

ANNUAL REPORT 2020



CONTENTS

3	Letter from the CEO	46	DONATIONS UNIT	72	LEGAL OBLIGATIONS UNIT	85	SPECIAL PROJECTS UNIT
4	Perspectives	47	COPAÍBAS Community, Protected Areas and Indigenous Peoples Project in the Brazilian Amazon and Cerrado Savannah	62	GEF TERRESTRE Strategies for the Conservation, Restoration and Management of Biodiversity in the Caatinga, Pampa and Pantanal	86	SUZANO Emergency Call Support
5	FUNBIO 25 years	50	ARPA Amazon Region Protected Areas Program	64	ATLANTIC FOREST Biodiversity and Climate Change in the Atlantic Forest	87	PROJETO K Knowledge for Action
6	Mission, Vision and Values	53	REM MT REDD Early Movers (REM) Global Program – Mato Grosso	65	PROBIO II Opportunities Fund of the National Public/Private Integrated Actions for Biodiversity Project		GEF AGENCY FUNBIO
7	SDG and Contributions	56	TRADITION AND FUTURE IN THE AMAZON	67	AMAPÁ FUND	88	FUNBIO
10	Timeline	57	KAYAPÓ FUND	68	ABROLHOS LAND AND SEA FUND	89	PRO-SPECIES National Strategic Project for the Conservation of Endangered Species
16	FUNBIO	59	A MILLION TREES FOR THE XINGU	69	GEF MAR Marine and Coastal Protected Areas Project	91	GFC AGENCY FUNBIO
16	How We Work	60	GOLDEN LION TAMARIN CONSERVATION Partnership: Forest Restoration for Golden Lion Tamarin Conservation	70	SEA GARBAGE IN SP Sea Garbage Monitoring and Assessment Plan, São Paulo	92	READINESS
17	In Numbers	61	GOLDEN LION TAMARIN PROJECT Partnership for the Implementation of a Golden Lion Tamarin Ecological Park			93	Credits
20	List of Funding Sources 2020			73	FRANCISCANA CONSERVATION Conservation in Franciscana Management Area I		
21	Organizational Flow Chart			76	ENVIRONMENTAL EDUCATION Implementing Environmental Education and Income-generation Projects for Improved Environmental Quality at Fishing Communities in the State of Rio de Janeiro		
22	Governance			78	MARINE AND FISHERIES RESEARCH Support for Marine and Fisheries Research in the State of Rio de Janeiro Project		
23	Transparency			81	SUPPORT TO PAs Conservation and Sustainable Use of Biodiversity in Federal Coastal and Estuarine Protected Areas in the States of Rio de Janeiro and São Paulo		
24	Ethics Committee			82	WINDOWS ONTO THE RESTINGA DE BERTIOGA STATE PARK		
25	Policies and Safeguards			83	GREEN AGAIN Nature Conservation Program in Volta Redonda		
26	National Agencies FUNBIO			84	TCSA PORTO SUL		
28	Who We Are						
32	In the Media						
35	Diversity in Conservation						
40	FUNBIO Grants – Conserving the Future						



LETTER FROM THE CHAIRMAN

Resilience, solidarity and responses



—
José Berenguer

Chairman of the Deliberative Board, FUNBIO

Throughout 2020 we saw predictability and continuity largely replaced by agility and adaptability. Locally and globally, the covid-19 pandemic posed a whole new set of challenges and showed, among other things, the relationship between environmental balance, risks and opportunities. We watched in surprise as wild animals returned to our urban spaces, listened attentively to the scientists’ warnings about the danger of outbreaks of new viruses hitherto contained within pristine environments, and we accompanied enthusiastically the emphasis placed by governments worldwide on the necessity for clean energy and ESG investing. Amid so much uncertainty and loss, there was a need for reflection.

Faced with the pandemic, FUNBIO reacted swiftly and serenely: in a matter of days, we implemented the ‘anywhere office’ concept, which permitted remote access to data previously only available on the premises. Adopting a home office regime afforded greater safety to FUNBIO’s most important asset: its work force. And initial assessments indicate that our concerted effort translated into maintained levels of productivity and engagement.

Technological acceleration also had an impact on project calls, which are now done entirely through digital channels. Technology ushered in new practices in other areas too, with the introduction of distance training, digital information modules, and ‘lives’ to clear up any possible doubts proponents may have.

This unusual year was also marked by solidarity: thanks to the exceptional support of some of the largest programs under FUNBIO’s management, PPEs and basic food baskets were distributed among riverine communities in the Amazon and to remote fishing and indigenous settlements. The ARPA Program alone distributed 2,800 food baskets to over 160 communities. This drive helped support people who had lost their income sources due to covid-19 restrictions, or who would have had to travel into urban environments to buy what they needed.

In the future, when we look back on this year, we will certainly mourn our losses, but we will also see the resilience, solidarity and rapid-response capacity that makes humanity so unique.

PERSPECTIVES

Knowledge and lessons learned from an unusual year



Rosa Lemos de Sá

Secretary-General of FUNBIO

In 2021 we celebrated a quarter of a century in activity: 25 years working to conserve the future. A future that will require the recovery of a planet severely affected by the covid-19 pandemic in 2020, a year also drubbed by sporadically extreme climatic conditions worldwide. For FUNBIO, this reconstruction will combine the experiences and knowledge amassed over the last two and a half decades with the recent lessons learned from the most unusual year that was 2020.

The next steps on this journey will be guided by a carefully constructed five-year plan that will fine-tune and steer our work so that we can obtain increasingly agile results with higher impact on sociobiodiversity conservation. New technologies and modes of collaborating and working, partnerships with different segments, and the perfecting of user experiences are among the opportunities that warrant attention.

In the years to come we will also roll out a relief-bringing initiative that will see some of our vast experience in the Amazon applied to Brazil's very own savannah, the Cerrado. The COPAÍBAS program, supported by the Norwegian Embassy in Brazil, will work in both of these biomes, on fronts that

include the consolidation of state-run protected areas, the bioeconomy and support for indigenous peoples in the Cerrado. By encouraging the sustainable use of biodiversity and strengthening PAs, widely recognized as one of the most effective conservation tools, COPAÍBAS will be a significant step toward building a long-term protection network for the most biodiverse savannah on the planet.

COPAÍBAS also strengthens partnerships in states that have resolutely expressed their commitment to environmental conservation ideas, projects and actions. Among the examples is the Consortium of Amazonian Governors, which plans to consolidate its standing as a regional solutions forum in 2021. These partnerships also reach across to the Atlantic Forest, in conjunction with the state government of Bahia.

In 2020, priorities had to be reset, paving the way for a much needed global reorganization. If history speaks of an explosion of vitality in the wake of the Spanish Flu, our hope is that, this time too, the post-pandemic period gives rise to an essential and energetic celebration of life and prioritization of the environment as a pillar of human wellbeing.

FUNBIO 25 YEARS



FUNBIO turns 25 displaying a solid, successful blend of innovation, experience and effort devoted to conservation. Each day that passes it builds upon its capacity to connect people, disciplines and interests that generate opportunities and converge upon solutions. An institution geared towards the future, attentive to the present, and that values the past."

JOSÉ BERENQUER, Chairman of FUNBIO's Deliberative Board



FUNBIO is an example of transparency, efficiency and innovation for other RedLAC members. In 25 years it has built a legacy and has worked to promote ties within the region, leading to strong partnerships that have become friendships. It has achieved outstanding impact and has contributed to more resilient and creative conservation finance. Congratulations, FUNBIO!"

ZDENKA PISKULIC, RedLAC presidente



We know that FUNBIO has the structure to manage large projects and we're delighted to be able to support the institution on yet another initiative."

NILS MARTIN GUNNENG, Norwegian ambassador to Brazil

Mission

To provide strategic resources for biodiversity conservation

Vision

To be the benchmark in enabling strategic resources and solutions for the conservation of biodiversity

Values

FUNBIO is guided by the following values:

- Transparency
- Ethics
- Effectiveness
- Receptiveness
- Independence Intellectuality
- Innovation

SDG AND CONTRIBUTIONS

The conservation initiatives FUNBIO supports work toward the 17 Sustainable Development Goals (SDGs), Brazil's Nationally Determined Contributions (NDCs) and the National Action Plan and Strategy for Biodiversity (EPANB, in Portuguese). In this report, projects with a bearing on the SDGs, Brazil's NDCs, or the EPANB are flagged with the respective icons.



Sustainable Development Goals (SDGs)

In 2015, the United Nations (UN) announced that its member states were adopting 17 Sustainable Development Goals in order to protect the planet, eradicate poverty and ensure prosperity for all. The SDGs carry on from where the Millennium Development Goals left off in 2000, giving those who fell short of those targets a second chance to hit the mark. The set of measures will guide Brazil and the 192 other signatories in drafting national policies and negotiating international cooperation agreements between now and 2030.

Nationally Determined Contribution (NDC)

That same year, Brazil submitted its Nationally Determined Contribution (NDC), a country-specific addendum to the Paris Agreement. Taking greenhouse-gas emissions levels from 2005 as a marker, Brazil committed to a stepped target of obtaining a 37% cut by 2025, and 43% by 2030.

The National Biodiversity Strategy and Action Plans (NBSAP)

The National Biodiversity Strategy and Action Plans – NBSAP is intended to promote the conservation and sustainable use of biodiversity, with an equitable sharing of the benefits of genetic use. It was created by the Federal Government in collaboration with state governments, business, academia and civil society. It contributes to the country's biodiversity goals. All FUNBIO projects contribute to the NBSAP.

SDG AND CONTRIBUTIONS

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS		
A MILLION TREES FOR THE XINGU					✓	✓							✓		✓		✓	✓	✓
ABROLHOS LAND AND SEA FUND								✓				✓	✓	✓			✓		✓
AMAPÁ FUND		✓						✓					✓		✓		✓		✓
ARPA		✓			✓	✓							✓		✓		✓		✓
ATLANTIC FOREST													✓		✓		✓		✓
COPAÍBAS	✓	✓						✓					✓		✓		✓		✓
ENVIRONMENTAL EDUCATION		✓			✓									✓			✓		✓
FRANCISCANA CONSERVATION														✓			✓		✓
FUNBIO GRANTS PROGRAM – CONSERVING THE FUTURE				✓									✓	✓	✓		✓		✓
GEF MAR		✓			✓			✓						✓			✓		✓
GEF TERRESTRE													✓		✓		✓		✓
GOLDEN LION TAMARIN CONSERVATION								✓					✓		✓		✓		✓
GOLDEN LION TAMARIN PROJECT								✓					✓		✓		✓		✓
GREEN AGAIN													✓		✓		✓		✓
KAYAPÓ FUND		✓			✓								✓		✓		✓		✓
MARINE AND FISHERIES RESEARCH					✓							✓		✓			✓		✓
PROBIO II		✓			✓	✓	✓					✓	✓		✓		✓		✓
PROJECT K								✓							✓		✓		✓
PRO-SPECIES														✓	✓		✓		✓
REM MT		✓			✓			✓				✓		✓	✓		✓		✓
SEA GARBAGE IN SP			✓											✓			✓		✓
SUPPORT TO PAs													✓	✓	✓		✓		✓
SUZANO	✓							✓									✓		✓
TCSA PORTO SUL						✓							✓	✓	✓		✓		✓
TRADITION AND FUTURE IN THE AMAZON					✓								✓		✓		✓		✓
WINDOWS ONTO THE RESTINGA DE BERTIOGA STATE PARK								✓				✓			✓		✓		✓

FUNBIO 25 YEARS



This is one of those times when we feel that we're really making a difference and making the world a better place. Post-graduate support through the FUNBIO Grants program – Conserving the Future will be fundamental for these professionals."

RICARDO B. MACHADO, D.Sc., University of Brasília and former member of FUNBIO's Deliberative Board



FUNBIO was created using funds from the GEF's first major project in Brazil. Since then it has served as the main model for other funds and innovative financial mechanisms in developing countries. In 2015, we welcomed FUNBIO aboard as a GEF implementing agency, in recognition of the level of maturity and excellence the institution has achieved."

GUSTAVO FONSECA, GEF director of programs and first vice-president of FUNBIO's Deliberative Board



The key to building Brazil's future can be summed up in one word: diversity. FUNBIO's success in its mission of contributing toward biodiversity conservation is not only due to the fact that its strategy incorporates native socio-diversity, but also because it operates in a diverse way, with a suite of projects and initiatives, involving a wide diversity of partners."

ADRIANA RAMOS, Environmental law and policy advisor for the Instituto Socioambiental, and a member of FUNBIO's Deliberative Board

TIMELINE

Restored area at the Golden Lion Tamarin Association base in Silva Jardim, Rio de Janeiro, where native seedlings were planted. Photo: Luiz Thiago de Jesus/AMLD



Jan.

— First field trip to accompany the **Golden Lion Tamarin Conservation** project, which, in 2020, restores 20 thousand native saplings in the species' known territory.

— An experiment using **prototypes aims to ascertain the real mortality rate of the nation's most endangered dolphin species**. In Rio Grande do Sul, the estimate is that the number of franciscana corpses that wash ashore accounts for only 11% of actual deaths.

Residents of São João da Ponta, PA, an área supported by the ARPA program. Photo: Victor Moriyama/FUNBIO



Feb.

— Brazil is the country with the fifth-largest contingent of enrolments on the **online course Gender and Environment**, launched by the GEF in 2018. FUNBIO, a member of the GEF Gender Partnership, helped devise the course, which is available in English, Spanish and French.

A team from the Rio Grande do Sul Aquatic Mammals Study Group – GEMARS, part of the Franciscana Conservation Project, prepares for an aerial monitoring flyover. Photo: Paulo Henrique Ott/GEMARS



Mar.

— **The Associação MarBrasil and GEMARS**, supported by the Franciscana Conservation project, run **aerial monitoring sorties to obtain precise, up-to-date data on the franciscana population** between São Paulo and Santa Catarina.

TIMELINE

Grande Sertão Veredas National Park, Minas Geras/Bahia (ICMBio) Photo: Marizilda Cruppe/FUNBIO



Apr.

- **The Tropical Forest Conservation Act (TFCA) reaches completion.** Fruit of an American debt-for-nature law that allowed percentages of national concessional debt to be redirected into environmental funding, the Act sponsored 90 projects in the Atlantic Forest, Cerrado and Caatinga.

Smallholders at the Chapada do Araripe EPA, shared by the states of Ceará, Pernambuco and Piauí. Photo: CEPAN



May

- **GEF Terrestre selects 10 projects** to further the restoration of the Caatinga and Pampa biomes.

Sloth-collared (*Bradypus torquatus*) is a research topic of FUNBIO Grants. Photo: Camila Souto/Personal archive



Jun.

- **Launch of the 3rd edition of the FUNBIO Grants Program—Conserving the Future**, in partnership with Instituto Humanize.
- **Start of the TCSA Porto Sul Project**, created under a Socio-environmental Consent Decree. **FUNBIO will work towards the integrated and strategic environmental management of the area** affected by the Porto Sul Port and Services Complex in the South of Bahia.

TIMELINE

Harvest truck in the Chapada dos Guimarães, Mato Grosso, part of the REM MT program. Photo: Mariana Galvão/FUNBIO



Jul.

— **The REM Mato Grosso Project delivers 71 vehicles to the State Government and Public Prosecutors Office** in a bid to strengthen family-run agriculture, sustainable production and environmental surveillance.

— **With ExxonMobil and the Associação Mico-Leão-Dourado (AMLD)** renewing their commitments, work begins on the Partnership for the Creation of the Golden Lion Tamarin Ecological Park. The initiative will see the construction of a belvedere to enable park visitors and researchers to observe and monitor the species in the wild.

Distribution of staple food baskets at the São João da Ponta Extractive Reserve/ICMBIO, a Protected Area supported by the ARPA program in Pará. Photo: Kayana Kaiamura



Aug.

— **GEF Mar puts up funds to buy food and PPEs and to hire seamstresses to make masks at Protected Areas** affected by the suspension of tourism and near-total reduction in fish sales.

— **The ARPA Program** raises approximately **R\$ 1 million in emergency funding to combat the impact of covid-19** at supported Protected Areas.

— **The Environmental Education Project**, part of the Frade Consent Degree/Conduct Adjustment Degree, **scrambles over R\$ 1 million in emergency aid to help mitigate the effects of covid-19** within craft fishing communities.

— **Pro-Espécies**, FUNBIO's first project as a GEF Implementing Agency, **adopts practices to ensure the broader participation of women.** One of these is the hiring of child-minders to look after kids during workshops.

— **REM Mato Grosso** musters **funds and over a thousand necessity hampers** to support indigenous communities and reduce the impacts of the pandemic.

TIMELINE

— Fire-fighters and Ciopaer practice forest-fire combat drills. Photo: Lucas Ninno/GCOM



Sep.

- **REM Mato Grosso** supports fire-fighting measures in the **Pantanal wetlands**, covering accommodation costs for volunteers and buying medicines, equipment and veterinary materials to treat animals injured by the wildfires spreading through the biome.

