





EXECUTIVE SUMMARY



The Atlantic Forest is composed of a wide range of environments, from coastal sand-forests and mangroves to lush tropical rainforests, and frostnipped Araucaria forests to high-altitude grasslands. The boundary between the Atlantic Forest and neighbouring domains, such as the Cerrado and the Caatinga, is not clearly demarcated in most regions, existing as a transition zone (ecotone) of variable amplitude. Consequently, it becomes difficult to establish precise limits for the vegetation formations associated with the Atlantic Forest. The lack of consensus to understand its boundaries has impacted studies on the richness of the different taxa that make up its biodiversity. Birds are a typical example, and authors have presented different values for the number of species associated with the domain. The most updated compilation of birds in the Atlantic Forest mentions at least 893 species of birds within its boundaries, with 215 species being endemic (exclusive to the domain). In addition to the diversity of the avifauna mentioned above, there are about 20,000 vascular plant species, 350 species of freshwater fishes, 340 species of amphibians, 250 species of mammals, and close to 200 species of reptiles.

The Atlantic Forest originally covered 1,300,000 km2 and occupied the majority of the easternmost parts of Brazil, as well as areas in eastern Paraguay and northeastern Argentina. After successive cycles of predatory exploitation of its natural resources, from the Portuguese colonisation to the present, the Atlantic Forest has been reduced to isolated remnants of varying sizes, totaling approximately 26.2% of its original cover, making this domain a priority for conservation.

With its incredible levels of biodiversity and endemism, and history of habitat destruction, the Atlantic Forest is considered one of the world's Biodiversity Hotspots. The domain has a resident population of 120 million people, providing 70% of

Brazil's GDP, and who depend on its environmental services.

The domain's historical and cultural heritage, its varied landscapes which offer scenic beauty generating tourism and its contributions to water, soil fertility, slope protection and climate stability requires planning.

Among all Brazilian domains, the Atlantic Forest has the highest number of threatened bird species. Approximately 45% of all threatened bird species in the country live in the Atlantic Forest, and the Endemism Center of Pernambuco is the location with the highest number of taxa in the CR, EN, and VU categories. The domain is also one of the ecosystems with the highest species richness of birds on the planet and is considered one of the world's most biodiverse ecosystems.

The first cycle of management of the National Action Plan (PAN) (i.e. 2018 - 2022) made some notable achievements. The implementation of projects developed by various institutions and collaborators has contributed to increased knowledge for some PAN species, as well as the integration of specific conservation programmes. These include the Cherry-throated Tanager, Alagoas Antwren and species of the Galliformes and Tinamiformes orders. Population estimates for some PAN species have been updated, representing a significant advance in the status of populations. The PAN has played a prominent role in launching campaigns to promote the importance of species recovery, such as the "Jacuçara" campaign, which reached over a million people. The PAN has also raised awareness and attracted more people to conservation through its documentary "Reconnecting people to birds". Since then, this strategy has been refined and is currently in its 2nd edition (2023-2028), under the coordination of the Chico Mendes Institute for Biodiversity Conservation (ICMBio).



Cover photo: Ciro Albano; Species: Crejoá, Cotinga maculata.

Species Covered

The National Action Plan (PAN) for Birds of the Atlantic Forest identifies conservation strategies with the aim of contributing to the survival of 114 endangered species listed in the National List of Threatened Species. The results show one species classified as "Extinct in the Wild" (EW), twenty species classified as "Critically Endangered" (CR) with four of these classified as "Possibly Extinct" (CR/PEX), forty three species classified as "Endangered" (EN), and fifty species classified as "Vulnerable" (VU).

The PAN also identifies another twenty five species of conservation relevance in the domain, including seven classified as "Near Threatened" (NT), two migratory species subject to international agreements in which Brazil is a signatory, and sixteen species listed as threatened on the red list of the state of Bahia (Ordinance No. 37 of August 15, 2017).



Photos: Alexander Zaidan (a); Ciro Albano (f, h, j, k, l); Cristine Prates (b); Ester Ramirez (c, i), Kassius Santos (d); Robson Kzaban (e), Bruno Rennó Soares (g); Fernando Farias (m).



