Netherlands Development Finance Company (FMO) and Sudameris Bank, in partnership with WWF.
- Reducing its Ecological Footprint through sustainable production of commodities.
- Supporting the National Plan for Reducing Emissions from Deforestation and Forest Degradation (REDD+) and the programme of Payments for Environmental Services (PES).
- Supporting territorial planning to steer sustainable development and suggest alternative income-generating activities in traditional riverside communities and indigenous people.
- WWF is also working on guidelines and principles for sustainable livestock production as a regional strategy and as to encourage good environmental practices.



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony and nature.

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