— Corn plantation in Juara, Mato Grosso. Photo: REM MT



Oct.

- **GEF Terrestre** makes headway in **digital communication** and hosts its **first online forums and seminars** in order to ensure ongoing experience-sharing and presentation of results.

- **The Marine and Fisheries Research project** issues a **call for proposals focused on the conservation and sustainable-use of mangroves** in Rio de Janeiro state. In all, **R\$ 4.8 million** will be shared among the chosen initiatives.

- Launch of the podcast **“Toninhas: a extinção do golfinho invisível” (Franciscana: the extinction of the invisible dolphin)**, the first **work of environmental fiction** in the country.

- With **R\$ 40 million** in funding, **REM Mato Grosso** selects **29 initiatives** through two open calls: **“family agriculture”** and **“production, innovation and sustainable markets”**.

- Announcement of the **COPAÍBAS Project**, supported by Norway, which will promote **biodiversity conservation by stimulating the bioeconomy, reducing deforestation** and **generating positive social impacts through actions in protected areas** and **traditional communities** in the **Amazon** and **Cerrado**.

TIMELINE

— Tree nursery at the Chapada do Araripe EPA, in the states of Ceará, Pernambuco and Piauí. Photo: CEPAN



Nov.

- With **Franciscana Conservation project** support, the **Maqua Lab** uses **photos, film and audio recordings to detect franciscana in Paraty, RJ.**
- **The Northeastern Center for Environmental Research (CEPAN)**, supported by **GEF Terrestre**, begins its **Caatinga restoration drive in the Araripe-Apodi NF** in Ceará.
- Two **new KF projects** get underway, one to strengthen the **indigenous crafts production chain**, and another to buttress **agroforestry systems** in Kayapó territory.
- A World Bank-commissioned consultancy selects an **ARPA-backed project** as a **gender case study** for the **Amazon Sustainable Landscapes Program** (which supports the Transition Fund).

— Menkragnoti Indigenous Territory, straddling the states of Mato Grosso and Pará. Photo: FUNBIO



Dec.

- According to Spotify, **“Toninhas: a extinção do golfinho invisível” (Franciscana: the extinction of the invisible dolphin)** is among the **50 most widely heard fiction podcasts in Brazil.**

- **Launch of the project Tradition and Future in the Amazon.** With backing from the **Petrobras Socio-environmental Program**, the initiative aims to foster **biodiversity conservation in Kayapó Homelands** by improving **territorial management** with a focus on **preserving and valuing traditional knowledge.**

- **The FUNBIO Grants Program – Conserving the Future** selects **37 researchers** from over **450 submissions**, a number **exceeding the average** for the two previous years. **Women account for 67%** of those approved.

FUNBIO 25 YEARS



We're celebrating FUNBIO's 25th anniversary highlighting its importance to Brazilian biodiversity. Partnering on such projects as 'The FUNBIO Grants program – Conserving the Future' reinforces our belief in the power of capacitating people who defend and spread transformative ideas. It also represents support for research in Brazil and the reinforcement of actions engaged with socioenvironmental themes in general—elements that help pave a more promising way forward in terms of conservation practices."

GEORGIA PESSOA, Executive director of Instituto Humanize



Twenty-five years ago, FUNBIO was created with the daring vision of using financial and economic tools for sustainability in nature conservation. Today, thanks to its past and current extraordinary leaders with their effective teams, FUNBIO holds a significant space in the world: it is an essential institution that has become an example of creativity and rigor to accomplish the difficult task of securing sustainable resources for the most precious natural areas of Brazil. The Moore Foundation and myself offer our deepest congratulations on your achievements."

AVECITA CHICCHÓN, Program director, Andes-Amazon, Gordon and Betty Moore Foundation

FUNBIO

The Brazilian Biodiversity Fund (FUNBIO) is a private, non-profit national institution that works in partnership with government, business and civil society to mobilize and effectively deploy strategic and financial resources for biodiversity conservation.

Since operations began in 1996, FUNBIO has provided support

for 291 projects benefitting 248 institutions nationwide.

Among FUNBIO's main activities are the financial management of projects, design of financial mechanisms, and studies on new sources of conservation funding, as well as the procurement of goods and services for its project portfolio.

FUNBIO has contracted an independent external audit every year since its foundation, and its statements of account have all been passed with unqualified opinion. Since 2013, this effort has been reinforced with an internal audit as well. All of FUNBIO's external audit reports are available for consultation online at:



[ACCESS THE WEBSITE](#)

HOW WE WORK

FUNBIO is structured into three areas:

Donations Unit

Projects financed through private donations and bi-and multi-lateral agreements brokered with the Brazilian government.

Legal Obligations Unit

Projects financed through private-sector legal obligations: environmental compensation, Consent Decrees/Terms of Conduct Adjustment, and other mechanisms.

Special Projects Unit

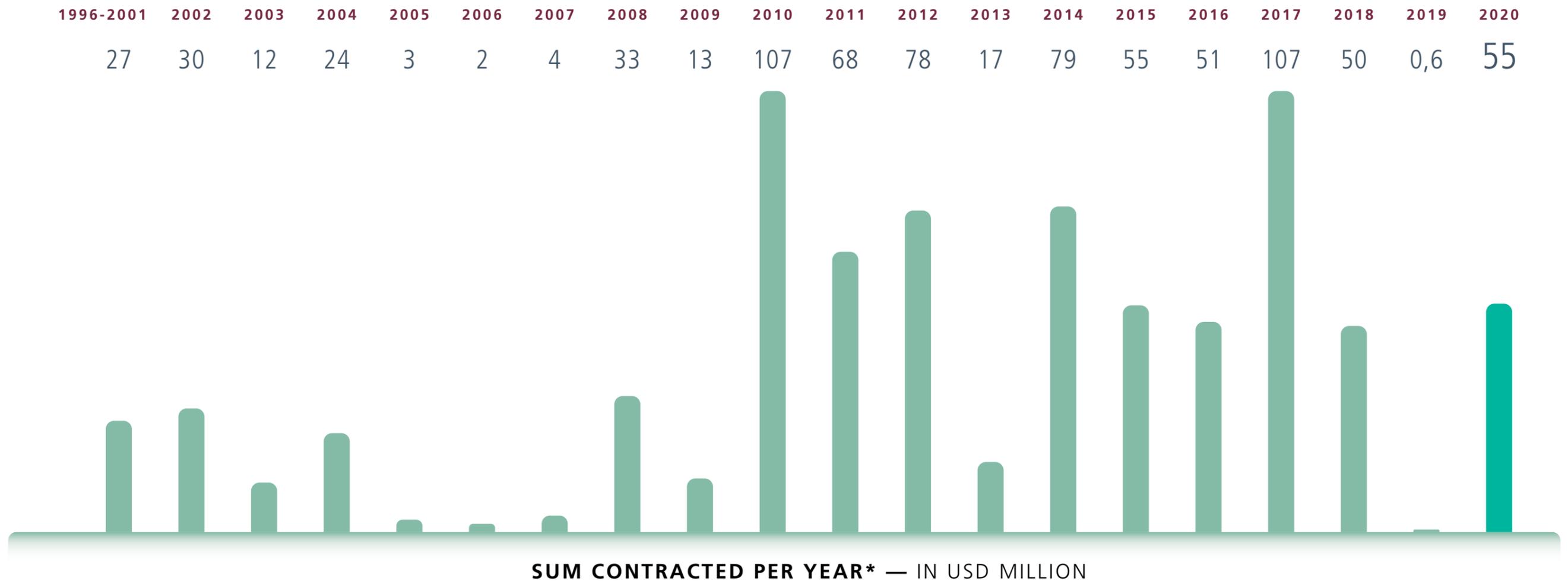
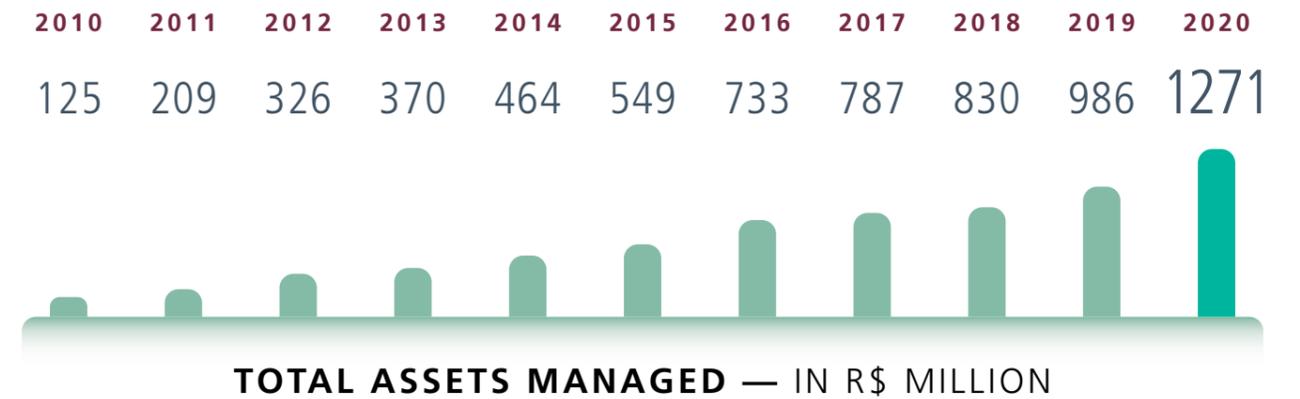
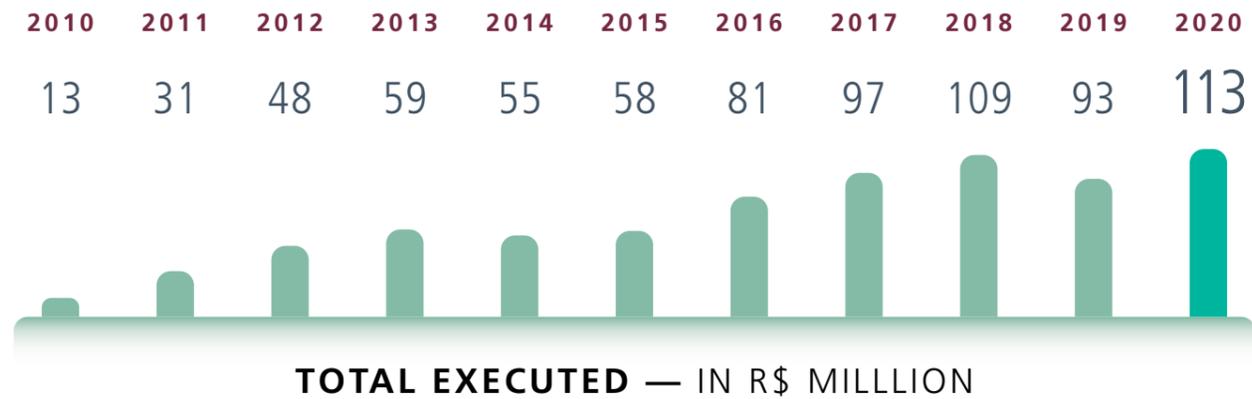
Diagnoses financial environments and designs mechanisms and tools that unblock access to new financial sources.



IN NUMBERS

SUPPORTED PROTECTED ÁREAS	358	47	CALLS FOR PROJECT
SUPPORTED INSTITUTIONS	278	20	INDIGENOUS TERRITORIES SUPPORTED
SUPPORTED PROJECTS	340	92	FINANCERS

IN NUMBERS



* Project sums converted into US dollars (exchange rate as of the last day of the month of the contract's signing)

FUNBIO 25 YEARS



FUNBIO has been one of our closest partners in Financial Cooperation with Brazil. We have been cooperating in some of our most prominent programs such as the ARPA – Amazon Region Protected Areas program and REDD for Early Movers in Mato Grosso. As a professional financial agent with huge technical knowledge and expertise in handling international donor programs, we truly appreciate FUNBIO's contribution to highly successful program implementation as well as real impact on the ground. We thank you for the first 20 years of partnership and look forward to working together for the next 20 years! Parabéns!"

JENS MACKENSEN, KfW head conservation finance and sustainable resource mgmt
Latin America



FUNBIO is the go-to institution for biodiversity conservation in Brazil. Innovating, and creating partnerships, it has set the standard for transparency and efficiency in the management of strategic resources."

ADRIANA MOREIRA, Senior Biodiversity Specialist, GEF



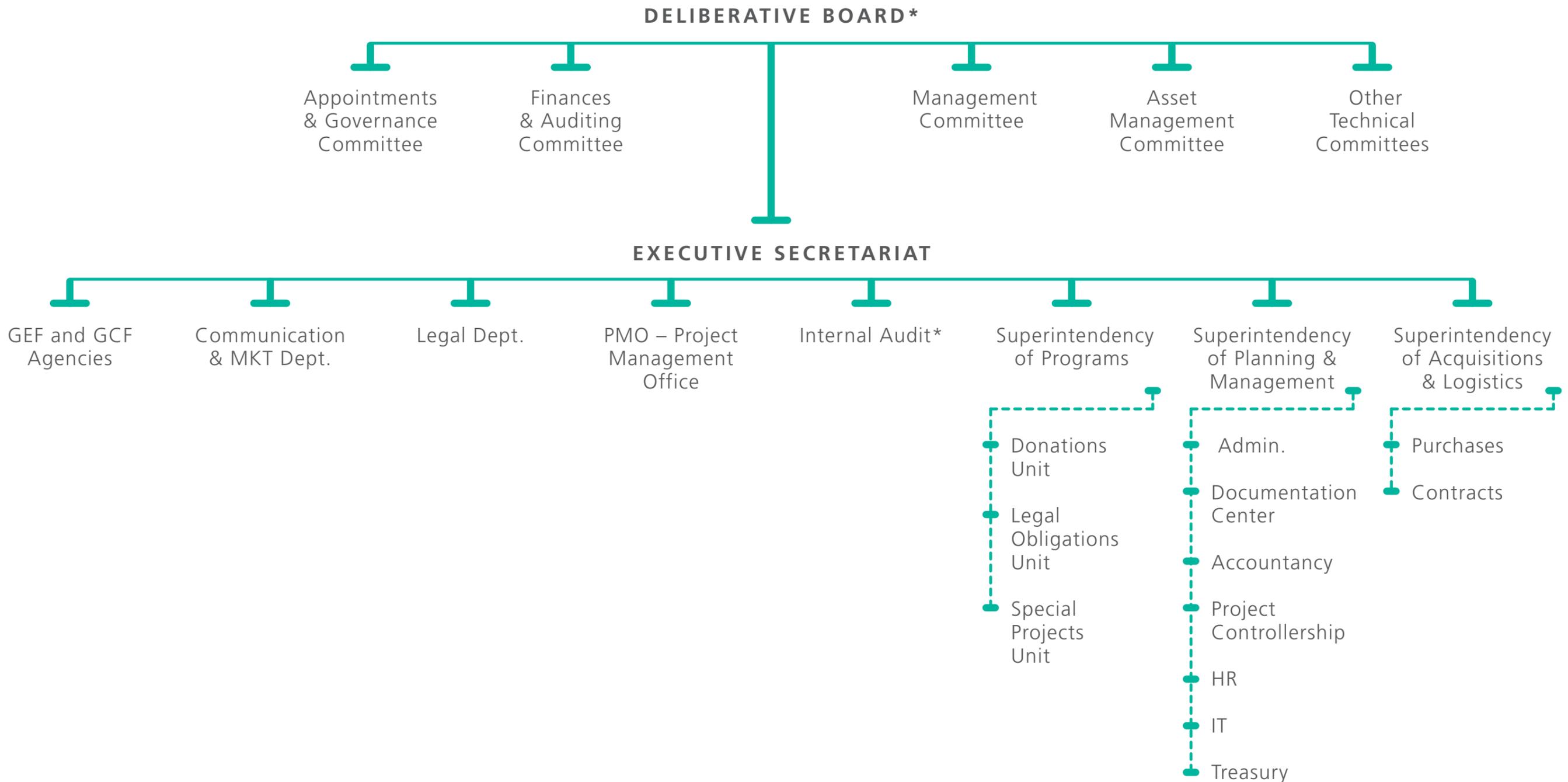
In addition to creating proposals for the conservation of this dolphin species, the Franciscana Conservation project has helped open channels of dialogue between fisheries and science, fostering spaces at the front lines for young researchers—women, mothers—who work together in the fight for a sustainable ocean that provides a healthy environment for all creatures. FUNBIO's support has been essential in strengthening new generations of scientists, not just technically, but in terms of more inclusive environmental governance processes."