PAN Coverage Area

The PAN for Birds of the Atlantic Forest is restricted to the Atlantic Forest domain found in 17 states, occupying roughly 13% of the country. Brazil's Birdlife International partner, SAVE Brasil is also supporting the PAN using data from its <u>"Important Bird Area" (IBA) programme</u>, as a tool to identify strategic areas within the domain for species conservation.

The PAN has developed a map showing the concentration of threatened species in the Atlantic Forest domain, using categories (CR, EN, VU). In the spectrum, green represents a smaller number of threatened species whilst tones of red indicate a higher number of threatened species.

The Alagoas curassow (*Pauxi mitu*) is an endemic species of NE Atlantic Forest and the only species in this Action Plan that is "Extinct in the Wild" (EW). The species was saved from extinction by conservationists in ICMBio-approved captive breeding programmes. Roughly 250 individuals, some of which are hybrids of the Alagoas Curassow and the Helmeted Curassow (*Pauxi tuberosa*), survive in captivity for releases in the future. The first releases of this species into the wild occurred in 2019 and more are planned.

The Cherry-throated
Tanager (Nemosia rourei)
is an endemic species of
SE Atlantic Forest and is
considered one of the
most endangered birds in the
world. Currently, there are only
an estimated 20 individuals of the species
in two locations exclusively in the state of
Espírito Santo. With so few individuals,
the species requires a significant effort for
its conservation, and the local institution,
Instituto Marcos Daniel, is working
successfully in its protection.

The Restinga Antwren (Formicivora littoralis) is an endemic species of SE Atlantic Forest with an estimated population size of less than 2,500 individuals. Just about all individuals are found in a single, severely fragmented seaside area threatened by real estate expansion. This species has low mobility and suffers low breeding success because of predation of eggs and young by the invasive white-tufted marmoset (Callithrix jacchus).

at a single roost site. This bird is the only migratory parrot species of Brazil. The Parrot National Action Plan has integrated its data and recommendations in the National Action Plan for Birds of the Atlantic Forest (PAN). Conservation strategies for parrots are developed by the Brazil Parrots Program in collaboration with other institutions.

The Red-spectacled Amazon (Amazona pretrei)

and has a very restricted range, especially in

is an endemic species of SE and S Atlantic Forest,

winter when virtually the entire population congregates

Protected areas/Parks

There are over 10 million hectares in 1,240 parks offering protected status at Federal, State, and Municipal levels, or in the form of Private Natural Heritage Reserves (RPPN). Of this total, 30% of the area are "Important Bird and Biodiversity Areas" (IBAs) in the Atlantic Forest and harbour significant populations of species covered in the National Action Plan (PAN). Roughly 460 parks are considered "strictly protected" whilst the rest are in "sustainable use" category. There are 61 federal parks, including: Murici Ecological Station (ESEC Murici), Sooretama Biological Reserve (REBIO Sooretama), Boa Nova Environmental Protection Area (REVIS Boa Nova), Boa Nova National Park (PARNA Boa Nova), Serra das Lontras National Park (PARNA Serra das Lontras), Petrópolis Environmental Protection Area (APA Petrópolis), Descobrimento National Park (PARNA Descobrimento), and Una Biological Reserve (REBIO Una).



Estação Ecológica de Murici (BA): Established in 2001, the ESEC Murici (AL) located in Brazil's NE Atlantic Forest, is considered an IBA (Important Bird and Biodiversity Area) and an area of extreme biological importance, with the highest concentration of Critically Endangered birds in Brazil. Though it is a Federal Park with 40 threatened bird taxa, only around 60% of its area is covered in forest, the rest having been deforested prior to the park being established.

Parque Nacional de Itatiaia (RJ/MG/SP): Established in 1937, the PARNA Itatiaia (RJ/MG/SP) located in Brazil's SE Atlantic Forest is the oldest Federal park in the country, offering a diverse and unique fauna and flora of significant ecological relevance. The park is located in a mountainous region with the fifth highest peak (2,791m) with 330 bird species recorded, many of which are endemic and threatened.