CAMILA DOMIT, Coordinator of the Franciscana Conservation project in Management Area II, supported by the Franciscana Conservation project

LIST OF FUNDING SOURCES 2020

- Anglo American Minério de Ferro Brasil S.A.
- Bahia Mineração S.A.
- Banco Interamericano de Desenvolvimento – BID
- Banco Nacional de Desenvolvimento Econômico e Social – BNDES
- BP Brasil Ltda.
- Bundesministerium für Umwelt – BMU
- Companhia Siderúrgica Nacional – CSN
- Conservação Internacional – CI-Brasil
- Conservation International Foundation
- Eurofins Foundation
- ExxonMobil Química Ltda.
- ExxonMobil Exploração Brasil Ltda.
- Fonds Français pour l’Environnement Mondial (FFEM)
- Global Conservation Fund
- Global Environment Facility – GEF
- Global Wildlife Conservation
- Gordon & Betty Moore Foundation
- Green Climate Fund – GCF
- Instituto Humanize
- KfW Bankengruppe
- L. Figueiredo Empreendimentos Imobiliários
- Linden Trust for Conservation
- Margaret A. Cargill Philanthropies
- Mava Fondation Pour La Nature
- Natura Cosméticos S.A.
- Norwegian Ministry of Foreign Affairs
- O Boticário Franchising Ltda.
- Petróleo Brasileiro S.A. – Petrobras
- Petro Rio Jaguar Petróleo Ltda.
- Rock World S.A.
- Secretaria de Negócios, Energia e Estratégia Industrial do Reino Unido – BEIS
- Suzano Papel e Celulose
- US Agency for International Development – USAID
- World Bank – Banco Mundial
- WWF-Brasil
- WWF-US

ORGANIZATIONAL FLOW CHART



* Responds functionally to the Deliberative Board
 - - - Department composition

GOVERNANCE

The Deliberative Board (DB) sits 16 members from the academic, environmental, business and governmental sectors. It is FUNBIO's chief governing body.



CHAIRMAN

José de Menezes Berenguer Neto

VICE-CHAIRWOMAN

Danielle de Andrade Moreira

ACADEMIC SECTOR

Danielle de Andrade Moreira

Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio)

Fabio Scarano

Fundação Brasileira para o Desenvolvimento Sustentável (FBDS)

Ricardo Machado

Universidade de Brasília (UnB)

Sergio Besserman Vianna

Instituto de Pesquisas Jardim Botânico do Rio de Janeiro



ENVIRONMENTAL SECTOR

Adriana Ramos

Instituto Socioambiental (ISA)

Maria de Lourdes Silva Nunes

Fundação Grupo Boticário

Maria José Gontijo

Instituto Internacional de Educação do Brasil (IIEB)

Valmir Ortega

Conexus



BUSINESS SECTOR

Flavio Ribeiro de Castro

FSB Comunicação

José de Menezes Berenguer Neto

JPMorgan

Marianne von Lachmann

Lachmann Investimentos Ltda.

Walter Schalka

Suzano Papel e Celulose



GOVERNMENTAL SECTOR

Eduardo Lunardelli Novaes

Ministério do Meio Ambiente
[a partir de novembro/2020]

Fernando Cesar Lorencini

Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) [since September 2020]

Homero de Gorge Cerqueira

Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) [until September 2020]

Luis Gustavo Biagioni

Ministério do Meio Ambiente
[until November 2020]

Marcelo Moisés de Paula

Ministério da Economia

TRANSPARENCY

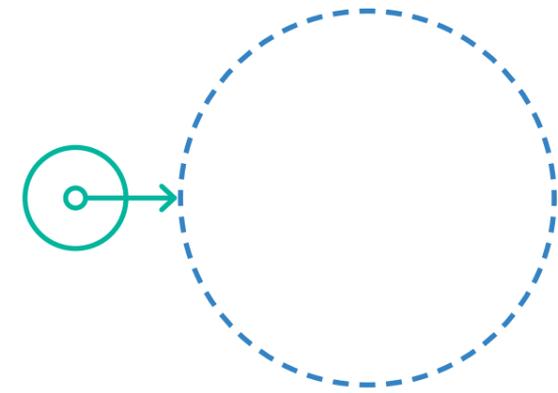
Our demonstration of accountability dated December 31, 2019, along with the independent auditor’s report and explanatory notes are available for consultation at:



ACCESS AUDIT REPORTS

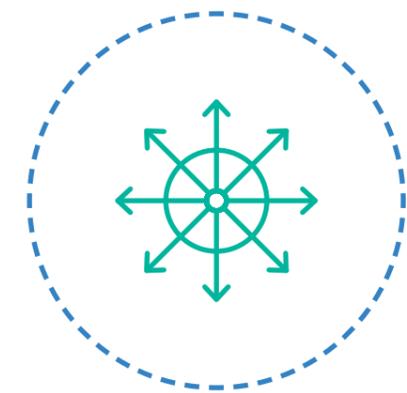
External Audit

FUNBIO has contracted an independent external audit every year since its foundation. Its statements of account, all passed with unqualified opinion, the independent auditor’s reports and explanatory notes are all available for consultation on the FUNBIO website.



Internal Audit

Since 2013, FUNBIO has also conducted an internal audit to buttress aspects of control and the integrity of its accounting and financial data. The internal audit is an instrument that probes every level of the organization, ensures an adequate working relationship between the different areas, and supports and promotes ongoing process improvements. It is a reference for the implantation and engagement of best practices in organizational governance. The statements of account, independent auditor’s reports and explanatory notes are all available for consultation on the FUNBIO website.



ETHICS COMMITTEE

Created in 2013, the FUNBIO Ethics Committee is formed by four members of staff encumbered with developing the Code of Ethics, a document that sets forth the organization’s norms of ethical conduct. The Code is approved by the Deliberative Board. The committee members, who serve two-year, once-renewable mandates, are also responsible for annually training FUNBIO employees in the Code. Issues can be raised and complaints made through the appropriate channels on the institution’s website.



ACCESS THE WEBSITE

In 2020, the FUNBIO Ethics Committee met regularly to conduct the following activities:



Annual ethics training, held in December 2020, with the participation of all of FUNBIO’s new hires. In addition to revising the Code of Ethics, the committee sessions also discussed the concepts of ethics and the internal practices followed at FUNBIO.



Throughout the year, the Ethics Committee addressed five cases, four of which were complaints and one, a doubt. The EC channels remained open year-round, and the average time taken to process the cases brought to the EC’s attention was roughly three months. The reports on cases are made available on the FUNBIO website every April



In April, Alexandra Leitão, from Internal Auditing, joined the Ethics Committee after the end of the mandate held by Fábio Leite.



ACCESS THE ETHICS COMMITTEE



MEMBERS OF THE ETHICS COMMITTEE IN 2020

Flavia Neviani Coordinator
Heloísa Helena Henriques

Alexandra Viana Leitão
João Ferraz

POLICIES AND SAFEGUARDS

In 2018, FUNBIO adopted the safeguards applied by the International Finance Corporation (IFC), part of the World Bank Group.



[ACCESS POLICIES AND SAFEGUARDS](#)



Gender Integration Policy



Environmental and Social Policy

PERFORMANCE STANDARDS (PS):

- PS1
Assessment and Management of Environmental and Social Risks and Impacts
- PS2
Labor and Working Conditions
- PS3
Resource Efficiency and Pollution Prevention
- PS4
Community Health, Safety, and Security
- PS5
Land Acquisition and Involuntary Resettlement
- PS6
Biodiversity Conservation and Sustainable Management of Living Natural Resources
- PS7
Indigenous People
- PS8
Cultural Heritage

NATIONAL AGENCIES FUNBIO

FUNBIO is the only civil society Organization in the Southern Hemisphere to hold both GEF agency and GCF entity accreditation.



The Green Climate Fund (GCF) was set up in 2010 to support projects tackling climate change. Since then, it has supported over a hundred projects totaling USD 2 billion in funding. In 2018, FUNBIO, BNDES and the federal bank Caixa Econômica Federal became Brazil's first GCF accredited entities.



[ACCESS GCF AGENCY](#)



The Global Environment Facility was established at the Earth Summit in Rio de Janeiro in 1992 to help tackle some of the most pressing problems facing the environment. Since then, the GEF has channeled USD 21.1 billion into over 5 thousand conservation projects across 170 countries. Today, there are 18 GEF Agencies worldwide, working together to increase and diversify this portfolio. In 2015, after careful assessment, FUNBIO

received national GEF agency accreditation. Its maiden voyage as a GEF Agency came in 2018, when work began on the National Strategic Project for the Conservation of Endangered Species (Pro-Species).



[ACCESS GEF AGENCY](#)

FUNBIO 25 YEARS



With support from its partners, Tabôa Fortalecimento Comunitário has increased the credit allotted for investment in boosting the productivity and quality of cocoa planted using the *cabruca* system, where the cocoa plants grow in the shade of existing woodland and to other agroforestry systems in Bahia. To further expand the resources available for loans, we are studying blended finance models to enlarge the credit pool for agriculture with socioenvironmental returns."

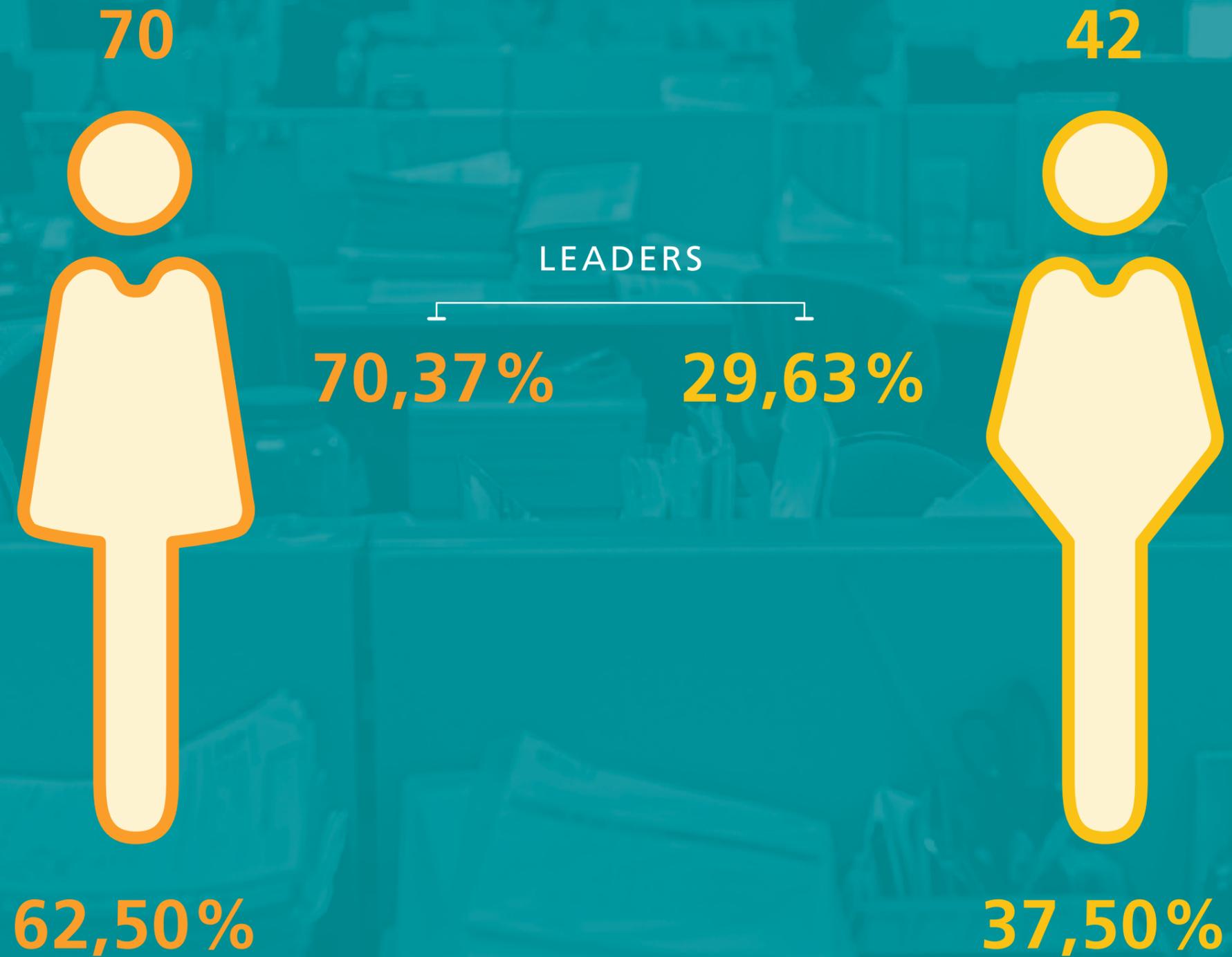
ROBERTO VILELA, Executive director of Tabôa, a partner on the Probio II Opportunities Fund managed by FUNBIO



FUNBIO is a strategic partner of the golden lion tamarin conservation program. It is a privilege to work with an institution that understands the complexity of the environmental issues, has a well prepared technical team and institutional goals that run in the same direction as our own. This really helps in planning to obtain results and in maximizing the use of resources."

LUIS PAULO FERRAZ, Executive secretary, Golden Lion Tamarin Association

WHO WE ARE*



* The list includes staff and interns who were part of the FUNBIO team in 2020.

WHO WE ARE

SECRETARY-GENERAL'S OFFICE

Rosa Maria Lemos de Sá CEO

Zeni Pinheiro Assistant

GEF & GCF AGENCIES

Fábio Heuseler Ferreira Leite Manager

COMMUNICATION & MARKETING

Helio Yutaka Hara Manager

TEAM:

Carlos Atila de Alencar Ximenes

Samira Chain Nascimento

Talissa Silverio Araujo

Thiago Ferreira Câmara

LEGAL DEPARTMENT

Flavia de Souza Neviani Manager

TEAM:

Alice Regnier Gomide

Paulo Miranda Gomes

Rafaela Luiza Pontalti Giongo

INTERNAL AUDIT

Alexandra Viana Leitão

PROJECT MANAGEMENT OFFICE (PMO)

Mônica Aparecida Mesquita Ferreira

Manager

TEAM:

Thiago da Fonseca Martins

SUPERINTENDENCY OF PROGRAMS

Manoel Serrão Borges de Sampaio

Superintendent

DONATIONS UNIT

Fernanda Figueiredo Constant Marques

Manager

Ilana Parga Nina Boetger de Oliveira

Manager

TEAM:

Alexandre Ferrazoli Camargo

Andre Luiz Ferreira Lemos

Clarissa Scofield Pimenta

Daniela Torres Ferreira Leite

Dante Coppi Novaes

Edegar Bernardes Silva

Fabio Ribeiro Silva

Fernanda Abduche Correa de Paiva

Estrella

Heliz Menezes da Costa

João Ferraz Fernandes de Mello

Mariana Fernandes Gomes Galvão

Mariana Melo Gogola

Mary Elizabeth Lazzarini Teixeira

Paula Cavalcanti Ceotto

Paula Vergne Fernandes

Pedro Alberto Dantas da Silva

Rodolfo Cabral Costa Gomes Marçal

Thales Fernandes do Carmo

LEGAL OBLIGATIONS UNIT

Erika Polverari Farias (*in memoriam*) Manager

Manuela Mosse Muanis Manager

TEAM:

Ana Helena Varella Bevilacqua

Andre Aroeira Pacheco

Laura Pires de Souza Petroni

Mayne Assunção Moreira

Natalia Prado Lopes Paz Travassos

SPECIAL PROJECTS UNIT

Andreia de Mello Martins

SUPERINTENDENCY OF PLANNING & MANAGEMENT

Aylton Coelho Costa Neto Superintendent

ADMINISTRATION

Flávia Mól Machado Coordinator

TEAM:

Cláudio Augusto Silvino

Evellyn de Freitas Lisboa

Marcio de Vasconcelos Maciel

Matheus Duarte Ramos

Vanessa Ravaglia Cohen

Fernanda Luiza Silva de Medeiros



WHO WE ARE

DOCUMENTATION CENTER

TEAM:

Ana Maria Rodrigues Martins
Jefferson Luis Mattos Jesus
Natália Corrêa Santos

ACCOUNTING

Daniele Soares dos Santos Seixas

Coordinator

TEAM:

Elizangela da Conceição Santos
Flavia Fontes de Souza
Guilherme Brito da Silva
Julia Lopes Clacino
Mylena Costa Barbosa Milesi
Nara Anne Brito do Nascimento
Suellen Pereira de Freitas
Thais dos Santos Lima

PROJECT CONTROLLERSHIP

Marilene Viero Coordinator

Mayara do Valle Bernardes de Lima

Coordinator

TEAM:

Ana Paula França Lopes
Camila da Costa Golfetto
Dalissa Granja Villa Nova
Felipe Augusto de Araujo Camello
Felipe Dias Mendes Serra
Juliana Siqueira da Silva Schuler
Luciana Bernardes Natal
Natalia de Barros Silva Mattos
Priscila Ribeiro Larangeira Freitas
Renato Reis Esteves
Ronny Paulo Guimarães Pessanha
Vanessa Guimarães Ribeiro de Barros
Victor Hugo Gatto
Vitor da Silva Vieira

HUMAN RESOURCES

Andrea Pereira Goeb Manager

TEAM:

Barbara Santana da Silva Chagas
Bruna Gabriella de Oliveira Araujo
Heloisa Helena Henriques

TREASURY

Roberta Alves Martins Coordinator

TEAM:

Odara Diniz da Conceição
Roberta Alves Martins
Thais de Oliveira Medeiros

INFORMATION TECHNOLOGY

Vinicius de Souza Barbosa Coordinator

TEAM:

Alessandro de Assis Denes
Caroline Cavalcanti de Oliveira Jacobina
Deywid Carvalho Dutra
Igor de Veras Coutinho Soares

SUPERINTENDENCY OF ACQUISITIONS & LOGISTICS

Marcelo Moreira dos Santos

Superintendent

Fernanda Alves Jacintho Rodrigues da Silva Coordinator of Acquisitions and Logistics

Suzana Amora Ramos Coordinator of Contract Management, Acquisitions and Consultancy

TEAM:

Alessandro Jonady Oliveira
Allan da Silva Cabral
Ana Lucia Oliveira dos Santos
Cleyton Oliveira Lima de Souza
Denise Tavares Fernandes da Silva
Flavia Avelar Teixeira
Flavio do Sacramento Miguel
Jeanne Caroline Silva Alves
José Mauro de Oliveira Lima Filho
Luisa Brandt Pinheiro da Silva
Luiza de Andrade Lima
Marcos Pereira da Rocha
Thais Mariano da Silveira de Brito
Vinicius Chavão da Cunha de Souza
Viviane dos Santos da Silva
Viviane Ferreira da Costa
Willian dos Santos Edgard





IN THE MEDIA

24.01.2020 | G1
Mato Grosso receives R\$ 36.8 million from German bank through environmental preservation agreement



09.02.2020 | Jornal da Paraíba
Doctoral research at the Federal University of Paraíba tries to age wine using local Caatinga wood



03.03.2020 | Veja SP
Spix's macaws arrive in Brazil this Tuesday



03.03.2020 | UOL
At risk of extinction, dozens of Spix's macaws to arrive in Brazil today



20.04.2020 | O Povo
Pedra da Risca do Meio State Park receives underwater monitoring



28.04.2020 | Brasil de Fato
In Pernambuco, 51% of native Caatinga vegetation has already been deforested



29.05.2020 | Vivo Verde
FUNBIO Grants 2020 channels R\$ 1 million into research on biodiversity conservation



06.06.2020 | Meio Ambiente por Inteiro (TV Justiça)
World Environment Day



25.06.2020 | G1
Bahia State Government signs Porto-Sul socio-environmental resource management agreement



IN THE MEDIA

29.06.2020 | Folha do Litoral
Suzano launches an emergency call for community support projects



16.07.2020 | Só Notícias
Empaer receives 58 vehicles to attend farmers across 33 municipalities state-wide



01.08.2020 | Projeto Colabora
An overpass for the golden lion tamarin



02.08.2020 | G1
Golden lion tamarin is the beneficiary of Brazil's first wildlife crossing, a bridge to the species' future



23.08.2020 | Portal Amazônia
Forests of Mato Grosso to be monitored by high-resolution satellite until 2021



30.09.2020 | Gaúcha ZH
Meet the most endangered cetacean in the Southwestern Atlantic, a visitor to the Gaúcho coastline



07.10.2020 | O Eco
Conserving the Pampa birdlife: an alliance between conservationists and rural producers



19.10.2020 | O Globo
Actress Camila Márdila to star in environmental fiction podcast in defense of dolphins



29.10.2020 | O Eco
Coordinated knowledge in pursuit of solutions—franciscana conservation



IN THE MEDIA

31.10.2020 | G1
 NGO launches fiction podcast in defense of the franciscana, Brazil's most endangered dolphin species



01.11.2020 | O Eco
 Podcast introduces the franciscana, Brazil's most endangered dolphin species



17.11.2020 | Plataforma
 Specimens of the Spix's macaw, extinct in the wild, to be released into natural habitat in 2021



30.11.2020 | O Fluminense
 SG: Environment Department launches the Municipal Atlantic Forest Plan



06.12.2020 | O Eco
 Sighting of endangered dolphin species reinforces the importance of the Tamoios Ecological Station



05.12.2020 | O Estado de São Paulo
 Endangered dolphin species is sighted in Paraty



09.12.2020 | O Documento
 A helicopter helps distribute food in the remoter regions of the Pantanal.



DIVERSITY AND CONSERVATION

In this annual report, two of the researchers supported by the program FUNBIO Grants – Conserving the Future give first-person accounts of their experiences with diversity in their work and careers. In addition, there are also write-ups on the women leading a fisheries project in Rio de Janeiro and the leader of a group that is fundamental to producing knowledge on the golden lion tamarin.

Since the 2016 Annual Report, each edition has contained a section on gender issues, a theme of enormous relevance to FUNBIO, both internally and externally: we have gender-integration policies, organize internal gender-awareness training, and take part in the GEF Gender Partnership, a working group formed by implementing agencies from all over the world.



The visibility of bisexual people in academia can generate familiarity so that indecisive bisexual youths (indecisive in terms of their career, not their sexuality) can see themselves taking a doctorate or going into science."

IGOR DANIEL, FUNBIO Grants – Conserving the Future



I guess I'm lucky, because I've never run into obstacles for being a black woman."

ANDRÉIA MARTINS, Golden Lion Tamarin Association



I've been called a 'monkey', in an attempt to equate me with my subject of study. I sometimes ask myself if the same thing would happen if I were white."

MARIANNE BELLO, FUNBIO Grants – Conserving the Future



Fishing is seen as a man's thing. When we started going out in a fishing boat with an all-female crew, the fishermen couldn't accept it. We suffered a lot of harassment: they'd curse at us, make rude gestures, tell us to go wash clothes or watch the soaps on TV."

MARGARETH JULIÃO, Native Women – Cooperative of Craft Fisherwomen and Growers of Native Plants in the Lake District

DIVERSITY AND CONSERVATION

The Seventh Sense

The biologist Andréia Martins starts the day at 5:30am. As soon as she gets up, she tends to her plants with her adopted stray Nino in tow, has breakfast and throws herself into the unique world of the golden lion tamarin. She keeps diaries, plans routes, selects the troupes that need to be visited, and then, at 7:30am, along comes the car that will take her out into the field. Something of a conservation success story, Andréia has devoted the last 38 years of her life to this marmoset, endemic to the Silva Jardim region of Rio de Janeiro state. She heads up a team of five. All male.

“I guess I’m lucky, because I’ve never run into obstacles for being a black woman. There’s a lot of trust on our team, as we’ve known each other since we were kids and we’re close friends. I always say that I prefer to ask, but if they don’t do what I say, then I have no problem telling. And if they mess up, I joke that I’m gonna tell their wives”, says Andréia, who started out planning to be a teacher and ended up going into biology instead.

“From the very first time I went into the forest to see the marmosets I felt at home, and I said to myself: this is what I want!”. That first time was as a teenager, in the 1980s. The forest was key to her decision to opt for biology over

teaching, and in 1989 she was hired as field coordinator on the Golden Lion Tamarin Association’s Metapopulation Program, which she has known from the get-go, and works on to this day. She had various chances to make the move into academia, and she’s provided support to researchers from all over the world, but her passion kept her at Silva Jardim, where she has even learned to reproduce the primate’s vocalizations: “It’s a long call, which they use to check if there are other groups in the area”, she says. “They usually respond, and sometimes even come toward me”.

She has spent so much time among the golden lion tamarins that she has developed a unique familiarity with the

animals: “Nobody else has comparable knowledge and field experience with the golden lion tamarin in the wild. Not one of the illustrious scientists”, says Luís Paulo Ferraz, executive secretary of the Golden Lion Tamarin Association.

Andréia was born in Silva Jardim, where she grew up “playing in the forest beside the house”. But there were no golden lion tamarins there, and her first contact with the species came in the classroom: we had never heard of this endangered neighbor, and to get pictures of it, you had to use a ‘trick’: take a photo of a photo and use that to illustrate your paper. This was back when the species was on the very brink of extinction.

—
Andréia Martins monitoring golden lion tamarins (*Leontopithecus rosalia*) in the field. Photo: Sally Foster



Almost four decades later, she jokes that she wakes up exhausted from working so hard in her sleep: her dreams are full of these golden primates. More than once she’s dreamed that a certain troupe had produced offspring only to find out in the field the next day that the dream was true: “I call it my seventh sense, because I’ve already used up all the sixth!”, laughs Andréia, who recalls her personal favorite: Micoeca, a male rescued from traffickers and released into the wild at Silva Jardim. Micoeca adopted Andréia into his troupe: “There was a female from another troupe, called Ritinha. She was used to people and would jump down onto our shoulders. That wasn’t

good, so we kept our distance. Ritinha felt rejected by this and started attacking us instead. And every time she launched one of these attacks, there was Micoeca, planting himself between me and Ritinha, like a shield.”

The brave Micoeca ended his days in a shelter after a violent fight with a large capuchin that left him maimed.

I ask her if, after all this time, she’s not sick of tamarins, and after a brief silence, she responds with a smile and a boom: “Like hell, I can barely even stay away during vacation. I keep imagining a day when their population is viable, and all the future generations we’ll get a chance to know. I’m optimistic”.

DIVERSITY AND CONSERVATION

B for Biscuit

IGOR DANIEL BUENO ROCHA

My name is Igor Daniel, I'm a student on the Post-graduate Program in Ecology at the University of Brasília and my relationship with the institution goes back nine years, including degree, master's degree and the doctorate I'm doing now. It was during my second year as an undergrad that I realized I was bisexual. Many people brand bisexuality as an excuse for not assuming one's homosexuality, or see it merely as a passing phase of curiosity and discovery, and I admit I often wondered this about myself, until I finally understood that it's okay to like both men and women.

My sexuality was never an issue in terms of how people saw me in the academic milieu, though the fact that I'm a man may have had a lot to do with that. I see far greater inequalities between the genders than between sexual orientations in the scientific world. My personality was always the most determining factor in how I was treated in academia. My handling of bureaucracy and the trust I received from others enabled me to become president of the Biology course and, later on, post-graduate students' representative on the Collegiate Program and Institute Board. I'm also vocal as an ecologist, lecturer, scientist and

bisexual on the political scene, making my voice heard on all the fronts I have some authority to speak on: the environment, education, respect for science and the LGBTQIA+ struggle.

We need greater visibility for the B part of LGBTQIA+, including in academia. After all, B is not just for "biscuit", "Beyoncé" or "Bats", my subject of study. It's not because I'm bi that I'm not going to accept myself, or need to hear that it's just a phase, or that I'm still sitting on the fence. I'm bi because this dichotomy in sexuality is not a relevant factor for my preference. The visibility of bisexual people in

academia can generate familiarity so that indecisive bisexual youths (indecisive in terms of their career, not their sexuality) can see themselves taking a doctorate or going into science.



Igor Daniel, supported by the third edition of the FUNBIO Grants Program. Photo: Personal archive

DIVERSITY AND CONSERVATION

We can and want to be protagonists

MARIANNE BELLO

Fieldwork is definitely a challenge, but there are obstacles that track back to gender and race. To paraphrase Conceição Evaristo, my research is contaminated by the fact that I am a black woman. I've been called a 'monkey', in an attempt to equate me with my subject of study. I sometimes ask myself if the same thing would happen if I were white.

My capacity has been called into question from the very beginning, and I'm generally posed two questions. One: *'aren't you afraid?'* Women often ask me about the contact I have with men during my work and that makes me think that the violence we are subjected to generates insecurity and fear. From the outset, I was told to find a male assistant so that I'd be "safer" and I realized that when I'm with him, he's the one people immediately figure must be in charge. Two: *'do you think you can manage that?'* It's a question usually put by men eager to tell me how to do my job, as if I didn't already know what it entailed.

When it comes to studies assessing knowledge about primates, women are not seen as a target public. In my experience, there was a clear difference in the way I was received by the interviewees. While the women spoke about subjects beyond the study itself, telling stories about their interactions with howler monkeys, and how they always seem to know when the rains are coming, the men tended to give much more succinct answers.

However, the challenges aren't limited to fieldwork. According to a National Census conducted in 2015, 54% of the Brazilian population is black, yet only 12.8% of young black

youths aged between 18 and 24 made it into university that same year. As a post-graduate student, none of my teachers were black women, and I was often the only black student in the classroom or at academic events.

The need to inspire black students to go into post-graduate research was the motivation behind Odú, created by myself, Dr. Piatã Marques and Dr. Arildo Dias (odu.initiative@gmail.com). The Yoruba word Odú means destiny/path. According to Ifism, there are 256 odús each individual can follow, and our initiative wants to shine a light on one in particular: the path of research.



Marianne Bello, biologist and researcher supported by the second edition of the FUNBIO Grants Program. Photo: Personal archive

Being a FUNBIO grant holder gave me the resources I needed to pursue my research, but I also see it as an investment in my personal and professional development. It is essential that we promote diversity in science and telling my story is a chance to show that, more than just subjects in a study, we can and want to be protagonists.

Marianne Bello is a biologist studying for a master's degree in Ecology and Evolution at the State University of Rio de Janeiro. The FUNBIO Grants Program supports her field study "The Silence of the Innocents", about howler monkeys on Ilha Grande.

DIVERSITY AND CONSERVATION

A change of tide*

Fisherwoman from the Native Women group in Arraial do Cabo, Rio de Janeiro. Photo: Zenilda Maria da Silva/Mulheres Nativas



Also in Ilha Grande, more specifically in the Lake District, covid-19 has had undeniable impact on the fishing communities living near the Arraial do Cabo Marine Extractive Reserve. For the women there, the challenges are immense and predate the pandemic.

“Fishing is seen as a man’s thing. When we started going out in a fishing boat with an all-female crew, the fishermen couldn’t accept it. We suffered a lot of harassment: they’d curse at us, make rude gestures, tell us to go wash clothes or watch the soaps on TV”, says Margareth Julião, who has been bringing back her own fish from the sea since the age of fifteen.

In the beginning, she’d ask her brother to take her out, but after a time she started going with a girl friend, then another and another. Before she knew it, there were at least ten women sailing out on the waves. “Today, when we turn up to fish, the men talk to us, greet us, treat us with

respect. ‘Here comes the girls’ boat’, they say”.

Now, wherever they go, they move and hang together like a shoal. “When we hear about a course or something, we all go together. When there’s a meeting, we all go together”, says Margareth. And it was in this collective spirit that they began to produce an extremely varied menu out of their spoils from the sea—from fish burgers to fish ice-cream. In 2017, they founded Native Women—Cooperative of Craft Fisherwomen and Growers of Native Plants in the Lake District, and rented a HQ so they could organize their work as a group.

Not that they had the money to do it, because they didn’t. But they believed in their dream from day-one. Since the co-op got up-and-running, they’ve found themselves hanging by a thread more than once, but they always scraped a way to pay the rent and keep producing. In 2020, just as they were finally beginning to see a steady inflow of cash, along came the pandemic and put everything on freeze.

“We had to close the co-op, turn off the machinery, and keep paying the rent despite the lack of income”, says Margareth. “That was when the Marine and Fisheries Research Project appeared. It was the lifeline

we needed. Not only did it restructure our base, but also helped us get our products back on the street again”.

With the project’s help, the co-op’s base is being refitted so that the members can continue their work in safety, protected against covid-19. Acrylic screens and ventilators will be installed, and each worker will have her very own PPEs. In addition, a nurse is going to be on-hand to coordinate the sanitization of the locale and to accompany the health of those present. With protection in place, the idea is that every week for the next six months, the co-op will be able to transform 60kg of fish hauls into exclusive product and income for the families.

Administrative consultancy will also ensure, and encourage, further professionalization at the Native Women co-op, with an internal charter and the development of a business plan with short, medium and long-term actions.

“The restructuring project will provide the conditions we need to go back to work. We’re 100% focused. Six months from now, we’ll be up and running again”, says Margareth, excited about the future. “Our re-beginning starts now”.

* Text by Bernardo Câmara, originally written for the newsletter “Linhas do Mar”, published by the Marine and Fisheries Research Project.