Parque Nacional do Iguaçu: It is also one of the oldest Brazilian protected areas. Created in 1939, the park was granted the title of Natural Heritage of Humanity in 1986. Best known for its waterfalls, it protects more than 180,000 hectares across 14 municipalities in Paraná, currently being one of the largest remnants of the Atlantic Forest in the state of Paraná. In this protected area, there are records of around 400 bird species, including threatened species.

Gustavo Tomzhinski

Threats

The Atlantic Forest is in a critical state of conservation. There are few areas of continuous forests (> 10,000 ha) in good conservation status. Almost 50% of all remaining Atlantic Forest is concentrated in small forest fragments (< 250 ha). North of the São Francisco River, (part of the Pernambuco Endemism Center) the situation is more critical, with only 2% of the original remaining forest, low fauna densities and an ongoing scenario of local and global extinction. The high species richness, combined

with the critical state of conservation seven bird species appear to be extinct of the remaining Atlantic Forest areas in the Atlantic Forest. This discrepancy justifies the designation as one of the between a critically degraded state most threatened tropical forests on and the extinction of relatively few the planet, with global conservation species is a result of a delayed effect priority.

Evidence shows habitat loss is at the root of population decline for most species. Illegal trading and hunting, introduction of exotic species, and climate change are threats to the remaining species. Despite being reduced to 26.2% of its original cover and considering these factors, only

seven bird species appear to be extinct in the Atlantic Forest. This discrepancy between a critically degraded state and the extinction of relatively few species is a result of a delayed effect that leads to a gap between destruction and extinction, with the expectation that many threatened species will succumb in the near future. However, it is still possible to reverse part of this process. The creation and effective implementation of new parks, as well as forest restoration, are urgent actions.





The collection of eggs, chicks and adult birds for the pet trade is another grave threat and historically many species of parrots and songbirds, in particular, have suffered as a result of this illegal activity.

Invasive exotic species are also one of the principal threats to remaining biodiversity and one of the most overlooked.





REGUA colle

ICMBio strategy for conserving birds in the Atlantic Forest

Of the total of 1971 bird species in the country, one species is considered "extinct in the wild" and 256 taxa are considered "threatened". The Chico Mendes Institute for Biodiversity Conservation (ICMBio) is developing strategies to conserve and protect its biodiversity, as well as to recover those threatened with extinction through various measures, including the development and management of action plans. The development of the 2nd cycle of the National Action Plan for the Conservation of Birds of the Atlantic Forest - PAN Birds of the Atlantic Forest, took place in a participatory workshop at the end of 2022, in a

virtual format, with 58 participants representing 37 institutions. The methodological approach, facilitation techniques, and participatory planning used during the workshop for the development of the plan followed the guidelines established by ICMBio Normative Instruction No. 21/2018. The PAN Birds of the Atlantic Forest has the General Objective of "Establishing and implementing measures for the maintenance and recovery of populations of species from PAN Birds of the Atlantic Forest, within five years." To achieve this goal, four specific objectives were established, containing 49 actions.

Matriz de Planejamento

Vision

Ensure the conservation of species from the National Action Plan for Birds of the Atlantic Forest (PAN Birds of the Atlantic Forest) in their habitats, with viable populations from a genetic and demographic perspective.

General Objective

Establish and implement measures for the maintenance and recovery of populations of species from the PAN Birds of the Atlantic Forest within five years.

Nº	Specific Objectives	N° of Actions
1	Protection, restoration, and expansion of habitats of taxa from PAN Birds of the Atlantic Forest	16
2	Reduction of hunting, illegal capture, and trafficking of taxa from PAN Birds of the Atlantic Forest	7
3	Prevention and control of the presence of invasive exotic species in areas where taxa from PAN Birds of the Atlantic Forest occur	4
4	Promotion of proper in situ/ex situ management of species from PAN Birds of the Atlantic Forest for conservation purposes	22

















































































































SUPPORT







REALIZATION





MINISTÉRIO DO MEIO AMBIENTE E MUDANÇA DO CLIMA



Brasília, October 2023