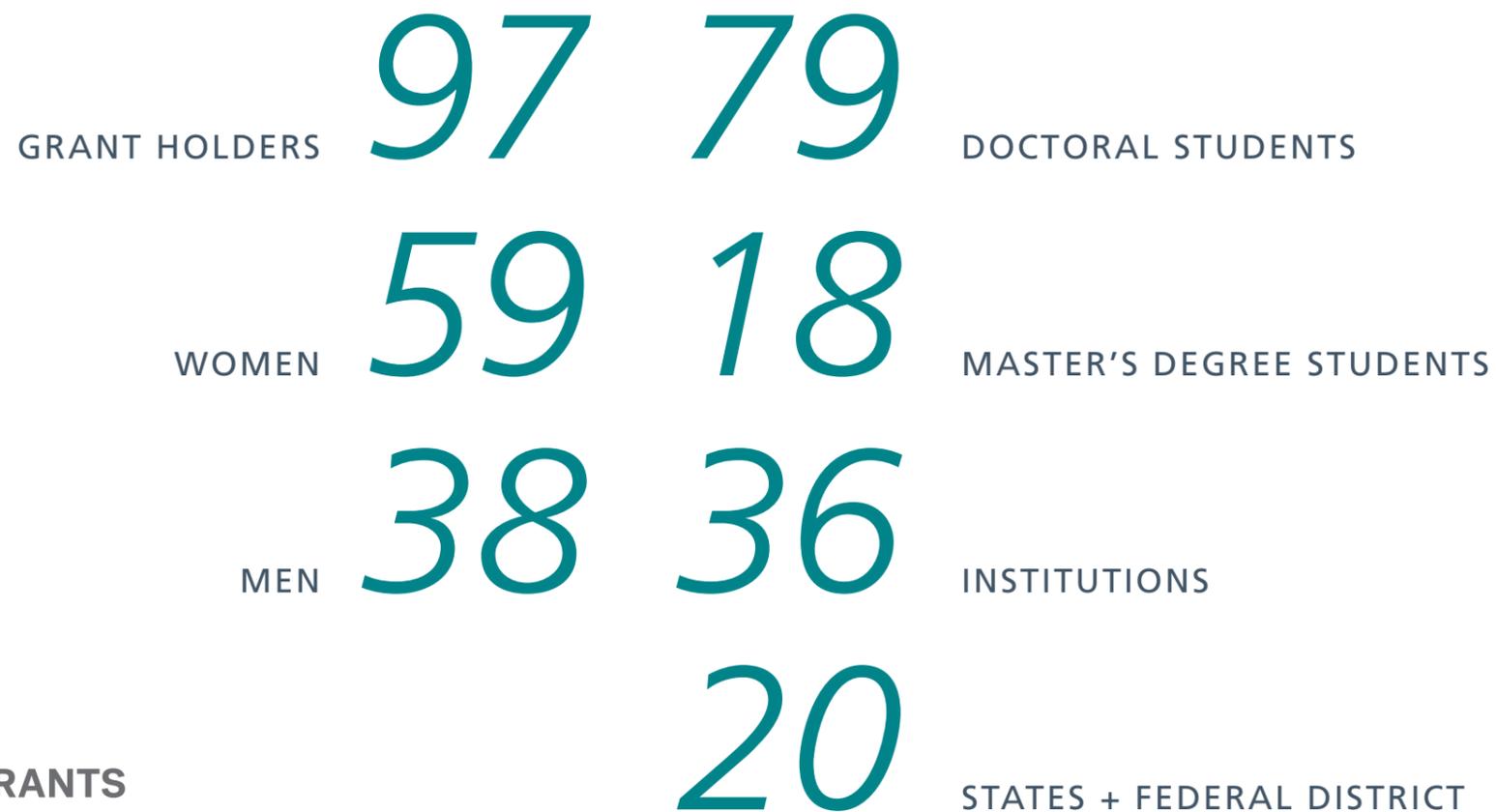
FUNBIO GRANTS

CONSERVING THE FUTURE



Gabriela Gama, supported by FUNBIO Grants – Conserving the Future 2020, at the Marituba do Peixe EPA in Alagoas. Photo: Personal archive

FUNBIO GRANTS — CONSERVING THE FUTURE

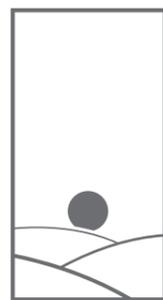


The third edition of the FUNBIO Grants Program—Conserving the Future received 450 proposals and conferred a record number of payments. With the 37 grants issued in 2020, the Program's total comes to 97, 59 of which were awarded to female researchers. 61% is an expressive cut, especially if we consider that women make up only 40% of the nation's doctoral researchers, according to Fapesp.

Launched in 2018, the program has been supported by the Instituto Humanize since day-one. A new call is issued on June 5 each year—World Environment Day, and the anniversary of FUNBIO's founding. Supporting master's and Ph.D research is a vital contribution to science and to knowledge-building in Brazil, as well as to the formation of future leaders.

Among the new projects selected is a study that hopes to understand how social-media communication (winning hearts and minds) has contributed to protected-area governance. The study will make use of big data and AI tools.

Another research project, to be conducted in the Cerrado (see highlight), will explore the relationship between bats and viruses and the mammal's capacity to serve as a viral reservoir, with potentially disastrous effects on public health. It's a relationship that is currently being explored worldwide, and this study will plug a significant knowledge gap in Brazil.



FUNBIO GRANTS
CONSERVING
THE FUTURE



FUNBIO GRANTS — CONSERVING THE FUTURE

CAROLINA NEVES SOUZA

Studying for a PhD in Biological Diversity and Conservation in the Tropics at the Federal University of Alagoas – UFAL
FUNBIO Grants – Conserving the Future 2020



[CLICK HERE TO SEE
AND HEAR CAROLINA](#)



Photo: Personal archive

Artificial Intelligence sheds light on PA communication and governance

The social media age has turned us all into creators of content. And that includes Protected Areas (PAs). PA managers have become important producers and propagators of information—first-hand, and often in real time, with the capacity to inform and the potential to influence and involve. But how has this veritable digital revolution changed the way we look at PAs and how they are run? These are the questions the biologist Carolina Neves Souza, a Ph.D candidate on the Federal University of Alagoas Post-graduate Program in Biology and Conservation in the Tropics, aims to answer.

“During the first stage, we’ll evaluate the general perception people on Twitter and YouTube have about Brazil’s 334 federal strict and sustainable use PAs. What most whet my curiosity was the kind of emotional response they elicit (positive, negative, neutral). During stage two, we’ll collect data on six National Parks, though which six is yet to be decided. The idea is to analyze how communication, the manner in which it is approached and the digital channels it is done through can influence people’s participation in decision-making spaces”, says Carolina.

The standout feature of the proposal lies in its rare use of big data—vast quantities of information gathered and analyzed by algorithms—in studies on PAs. While big data has already revolutionized the consumer and medical sectors—where artificial intelligence has learned to interpret tests and clinical exams and so fine-tune diagnoses—, the socioenvironmental sector has yet to fully explore these new technologies.

Where phase one will harvest Brazil-first data sets on the perceptions and feelings a relevant cross-section of the population has about PAs, phase two will answer such important

questions as “Does this park have a communication plan?”; “How is the local community informed about the actions it rolls out?”; and “Are the PA’s meetings open to the public?”. The study will focus on the Managing Councils of PAs and include questionnaires, record analyses, and interviews.

The results will allow us to understand which themes and what types of communication generate most engagement, and how a sense of belonging can (or not) result in greater participation from different segments either directly or indirectly in PA

governance. This should result in best practices that can guide PA communication drives in these new online times.

FUNBIO GRANTS — CONSERVING THE FUTURE

IGOR DANIEL BUENO ROCHA

Studying for a PhD in Ecology at the University of Brasília – UnB
FUNBIO Grants – Conserving the Future 2020



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AND HEAR IGOR](#)

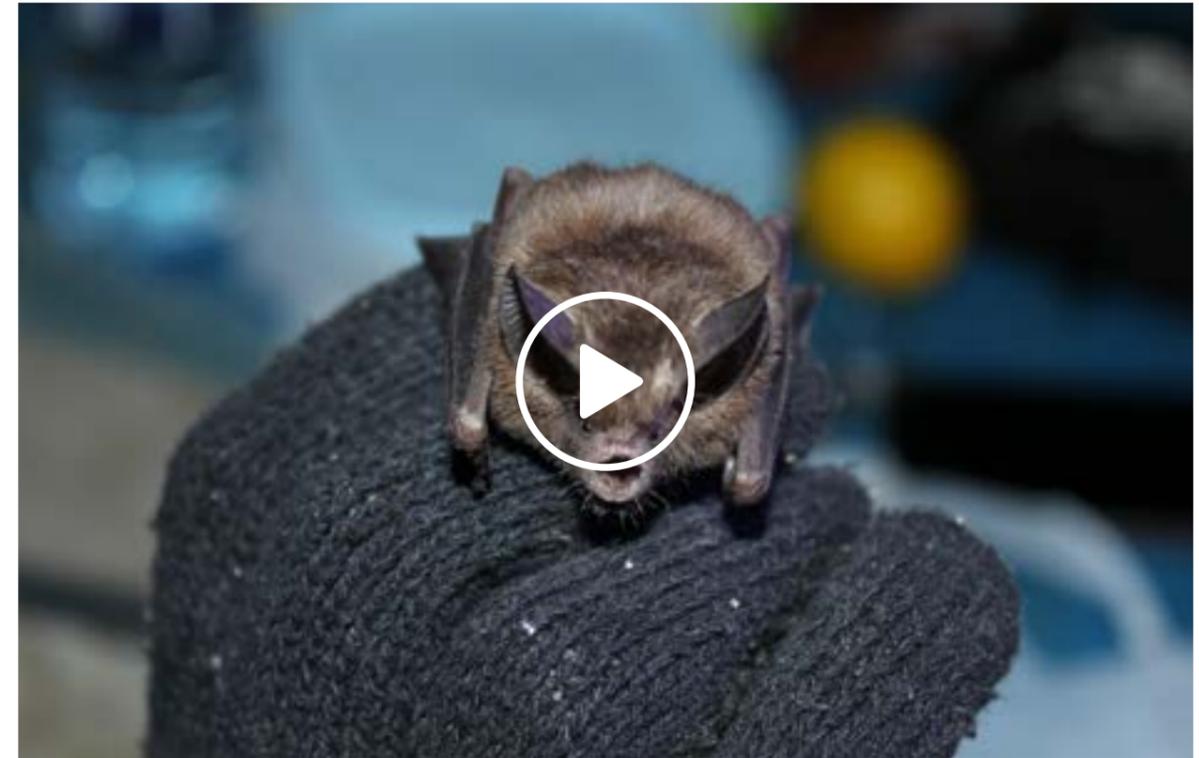


Photo: Personal archive

Study will assess the risk of Cerrado bats serving as viral hosts

As a child and teen, Batman was his favorite super hero. As an adult, real bats—frightening to some, adorable to others—took their definitive place in Igor Daniel Bueno Rocha's life. It was at a University of Brasília (UnB) laboratory that the biologist delved once and for all into the science of the world's only flying mammal, the theme of a project approved on the third edition of the FUNBIO Grants program. Rocha will study at least eight species of bat found in the Cerrado savanna, potential hosts of viruses that could pose a massive challenge to public health.

"Earlier studies had detected the presence of coronavirus in Brazilian bats.

As we'll be doing viral metagenomics, that is, a survey of the genetic material of all the viruses found in these bats, there is a good chance we'll come across various other common tropical viruses with epidemiological potential. More importantly, ascertaining whether SARS-CoV-2 is present in our bats will enable us to infer the likelihood of human transmission to bats as well, which is prejudicial to the species' conservation", says Rocha.

The covid-19 pandemic has further increased global interest in bats, known viral reservoirs, which many fear have the potential to trigger a process known as spillover, where the pathogen adapts

from one host to a novel host—bat to some other animal—, which can then pass it on directly to man.

"There's a knowledge shortfall in Brazil when it comes to bats and viruses. Here, research tends to focus on rabies, for example, given its potential to infect animals and so negatively affect livestock", says the Ph.D candidate on the UnB Post-graduate Program in Ecology.

Of the estimated 1,400 bat species thought to exist worldwide, 181 are found in Brazil. Of these, at least 103 inhabit the Cerrado. Climate change and deforestation are causing populations

previously restricted to certain areas to spread out in search of new habitat. In some cases, the result is greater proximity to human populations, and this increased contact is causing major concern among the scientific community given the risk of spillover and potential pandemics.

Rocha's work, the first of its kind in Brazil, will help us know which viruses bats are carrying south of the Equator. Today, most such studies are concentrated in Asia, where bats are consumed as a delicacy in certain places. According to Rocha, the same happens here, but it's very rare.

"In addition to its sanitary aspect, my study also has an ecological concern. The strategy of eliminating bats wholesale by blowing up caves, for example, could be devastating to endangered bat species that play a key role in pollination", says Rocha.

The researcher will conduct field studies in caves in the Federal District.

SDG



FUNBIO GRANTS — CONSERVING THE FUTURE

PROJECTS SUPPORTED



* Some projects have field work underway in more than one territory, hence the dots on the map outnumber the projects supported.

** In 2019, the thematic group Conservation and Sustainable Use of Biodiversity was subsumed under Conservation and Sustainable Management and Use of Fauna and Flora.

FUNBIO GRANTS — CONSERVING THE FUTURE



Backed by Humanize since its very first edition, the FUNBIO Grants Program is an essential initiative for conservation, totally aligned with our remit of inspiring transformation in people and territories, and with each passing year it reveals new data that underscores the richness of our biodiversity. The program's results attest to the important role fostering research plays in forming new generations who are engaged in the conservation and sustainable use of biodiversity."

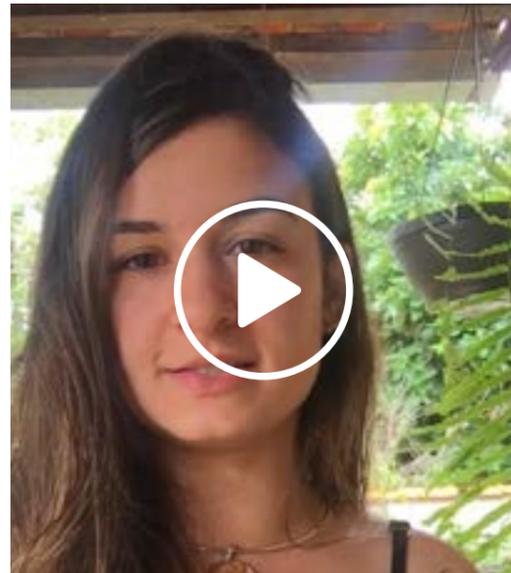
GEORGIA PESSOA, Executive director of the Instituto Humanize



BRUNO HENRIQUE DOS S. FERREIRA

Studying for a Ph.D in Ecology and Conservation, Federal University of Mato Grosso do Sul (UFMS)

In recent years, the inexorable increase in the size and frequency of forest fires has become one of the main threats posed to Brazil's indigenous territories. However, the controlled use of fire can actually benefit biodiversity, which is why indigenous populations have used fire for thousands of years and continue to use it today. This study analyzes the effects fires and flooding have on seed germination in the Pantanal wetlands. The goal is to understand which species' seeds show potential for use in biome restoration so that an integrated fire-management protocol can be created.



INGRID NAIARA GOMES

Studying for a Ph.D in Ecology, Conservation and Wildlife Management, Federal University of Minas Gerais (UFMG)

One of the most important environmental functions native bees perform is pollination. However, their ability to fulfill that role has been hampered over the years by habitat loss caused by urban sprawl and development. This study analyzes interactions between Brazilian bees and plant life in cities in order to understand how greenery (parks, squares, vegetable gardens and gardens in general) can help reduce the effects urbanization is having on pollinators.



JULIANA NASCIMENTO NERES

Studying for a Ph.D in Ecology: Theory, Application and Values, Federal University of Bahia, UFBA

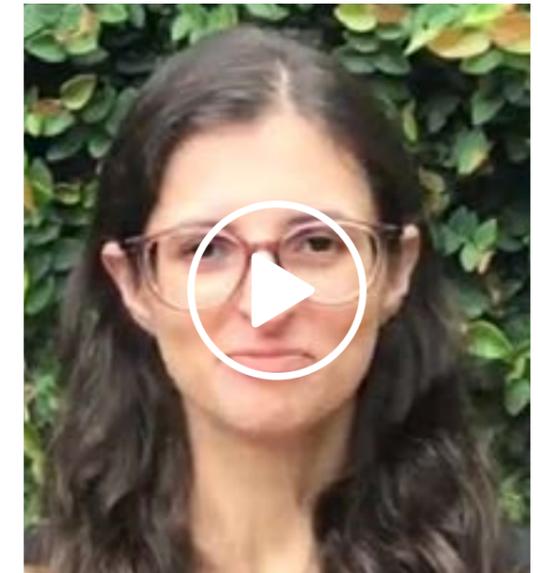
Mangroves are safe havens and feeding and breeding grounds for countless species, and bring innumerable benefits for humanity. However, problems like pollution can affect chlorophyll production, which is a key indicator of ecosystemic health. On this project, satellite imagery is used to assess the chlorophyll content and photosynthetic capacity of Bahia's mangrove forests. By doing this we hope to understand the effects contaminants are having on this ecosystem and issue directives to mitigate their environmental impact.



MÁRCIO PORT CARVALHO

Studying for a Ph.D in Protected Area Biodiversity, Botanical Garden of Rio de Janeiro (JBRJ)

The white-eared marmoset is one of the 25 most severely endangered species on the planet. This project will study the ecology and behavior of all the primate's populations in the Cantareira mountain range in São Paulo, with a view to generating information to support the creation of conservation strategies for the species.



NATÁLIA DALLAGNOL VARGAS

Studying for a Ph.D in Animal Biology, Federal University of Rio Grande do Sul (UFRGS)

Climate change has become one of the main drivers behind species extinctions. In the Atlantic Forest, these effects will have long-term impact on the geographic distribution of the admirable red-bellied toad and Brazilian red-bellied toad, two of the least studied and most endangered of the biome's amphibian species. This study will understand where these toads live and compare their tolerance to varying temperatures at different life stages so as to predict how they will respond to future changes in climate.

DONATIONS

Unit

47 **COPAÍBAS**

50 **ARPA**

53 **REM MT**

56 **TRADITION AND FUTURE IN THE AMAZON**

57 **KAYAPÓ FUND**

59 **A MILLION TREES FOR THE XINGU**

60 **GOLDEN LION TAMARIN CONSERVATION**

61 **GOLDEN LION TAMARIN PROJECT**

62 **GEF TERRESTRE**

64 **ATLANTIC FOREST**

65 **PROBIO II**

67 **AMAPÁ FUND**

68 **ABROLHOS LAND AND SEA FUND**

69 **GEF MAR**

70 **SEA GARBAGE IN SP**



COPAÍBAS

Community, Protected Areas and Indigenous Peoples Project in the Brazilian Amazon and Cerrado Savannah

Brazil nut from the Chico Mendes/ICMBio Extractive Reserve, Acre. Photo: Victor Moriyama/FUNBIO



In 2020, the conservation of the Amazon and Cerrado, Brazil's two largest and most severely endangered biomes, gained an important new ally with the launch of COPAÍBAS – Community, Protected Areas and Indigenous Peoples Project in the Brazilian Amazon and Cerrado Savannah. Backed by the Norwegian Ministry for Foreign Affairs and designed to extend through to 2026, the initiative sets four performance targets that are considered fundamental to containing and curbing activities that deplete native plant cover and pose a threat to climate stability and to the hydrographic system. The two biomes at the heart of the project are home to Brazil's vastest extensions of savannah, woodland and forest cover.

The strategy devised is fourfold:

- strengthen the protected-area system in the Cerrado;
- tighten up indigenous territorial management;
- improve the information stream reaching the public concerning the importance of Protected Areas in mitigating climate change and in conserving biodiversity;
- and boost the economic efficiency of local sociobiodiversity value chains and production arrangements.

The plan provides for the participation of civil society organizations in carrying out the activities selected on future calls for projects.

In July 2020, a contract was signed on the year-long first phase of the project, which will lay the structural groundwork for attaining the four key goals. This preparatory phase will include analyses and studies to establish the essential conditions required to bring the four goals to fruition. This process will involve selecting the protected areas the project will support and hiring the consultants who will help structure the implementation strategies for the remaining components.

The first goal is to furnish state-managed PAs in the Cerrado with the necessary support. Among the activities planned are the structuring and improvement of PA management capacity; strengthening of the public use of these areas with a view to identifying tourism potential and encouraging the creation of visitation plans that envision the economic benefit of the local communities; the implementation of initiatives that set technical supervision protocols for integrated fire management at priority PAs; and the drafting of management plans to stimulate the creation of Private Natural Heritage Reserves (PNHRs).

COPAÍBAS

Reducing deforestation and greenhouse-gas emissions through strategies that further the conservation of the native vegetation of the Amazon and Cerrado, and improving the living conditions of traditional communities and indigenous peoples are the main goals of COPAÍBAS.



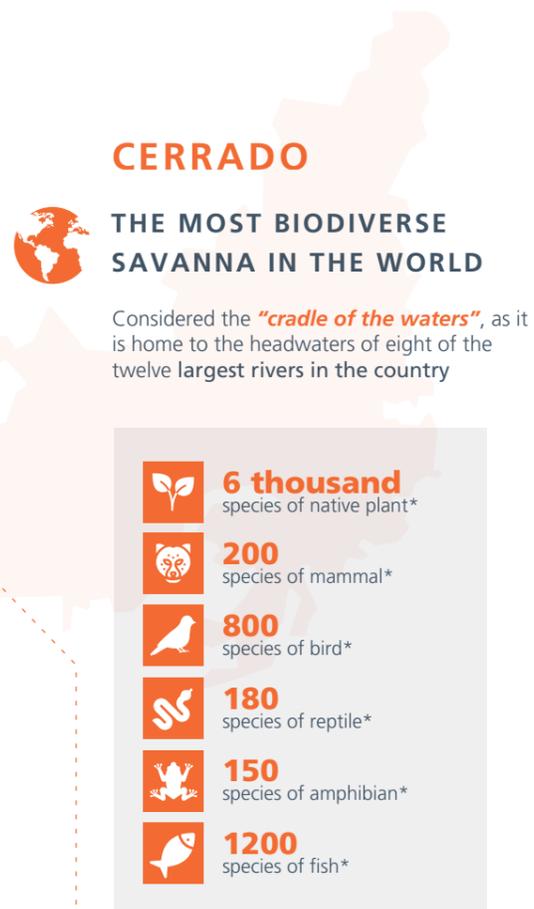
Home to the world's largest river basin*

Spread over **4 million** km²** Percentage under Protected Areas: 27.3%

Original extension: roughly 80% Deforestation (2001 and 2019): 224 thou km²** — area larger than Uruguay

*Source: ICMBio **Source: INPE

MAIN FRONTS



TOGETHER, THE AMAZON AND CERRADO BIOMES STOCK

90% OF BRAZIL'S CARBON

Over **2 million** km²** Percentage under Protected Areas: 8.23%

Original extension: a little over 30% Deforestation (between 2001 and 2019): 282,200 mil km²** — area the size of Ecuador

1. PROTECTED AREAS

- A** Increase the number of consolidated state-run Protected Areas (PAs) in the Cerrado
- B** Incentivize the creation of Private Natural Heritage Reserves (PNHRs)
- C** Support territorial, environmental mngmt of Indigenous Lands
- D** Strengthen indigenous populations and organizations
- E** Support the reduction of deforestation and greenhouse-gas emissions in order to curb climate change
- F** Value the native vegetation of the Amazon and Cerrado

2. INFORMATION

- A** Inform the public about the importance of protected areas and their relevance in maintaining essential environmental services, such as water supply and climate control
- B** Inform the public about the potential of supporting the ways of life and production of forest-dwelling peoples by consuming sociobiodiversity products

3. BIOECONOMY

- A** Generate income by helping structure sociobiodiverse product chains and Local Productive Arrangements (LPAs). Potential Value Chains in the Amazon and Cerrado are: fish, brazil nut, vegetable oils and resins, such as crabwood, copaiba, rubber, açai, cacao, baru nut, babassu, and a variety of regional fruits
- B** Improve sociobiodiversity production infrastructure, processing, transport and commercial outlets
- C** Facilitate access to technical assistance
- D** Promote the participation and integration of women into these value chains

COPAÍBAS



Phase two of COPAÍBAS will incentivize actions that collaborate toward the successful territorial and environmental management of Indigenous Homelands and strengthen indigenous institutions therein. This process will be developed in partnership with local associations and leaders so as to ensure that they duly value and recognize their experience, needs and priorities. Though the planning also includes activities in the Amazon, COPAÍBAS identified the urgency of prioritizing support for indigenous territories in the Cerrado. In 2020, studies were launched to define the funding models and project types to be supported.

Communication will also feature heavily in COPAÍBAS, with the creation of activities that stimulate awareness of the importance of environmental conservation, especially in Protected Areas and Indigenous Territories, and of promoting sociobiodiversity production chains as a way of mitigating the effects of global warming and of maintaining the

provision of ecosystem services that are essential to human welfare, whilst generating income for traditional communities and indigenous peoples.

The project aims to encourage inclusive development of sociobiodiversity production chains—brazil nut, for example—, identifying improvement opportunities for infrastructure, the funding model used, and the adoption of recommended production practices.

Another COPAÍBAS goal is to strengthen local co-ops and associations institutionally and in terms of their management capacity, and to develop production arrangements based on synergies between producer organizations, companies, local government and other social institutions that contribute towards sustainable territorial development and that generate benefits for the communities.

One of the lines of approach present in both the Action Plan for

the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) and the Action Plan for the Prevention and Control of Deforestation and Forest Fires in the Cerrado (PPCerrado) fosters the adoption of sustainable production activities, especially those developed within a pro-biodiversity economic model. The technical guidance outlined in the action plans also has the potential to generate income and life-quality improvements for traditional communities and indigenous peoples, who live in greater harmony with nature.

In a recent study on the development of the Duty Free Zone in Manaus, the Escolhas Institute estimated the current value of the bioeconomy in Amazonas State alone at R\$ 3.1 billion, with potential to reach R\$ 10 billion over the next ten years. According to the study, that sort of growth would create something in the region of 60 thousand jobs.

Açaí from the Chico Mendes/ICMBio Extractive Reserve, Acre. Photo: Victor Moriyama/FUNBIO

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ARPA

Amazon Region Protected Areas Program



The world's largest tropical-forest conservation project, the Amazon Region Protected Areas Program (ARPA) has made an invaluable contribution over the last 18 years to the environmental preservation of an area equivalent to 15% of the Brazilian Amazon. Rallying the efforts of government, civil society and the business sector, the initiative, which promotes the protection and sustainable use of 60 million hectares, is scheduled to be phased out by 2039, when the running costs of its Protected Areas (PAs) will be assumed in full by the public sphere.

The program's actions, carried out at state and federal PAs across nine Brazilian states, are coordinated by the Ministry for the Environment and receive financial support from domestic and foreign donors, such as the German Government,

through the German Development Bank (KfW); the Global Environment Facility (GEF), through the World Bank; WWF; the Gordon & Betty Moore Foundation; and Anglo American. FUNBIO financially manages and executes the donated sums. ARPA has served as a model for similar initiatives in Peru and Colombia.

In 2020, ARPA consolidated a series of initiatives that enabled it to fine-tune its management and financial control of donations, conferring greater agility and efficiency upon the operations rolled out by PA managers. An automated financial system was adopted to facilitate access to funds cleared for use, with disbursements made directly to a reloadable credit card, accepted by an expanded network of Amazonian suppliers, so that they can be used directly to cover fuel and food expenses and vehicle and vessel maintenance.

São João da Ponta Extractive Reserve, Pará. Photo: Victor Moriyama/FUNBIO



ARPA



PATRICK JACÓ

Environmental analyst of Chico Mendes Biodiversity Conservation Institute (ICMBio), Mãe Grande de Curuçá Extractive Reserve, PA

“We selected communities from the reserve using the communication and access’ difficulty criteria. In addition to the basic food baskets, personal hygiene kit and gel alcohol, contemplated families were also instructed on how to behave in this pandemic and avoid agglomerations.”



Residents at the Rio Ouro Preto Extractive Reserve, Roraima. Photo: Ricardo Plácido

ANTICOVID ACTIONS

The ARPA Program had to adapt its strategy in 2020, due to restrictions imposed by covid-19. With social isolation and the economy at a standstill, the Program had to rethink its scheduled actions and innovate in order to ensure that the PAs could continue running as normal. Program donors really stepped up with emergency actions to help tackle the pandemic in the Amazon.

The Transition Fund Committee approved the release of approximately R\$ 1 million to cover emergency-support projects for the program’s PAs.

The spread of Coronavirus posed a severe threat to the food security of the population ARPA attends, as the smallholders and extractivists had no way of selling their produce.

A number of initiatives were organised to help guarantee the security of the communities and PA teams, such as the distribution of necessity hampers; the purchase of PPEs (masks, disinfectant gels, thermometers and sanitising mats); and assistance to ensure that those eligible for Federal Government emergency support received the stipend (actions included registration

drives at the communities and transport to and from bank agencies so that withdrawals could be made). In all, over five thousand people were helped in this manner over the course of 2020.

Another solidarity action within the scope of the ARPA program was assistance given to the ICMBio in releasing funds for the prevention and control of forest fires and deforestation in the Amazon. The Transition Fund Committee authorised the liberation of R\$720 thousand for PAs in need of emergency aid.

RELEASE OF APPROXIMATELY **R\$1 million** TO COVER EMERGENCY-SUPPORT PROJECTS FOR THE PROGRAM’S PAS

6.189
PEOPLE ATTENDED
(FOOD SECURITY)

2.842
BASIC FOODS BASKETS
DISTRIBUTED

372
FAMILIES SIGNED
ON FOR EMERGENCY
AID FROM THE
GOVERNMENT

276
COLLABORATORS
RECEIVED PPES

50
TRANSPORT
ASSISTANCE SO PEOPLE
COULD COLLECT THEIR
BENEFIT PAYMENTS

ARPA

SUPPORT FOR **60.8** MILLION HECTARES
117 PROTECTED AREAS BENEFITED
15% MANAGERS GIVEN TRAINING ONLINE



Also on the topic of financial management, a local expense account project was implemented that not only simplifies and expedites the execution of PA funds on the ground, but ensures more security too. Other important advances were: the automation of the asset-donation process; further developments to the acquisitions platform; and the honing of consultancy procurement and construction-work requisitioning protocols and analytics.

Despite such an anomalous year, the program managed to launch two Amazon Sustainable Landscapes – ASL supervision missions so that beneficiaries could report on expenditure and their progress towards established targets. Further availing of ARPA’s ample expertise, a partnership was cemented this year for the publication of a financial sustainability guide for projects requiring long-term funding. Also in 2020, the World Bank hired a consultancy firm to select projects for

case-studies on gender issues, one of which was initially conducted at an ARPA-supported PA (the Igapó-Açu Sustainable Development Reserve in Amazonas).

A contingency fund was also approved to cover emergencies not already provided for under institutional security mechanisms and compliance.

In 2020, FUNBIO also administered specific training courses to PA managers. Due to social distancing requirements, for the first time ever one of the courses was delivered to a class of 25 via remote learning. The online initiative was a complete success and has paved the way toward further developments in 2021.

On a similar note, Transition Fund committee meetings, attended by program donors and representatives of the Brazilian Government, were also held online.

Cabo Orange National Park, Amapá. Photo: Victor Moriyama/FUNBIO

- NDC
- SDG
- 2 ZERO HUNGER
- 5 GENDER EQUALITY
- 6 CLEAN WATER AND SANITATION
- 13 CLIMATE ACTION
- 15 LIFE ON LAND
- 17 PARTNERSHIPS FOR THE GOALS

REM MT

REDD Early Movers (REM) Global Program – Mato Grosso

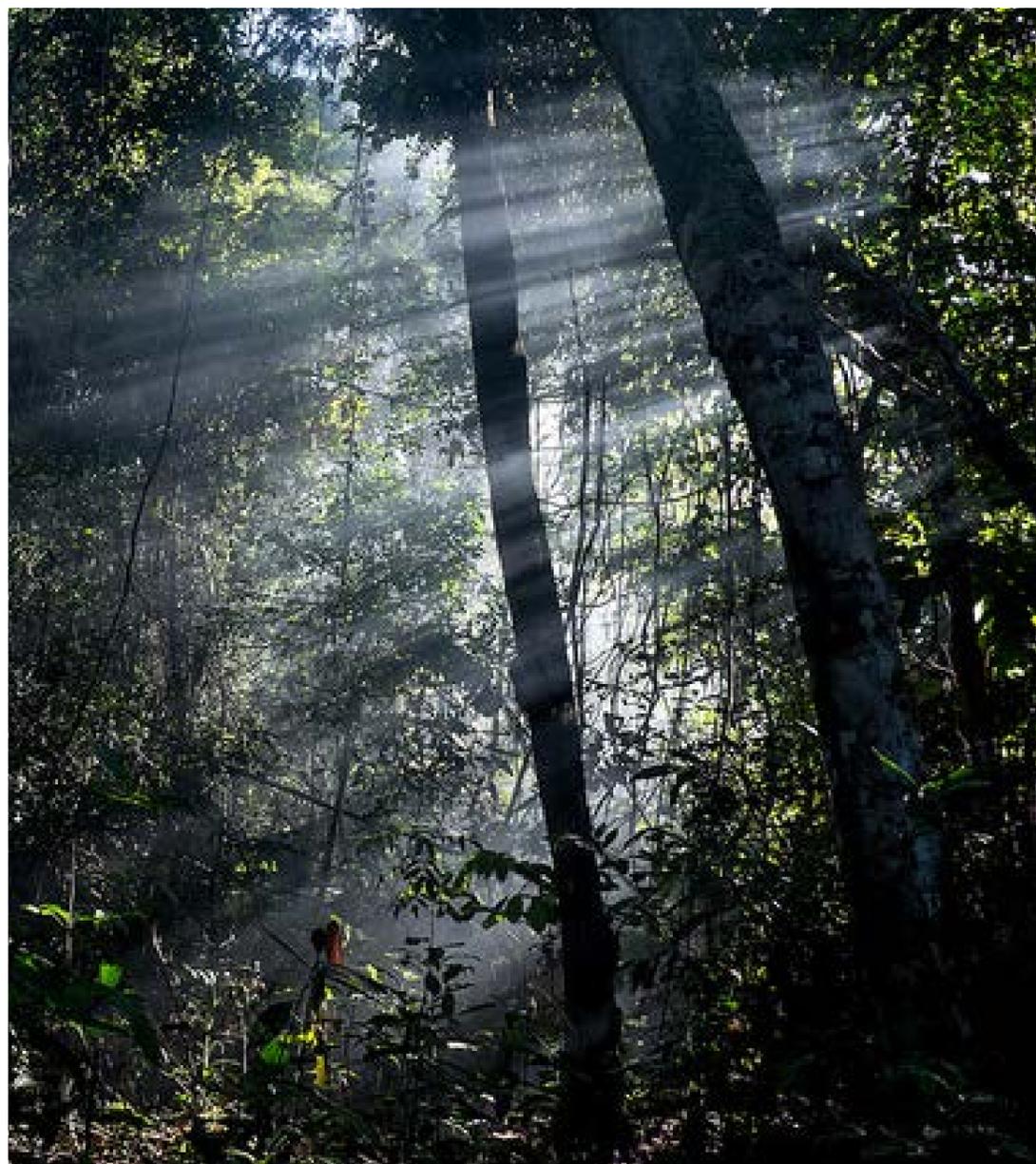


Photo: José Medeiros/SEMA MT

A pioneering initiative from the German government, the REDD Early Movers (REM) program, designed to recompense countries or states committed to keeping their forests intact so as to mitigate the effects of climate change, gained significant ground in conservation in Mato Grosso in 2020. The state was inducted into the project in recognition of its expressive results in curbing deforestation, which was slashed by 90% between 2004 and 2014. Mato Grosso is vitally important to Brazil’s conservation and sustainable-development drive,

as its territory straddles three key biomes: Amazon rainforest, Cerrado savanna and Pantanal wetland.

REM MT, which got underway in 2019, is jointly funded by Germany, through the German Development Bank (KfW), and Britain, through the Department for Business, Energy and industrial Strategy (BEIS). FUNBIO is operational and financial manager of the program, while the Mato Grosso Department for the Environment (SEMA) handles the technical management of the four REM-MT subprograms.

INSTITUTIONAL STRENGTHENING AND STRUCTURING PUBLIC POLICIES

The year 2000 saw the institutional consolidation of the REM MT program. Fresh initiatives enabled the continuity and fine-tuning of the structure in place to combat deforestation by strengthening the institutes doing the monitoring. An extension was negotiated to the contract signed in 2019 with the satellite monitoring company entrusted with tracking forest degradation.

The system captures daily high-resolution satellite images and

sends them to a data analysis platform that sounds the alarm if more than a hectare of forest has been degraded within that 24 hours period. Near-real-time tracking like this ensures a rapid response can be planned and executed by the inspection crews.

In parallel, improvements are being made to the crime notification system between the state’s Department for the Environment and Public Prosecutors’ Office. This is important to ensure that forest

recomposition commitments are being met by the rural properties the organs inspect.

Thanks to the program, the Department for the Environment was able to expand the fleet of vehicles available for monitoring and inspection activities and issue a contract for the removal of confiscated heavy machinery, such as tractors and, in one case, even a helicopter. This helps decapitalize organizations engaged in environmental crime.



REM MT

EMERGENCY ACTIONS AGAINST WILDFIRES

Joint action by FUNBIO and the State Government of Mato Grosso enabled the program to reevaluate the commitments assumed and reroute its resources in a bid to minimize the impact on the environment and indigenous populations.

Straight off, as soon as the pandemic broke out, emergency support actions were prepared to ensure food security for indigenous communities, with the acquisition and distribution of over a thousand basic needs hampers to villages in lockdown/lockout. Next, planning began on new forms of assistance with the Federation of Indigenous Peoples of Mato Grosso (FEPOIMT).

With approval from the German Development Bank (KfW), R\$9million in covid-19 aid was disbursed for support projects in indigenous territories. The funds are being used to buy PPEs, virus detection tests, and medical supplies, as well as to shore up the food security effort. Five partner institutions will be acting in conjunction with FEPOIMT.

Fire-fighter combatting the wildfires that spread through the Estrada da Guia region in Mato Grosso. Photo: Mayke Toscano/Secom-MT

Fire in the Pantanal wetlands, MT. Photo: Mayke Toscano/Secom-MT



Delivery of basic food baskets to Indigenous Territories. Photo: Reproduction/REM MT



SUPPORT FOR INDIGENOUS POPULATIONS DURING THE COVID-19 PANDEMIC

Another REM MT emergency measure, coordinated by the Mato Grosso Department for the Environment, managed to channel R\$300 thousand into a series of actions to combat the wildfires raging in the Pantanal and Amazon. Reloadable expense cards were made available so that the local focal points could purchase first aid material, medical supplies, food and water, provide the infrastructure required to treat wildlife injured in the blaze, and support the work of the volunteers and firefighters.



REM MT

Tractor working on the Colider plantation in Mato Grosso. Photo: Cleverson Braz Mateus

Corn plantation in Juara, Mato Grosso. Photo: Igor Murilo

Banana grower José Borges. Photo: Fátima da Rosa

In 2020, the program took a considerable step forward by strengthening the adoption of sustainability and biodiversity conservation practices across the state. Over the course of the year, two project calls were issued, resulting in the selection and approval of 29 initiatives that will foster sustainable development and biodiversity preservation in Brazil's largest Midwestern state. The projects are subsumed under two of the four REM-MT subprograms: Sustainable Production, Innovation and Markets; and Smallholder Agriculture and Traditional Communities.

The chosen projects, which will receive investments in the order of R\$ 40 million, will be carried out in priority areas, especially municipalities that have high carbon stocks and welling or waning flows.

In practice, they will make a decisive contribution to keeping forests intact, healthy and fully functioning within the nation's ecosystem. At present, Mato Grosso has 104 Protected Areas, 71 Indigenous Territories and 2 Quilombos (colonies originally formed by escaped slaves), together totaling 18.1% of the state's total hectareage. 60% of Mato Grosso's native land cover remains untouched.

In 2020, despite the adversities posed by covid-19, the German Development Bank (KfW) conducted a remote monitoring mission to stay abreast of REM MT's progress toward the execution of its planned measures. Also last year, the program made headway with its financial structuring, simplifying and conferring greater agility on its ability to disburse funds to cover minor expenses and contract local partners, especially in hard-to-reach areas.

CALL FOR PROJECTS

Two calls for projects launched during the year lent a new dimension to two REM MT subprograms: Sustainable Production, Innovation and Markets; and Smallholder Agriculture and Traditional Communities. Expected investments could reach R\$ 40 million.

FUNBIO selected and approved 23 projects to channel financial support to family smallholders and extractivists who adopt sustainable-use and reforestation practices that

help curb CO2 emissions. Funding will run to R\$ 32 million. The intention is to back initiatives that can help transform high-impact production chains into low-carbon, sustainable businesses. The actions are part of the Smallholder Agriculture and Traditional Communities subprogram.

Regarding Sustainable Production, Innovation and Markets, R\$ 8.5 million will be pumped into six proposals

selected from a project call that, due to the pandemic, occurred almost entirely online. The expectation is that the initiatives will help ensure the conservation of natural areas by implementing sustainable production models and improving forest management by timber, livestock and soya concerns.

In 2020, work began on capacitating the institutions behind the 29 projects approved on these two calls.



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TRADITION AND FUTURE IN THE AMAZON

Indigenous headdress being made.
Photo: Danielle Calandino/FUNBIO



The “Tradition and Future in the Amazon” project aims to contribute towards the Kayapó people’s territorial and environmental management by executing initiatives that maintain the natural land cover at their Indigenous Territories (ITs). Preserving the natural forest helps reinforce biodiversity conservation, regulate carbon stocks and boost appreciation for traditional knowledge. The Kayapó live in 10.6 million hectares of protected forest spanning northern Mato Grosso and the south of Pará state.

Launched in 2020, the project is backed by the Petrobras Socioambiental project and will be conducted in partnership with Conservation International Brazil (CI-Brasil) and the indigenous organizations representing the Kayapó—Associação Floresta Protegida, Instituto Raoni and Instituto Kabu. FUNBIO is the project’s proponent and the executor of the R\$ 5.1 million in funding provided by Petrobras. The initiative is scheduled for completion in February 2023.

The strategy includes the creation of a Territorial and Environmental

Management Plan (TEMP) for the Menkragnoti Indigenous Territory. The idea is to involve indigenous communities in devising a plan that will heighten Kayapó leadership and autonomy in processes of territorial control, environmental protection and the sustainable use of natural resources.

Key to the project’s success is identifying the most pressing needs of the Kayapó and indicating the activities that need to be prioritized in terms of cherishing and preserving indigenous heritage and culture.

The project will also support training and capacitation actions among the indigenous population, especially youths and women, with focus on such themes as representation, education, communication, project management, income generation and respect and appreciation for traditional knowledge. One of the ideas is to encourage the preparation and participation of 650 direct representatives and a thousand part-time or occasional representatives at fora and other entities devoted to defining or implanting actions within Indigenous Territories.

Other actions will include environmental education for Kayapó children and youths. These endeavors are expected to further the professional development of indigenous teachers through experience-sharing with other educators at indigenous communities.

The targets set for the project also include the collation, updating and monitoring of carbon-stock data in Kayapó Indigenous Territories. Once the information is gathered it will be possible to create activities aligned with the increasingly accepted concept that forests are worth more, and can generate more income, when they are properly conserved.

To contribute to food security among the Kayapó, the project will work towards ongoing capacitation for the installation and consolidation of sustainable production systems, such as traditional plots and Agroforestry Systems (AFSS)—a model that combines tree species (fruit-bearing or lumber trees) with crops or animal husbandry.

Watch the video by Kayapó Kokokrango



SDG



KAYAPÓ FUND

10 PROJECTS SUPPORTED

6 INDIGENOUS TERRITORIES SUPPORTED

12 MILLION HECTARES BENEFITED

Indigenous
Territory, Jarina.
Photo: Danielle
Calandino/FUNBIO

Turning ten in 2021, the Kayapó Fund (KF) was the first long-term financial mechanism designed to support indigenous peoples in Brazil. Over the last nine years, it has worked tirelessly to improve the quality of life and increase the autonomy of the Kayapó, a tribe which occupies 10.6 million hectares of conserved old-growth forest and savanna in the borderlands between northern Mato Grosso and the south of Pará—an area a little larger than Portugal.

The fund was created to irrigate indigenous organizations through donations, so that they could carry out projects in the Kayapó, Menkragnoti, Bau, Badjonkôre and Las Casas Indigenous Territories in Pará, and the Capoto/Jarina IT in Mato Grosso. The idea is to carry out activities focused on biodiversity protection, territorial monitoring, income generation through participation in sustainable-

production chains, and institutional strengthening of indigenous associations.

During this last decade, the KF has obtained significant results: nine thousand tribe members were involved in sustainable-production activities, and two thousand five-hundred received territorial and environmental management training. In all, 86 territorial and environmental management initiatives were executed with the Fund's collaboration. In conjunction with other funding sources, the Kayapó Fund also achieved a great deal in the development of sustainable-production chains between 2013 and 2020: Brazil nut production grew from 200 tons to 450, boosting income generation from R\$ 400 thousand to R\$ 3.2 million; tonka bean output last year reached 24 tons, generating a million reais in

revenues; and incomes from arts and crafts shot up from R\$ 62 thousand to R\$ 1 million.

Since the KF started its operations, there have been three cycles of support for eight subprojects, selected through project calls. These eight subprograms are coordinated by three organizations representing the Kayapó: the Raoni Institute, Kabu Institute, and Protected Forest Association, which together implement activities across all six Kayapó ITs, located in the so-called "Deforestation Belt" of the Amazon, a region rife with land conflicts.

In 2020, the fund began a fourth cycle of investments by selecting three new initiatives to receive R\$ 4.2 million in funding. Of the three chosen projects, one is still in contract phase, while two have already been rolled out by the partner indigenous institutions, reaffirming the proposal of stepping



KAYAPÓ FUND

Handmade craftwork made by the Kayapó. Photo: Dante Novaes/FUNBIO



up Kayapó involvement in the planning and execution of activities so as to consolidate their political and economic autonomy. The Kayapó are known for their culture and struggle to have their rights recognized.

The project “Concerted Strategy for Tackling the Growing Threats Faced by the Kayapó Territory”, in Pará, was presented by the Protected Forest Association (AFP). Among the actions planned are: steps to improve the tribe’s capacity to protect its territory; the development of agro-extractivism production chains (tonka bean and Brazil nut); institutional strengthening; and improved communication actions (AFP).

A number of measures will be taken to reach these goals, such as: training for 30 Kayapó environmental agents; territorial surveillance expeditions; attendance of Kayapó representatives at discussions on public policy geared towards indigenous peoples; and hiring of consulting firms to hone the COOBÂ-Y co-op, evaluate the arts-and-crafts chain and develop the cacao business.

Photo: Instituto Kabu

The Instituto Kabu (IK) was contracted to run the project “Mekrãfnotí Territory Defense in the Southwestern Pará Deforestation Corridor”, which, mindful of the growing interest in new technologies and services that can help the Kayapó protect their territory and the integrity of their culture, will ally traditional and technical/scientific bodies of knowledge.

Among the selected activities are: monitoring of mercury contamination in the fish of the Pixaxá River; training of indigenous youths to use the MapBiomias platform, an open-access collaboration with Google Earth; capacitation for the harvesting, processing, storage and sale of heirloom seeds; introduction of solar energy at Kayapó villages; and provision of audiovisual training for indigenous youths so that they can start producing content.

The “Mê Anodjá” project, put forward by the Instituto Raoni (IR), is designed to help protect the Capoto/Jarina and Menkragnoti ITs in Pará and Mato Grosso, specifically their populations, customs and ways of life, and natural

resources. The hope is to generate income by valuing the forest in its pristine state. Actions will also be developed to empower women and youths so as to strengthen the IR institutionally.

The proposal includes such actions as the training of indigenous fire-fighters; the acquisition of forest-fire protection equipment; the installation of Agroforestry systems so as to improve traditional orchards; structuring of flour processing units; harvest support; processing and sale of tonka bean seeds; coaching of women in the areas of administration, legislation, oratory, and argumentation; guidance for youths and women on such issues as income-generation, food security, environmental education, and public policy; Kayapó legacy-building and human rights.

The Kayapó Fund was established using donations from Conservation International Brazil (CI-Brasil), through the Global Conservation Fund (GCF), and the Brazilian Development Bank (BNDES), through the Amazon Fund. FUNBIO is financial manager.

SDG



A MILLION TREES FOR THE XINGU

Clerizia B. Farias Pantaleão processing tingui seeds (*Magonia pubescens*). Photo: Tui Anandi/ISA



The A Million Trees for the Xingu project received fresh impetus to expand its reforestation activities in Mato Grosso, a midwestern state where three Brazilian biomes meet—the Amazon, Cerrado and Pantanal. In May 2020, a new target was set to strengthen environmental conservation in the state: the planting of a further 215 thousand trees around the headwaters of the Xingu River by March 2022.

The result of a partnership between FUNBIO, Rock World (Rock in Rio) and the Instituto Socioambiental (ISA), the initiative has hit one target after another since 2016. With an initial goal of planting a million trees, the project managed to up that to 1.32 million native Amazonian specimens over the last three years, reforesting a 276-hectare area around the upper tributaries of the Xingu.

Since it began four years ago, the project has been able to count on the support of a key ally: the Xingu Seed Network Association (ARSX), which has supplied 25 tons of seeds for 86 native Amazonian species. In order to pursue this new target, a further five

tons of 91 species were ordered last year, including monkey comb, Brazilian fern, araracanga, tamarind and the Xingu pequi. Most of these seeds are already available for planting.

In addition to contributing to reforestation, the project also helps strengthen the Xingu Seed Network. The sale of seeds generates income for the network's 600 hundred-plus collectors, among indigenous tribes, family smallholders and extractivists. A restoration technique known as "muvuca" (seedbombing) is used to plant the seeds. The process, considered the most economic and efficient method, involves the planting of "bombs" packed with assorted seeds that then grow at their own pace, according to their respective growth cycles.

The new investment in the project totals R\$ 1 million and derives from donations to Rock World (Rock in Rio) fundraising campaigns, conducted by the company's socioenvironmental project, Amazonia Live.

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GOLDEN LION TAMARIN CONSERVATION

Partnership: Forest Restoration for Golden Lion Tamarin Conservation



Devastation before the reforestation project got underway. Photo: Luiz Thiago de Jesus/AMLD

After planting, the cradle of the golden lion tamarin in Rio de Janeiro shows considerable improvement. Photo: Luiz Thiago de Jesus/AMLD

An important initiative to protect the golden lion tamarin (*Leontopithecus rosalia*) reached its targets in 2020. In August, the monitoring phase of the forest restoration project was executed across a 14-hectare area of the Silva Jardim municipality, one of the remaining pockets of habitat for an endemic species that has been listed as endangered since the 1960s.

In 2019, to help ensure a future for the marmoset, 20 thousand saplings of 66 native Atlantic Forest species, including Argentine cedar, Cattley guava and jussara palm, were planted at Igarapé Ranch, the headquarters of the Golden Lion Tamarin Association (AMLD), the executor of the project "Partnership: Forest Restoration for the Conservation of the Golden lion tamarin". The project is funded by ExxonMobil and financially managed by FUNBIO.

Throughout 2020, technicians accompanied the saplings' growth, conducting maintenance and restocking where necessary. Forest restoration will enable the formation of wildlife corridors that will join forest fragments where the golden lion tamarin still lives. Some of the reforestation work was done at one end of the country's very first eco-overpass, built across the BR-101 Federal Highway. The overpass connects the Poço das Antas Biological Reserve and the São João/Golden lion tamarin Environmental Protection Area in Silva Jardim.

Bringing previously isolated groups into contact this way will boost the species' genetic variability, decrease in-breeding and thus also reduce the effects caused by consanguinity. All of this will be a boon for golden lion tamarin conservation.



Tree nursery in Silva Jardim, Rio de Janeiro. Photo: Helio Hara/FUNBIO



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GOLDEN LION TAMARIN PROJECT

Partnership for the Implementation of a Golden Lion Tamarin Ecological Park

Female golden lion tamarin (*Leontopithecus rosalia*) with infants. Photo: Andréia Martins/AMLD



Pressing ahead with actions to protect one of the nation's most severely endangered species, in August 2020 work began on Phase Two of the Golden Lion Tamarin Project, funded with a donation from ExxonMobil and financially managed by FUNBIO. Phase Two hinges around a Partnership for the Implementation of a Golden Lion Tamarin Ecological Park at Igarapé Ranch, Silva Jardim, Rio de Janeiro, where a forest restoration process was carried out in 2020 with the planting of 20 thousand native Atlantic-Forest saplings.

Fazenda Igarapé, the base of the Associação Mico-Leão-Dourado (Golden Lion Tamarin Association), the project's executor, enjoys a strategic position from which to structure the species' conservation drive, as this marmoset lives exclusively in a specific swath of Atlantic Forest. Located in the São João River Basin, the area was chosen as the site of the future park because it is home to remaining fragments of the golden lion tamarin's forest habitat and is situated quite close to the Poço das Antas Biological Reserve, another of the species' havens in Rio de Janeiro. In fact, this is the part of the state where most recorded sightings of the golden marmoset have been made.

As part of the strategy, the new park will invest heavily in ecotourism, so visitation support structures will require consolidation. The donated

funds will be of great help in installing visitor infrastructure and all necessary safety and security systems. The new park's standout feature will be an observation deck from which to watch the golden lion tamarin in the wild.

This ecological belvedere will look out over the country's very first wildlife bridge, built over the BR-101 highway. The specially-designed crossing will link the new park to the Poço das Antas Reserve. The bridge will also be used by scientists and technicians monitoring the flow of the tamarin back and forth between the two PAs. Contact between hitherto isolated populations is considered key to healthy species reproduction, as it fosters genetic exchange.

Another proposal is to encourage visitor engagement in environmental preservation and golden lion tamarin protection through an onsite and online communication drive.

The initiative also includes the ongoing maintenance of the 66 species of Atlantic Forest saplings planted in 2019 under the project "Forest Restoration for Golden Lion Tamarin Conservation". Specialists consider reforestation a significant contribution to the conservation of the São João River Basin ecosystem, helping improve the quality of the water and air consumed by the Eastern Rio State.



GEF TERRESTRE

Strategies for the Conservation, Restoration and Management of Biodiversity in the Caatinga, Pampa and Pantanal

São Francisco River
Natural Landmark.
Photo: FAPESE



Recovering degraded areas, protecting endangered species, and helping institute and bolster Protected Area (PA) management is the strategy the GEF Terrestre project has adopted to promote biodiversity conservation in the Caatinga scrublands, Pampa grasslands and Pantanal wetlands, biomes where the native land cover is at serious risk in Brazil. Established in May 2018, the initiative will be fully in place by 2023, thanks to Global Environment Facility (GEF) resources disbursed through the InterAmerican Development Bank (IDB).

The three biomes supported by GEF Terrestre are those least covered by the National Protected Areas System (SNUC, in Portuguese), created by Federal Law 9,985/2000. SNUC has the remit of creating a suite of norms and procedures to enable public authorities (municipal, state and federal) and private entities to set up and manage Protected Areas. Among the main goals, three come to the fore: ensure the conservation

of biological diversity; promote sustainable development; and protect traditional communities, their knowledge and culture. SNUC data show that only 2.9% of the Pampas, 4.6% of the Pantanal and 9% of the Caatinga are currently protected.

In order to achieve the set targets, in 2020 the project launched four calls for subproject proposals to restore degraded areas in the Caatinga, Pantanal and Pampa. Five proposals were approved over the course of the year, and are already underway at the following PAs: The Chapada de Araripe Environmental Protection Area in Ceará, Piauí and Pernambuco (Caatinga); the Chapada Diamantina National Park in Bahia (Caatinga); the Sesc Pantanal Private Natural Heritage Reserve in Mato Grosso (Pantanal); the Ibirapuitã Environmental Protection Area in Rio Grande do Sul (Pampa); the Espinilho State Park in Rio Grande do Sul (Pampa); and the Ibirapuitã Biological Reserve in Rio Grande do Sul (Pampa).

Amid the spectacular canyon-river landscape that lines this folkloric river, immortalized in books and films, the São Francisco River Natural Landmark (Alagoas, Sergipe, Bahia) is also suffering the effects of degradation and knowledge shortfalls about the local fauna. With the support of GEF Terrestre, work began on a diagnostic study and extinction risk assessment using camera traps. Among the wildlife clicked so far are the jaguarundi, an endangered wild cat; the gray brocket; and crab-eating fox (photo).



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GEF TERRESTRE



For people like us, environmentalists and directors of entities that have been fighting so long to see public policies for environmental preservation increased, the GEF Terrestre Project kick starts a new phase for the Caatinga. It opens a new perspective on how we can help preserve the biome's natural resources. The biodiversity of the Caatinga needed an initiative that could change this outlook on preservation, and that's why we have no doubt that GEF Terrestre will play an important role in this regard."

JOAQUIM ARAÚJO DE MELO NETO, coordinator of the Furna Feia Project: Recovering Degraded Areas and Supporting Local Sustainability, executed by the Organização Sertaneja dos Amigos da Natureza (SOS SERTÃO)



Ibirapuitã EPA, Rio Grande do Sul. Photo: PORVIR

All told, the five subprojects selected by GEF Terrestre in 2020 will help restore almost two thousand hectares at PAs in six states Brazil-wide. If we factor in the areas covered by the seven initiatives approved through the two project calls launched in 2019, but only contracted and rolled out in 2020, the figure comes to just under six thousand hectares. Of the 12 subprojects, three are located in the Pampa grasslands, one in the Pantanal and eight in the scrublands of the Caatinga.

Also in 2020, seven plans to restore degraded areas were drawn up for PAs in the Caatinga and Pampa. The documents identify the degraded areas in each PA, and the causes of the degradation, outline the directives and strategies to be followed in carrying out the

restoration, and list environmental restoration hotspots in urgent need of priority action. The PAs for which plans were drafted were: the Furna Feia National Park (Rio Grande do Norte); the Araripe Apodi National Forest (Ceará); the Rio São Francisco Natural Landmark (Alagoas, Sergipe and Bahia); the Caminho dos Gerais State Park (Minas Gerais); the Chapada do Araripe Environmental Protection Area (Ceará, Piauí and Pernambuco); and the Ibirapuitã Environmental Protection Area (Rio Grande do Sul).

GEF Terrestre also held three virtual workshops in 2020, organized by a consultancy hired by the project. These online groups brought together specialists on each biome in order to draw up maps indicating priority areas for restoration in the Caatinga, Pantanal and Pampa. The workshops strove to set criteria and variables

to be used in drafting the final documents, which will help inform public-policy making that provides incentives for environmental restoration in degraded areas.

2020 also saw the project host ten training programs and exchange seminars, with over one hundred participants in all. The idea was to foster development through information and experience-sharing on degraded-area restoration processes.

FUNBIO is financial executor of GEF Terrestre, a partnership between the Chico Mendes Biodiversity Conservation Institute (ICMBio), the Botanical Garden of Rio de Janeiro, and state organs engaged with environmental management. The Ministry for the Environment provides technical coordination.



GEF Terrestre and FUNBIO gave us an opportunity to fill the gaps in our knowledge and highlight a priority agenda for Caatinga restoration. The projects approved will make it possible to generate pioneering models and take the first steps towards structuring a whole restoration production chain in an ecosystem where the capacity and human resources required to work with the theme are still limited. In other words, this is perhaps the best opportunity Brazil's semi-arid scrubland has had to structure essential and strategic activities for the building of a lasting, permanent restoration agenda."

SEVERINO RIBEIRO, Centro de Pesquisas do Nordeste – CEPAN, restoration projects coordinator at the Chapada do Araripe Environmental Protection Area and Araripe-Apodi National Forest.

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ATLANTIC FOREST

Biodiversity and Climate Change in the Atlantic Forest



Lagamar Mosaic, São Paulo/Paraná.
Photos: Rodolfo Cabral/FUNBIO

The Atlantic Forest biome is a global hotspot, one of the most biodiverse (and endangered) areas on the planet. According to the Brazilian Ministry for the Environment, the Atlantic Forest provides habitat for 20 thousand species of plant, 850 species of bird, 370 species of amphibian, 200 species of reptile, 350 species of fish and 270 species of mammal. It is also home to 120 million people, or 70% of the Brazilian population. However, this biome, which once covered 1.3 million km², has whittled to a mere 12.4% of its original size, and only 8.5% of that is under protection.

In response to this glum outlook, the Biodiversity and Climate Change in the Atlantic Forest project aims to make a solid contribution towards biodiversity conservation and native vegetation restoration in the Atlantic Forest, with special emphasis on regions in the Southernmost Bahia, Central Rio State and Lagamar (São Paulo/Paraná) mosaics, thus helping reduce and otherwise mitigate the impacts of climate change.

Created in 2015, the project is part of the International Climate Protection Initiative (IKI), with assistance channeled through the Brazil/Germany Cooperation for Sustainable Development agreement. FUNBIO manages the resources and is responsible for all contracts and procurements recommended by the Ministry, the executor of the plan to reverse environmental degradation in the Atlantic Forest.

The project's actions are structured with four core goals in mind:

- 1) to establish territorial planning instruments;
- 2) to develop economic studies for native land-cover restoration;
- 3) to improve infrastructure and devise key management tools for Protected Areas whilst supporting measures to recover native vegetation; and
- 4) to facilitate the exchange of information and experiences between partners at municipal, state and federal level, as well as across civil society, so as to optimize the development and implementation of Atlantic Forest conservation and recuperation initiatives.

Also in 2020, the drafting of Municipal Atlantic Forest Plans for the Central Rio and Lagamar mosaics reached completion, and their results will contribute toward the planning of protection, conservation, recuperation and sustainable-use actions in Atlantic Forest areas. Likewise last year, strategic economic analyses of the native-vegetation recovery production chain were completed, and a strategy was defined to increase the funding available for the restoration of degraded areas.

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PROBIO II

Opportunities Fund of the National Public/Private Integrated Actions for Biodiversity Project

Sharp-tailed tyrant
in the Pampa.
Photo: SAVE



The Opportunities Fund of the National Public/Private Integrated Actions for Biodiversity Project – Probio II is an initiative that rallies productive sectors around the need to adopt conservation and sustainable-use practices in their treatment of natural resources in the Amazon, Atlantic Forest and Pampa grassland biomes. Developed and managed by FUNBIO, the fund—stocked with donations made by the Global Environment Facility (GEF) through the World Bank—is a financial mechanism that attracts private-sector participation in pursuit of innovative environmental conservation solutions.

Created in 2014, the fund was structured to ensure the continuity of the work undertaken by The National Public/Private Integrated Actions for Biodiversity Project – Probio II. Since then, the strategy has been to support eight initiatives, seven of which have already reached completion, with one still underway. The aim of the actions backed by the project is to prioritize biodiversity in areas of large-scale production across multiple economic fronts, from ranching to farming, and extractivism to forest management.

2020 saw the completion of the subproject "Biodiversity Conservation Allied with Livestock Farming in the Pampa Biome", in Rio Grande do Sul. Implemented by SAVE Brasil in partnership with the Far South Regional Development Bank (BRDE) and Alianza del Pastizal (Southern Cone Grasslands Alliance), the initiative sought to halt and reverse the conversion of native grasslands into farmland, especially for grain monoculture (soya, for example)

or for silviculture (reforestation with exotic species). The subproject strove to foster and value livestock farming on untouched Pampa by boosting its productivity and profitability.

The project supported the adoption of a blended finance model that created lines of credit for livestock farmers through the Far South Regional Development Bank (BRDE), with the Opportunities Fund making complementary investments in technical assistance to rural producers, administering training so that they could obtain better results through the adoption of sustainable production practices. As of 2020, 11 producers had signed up for BRDE financing.

One hundred and eighty rural properties benefited by the project received Alianza del Pastizal certification, which rewards farmers for supporting biodiversity conservation by rearing grass-fed cattle. The entity's seal attests to the origin and quality of the meat produced, serving as a key indicator for the consumer and stimulating competitiveness in the Brazilian market.

Another important complement supplied by the Opportunities Fund was birdlife monitoring in the southern grasslands. The tracking of biodiversity conservation was conducted using the Alliance's Natural Grassland Conservation Index (GCI). After two years of tracking on 40 certified properties totaling a combined 40 thousand hectares in 12 southern municipalities, 259 species of bird were recorded, 78 of which were native to the grasslands. This total corresponds to 80% of the



PROBIO II

Open cacao stand at the Serra de Areia Settlement in Ibirapitanga, Bahia. Photo: Archive/Taboa



grassland birds known to regularly occur in Brazil. These same areas also yielded sightings of 14 species of bird considered endangered or near-extinct on a regional and/or global scale.

With FUNBIO's support, a video was produced to crown the end of the initiative. The idea behind the film, which can be watched on the **SAVE Brasil YouTube channel**, was to highlight the viability of sustainable production practices aligned with environmental conservation in the Pampas, especially in a country like Brazil, where only 35% of these native grasslands remain. The video presents the subproject's results and calls attention to the importance of monitoring endangered species.

Also in 2020, the Opportunities Fund maintained its support for the subproject "Reinforcing Agroecology—Trade Routes", executed by Tabôa Fortalecimento Comunitário (Tabôa Community Strengthening). The subproject was designed to foster the production and sale of *Cacau cabruca* cocoa (a traditional mode of cocoa production in which the trees are grown in the shade of the Atlantic Forest understory) and the breeding of stingless bees in the south of Bahia. The strategy includes the development of activities that will lead to the installation of Agroforestry Systems (AFSs) and the maintenance of native forest cover in *cabruca* plantations. The method is more sustainable insofar as it does not require mechanization and avoids the intensive use of capital and agrochemicals.

The subproject receives financial backing from Porticus and the Ibi-

Honey production. Photo: Archive/Taboa

rapitanga, Humanize and Arapyau institutes. Complementing this financing, the Opportunities Fund channels resources into buttressing sustainable production, providing technical training incentives for the producers, and facilitating the processing and commercialization of smallholder and agroecologically-sound produce.

One of the activities supported is the Rede Povos da Mata (Forest People's Network), which represents over 700 registered producers that practice participative organic certification of forest yields and their derivatives. The members include smallholder families, farmers settled under agrarian reform programs, and members of indigenous and *quilombola* communities (the latter formed by the descendants of former Maroon colonies). In 2020, Probio II activities centered on technical assistance for the production, processing and commercialization of *cacau cabruca*, holding workshops, farm visits and field days—practical activities in the form of organized muck-ins to promote the importance of adopting certain technologies and innovations at properties under agroecological management.

The subproject "Reinforcing Agroecology—Trade Routes" also supports lines of credit to smallholder families through a blended finance model with Tabôa Fortalecimento Comunitário. FUNBIO resources are used to buttress the farmers' management practices and provide technical assistance to boost output, especially for Agroforestry Systems at *cabruca* sites. Four settlements connected with the Forest

People's Network are already receiving these benefits. The aim is to improve their cocoa bean processing structures and help form new *cacau cabruca* plantations.

At the Dois Riachões settlement, access to a new line of credit will help increase the volume of high-quality processed cocoa and the creation of new small plantations. The new stands will serve as part of a pilot-project to determine, among other variables, production costs and ROI timeframes. These are important technical data that might help in attracting new funding sources.

Regarding the installation of Agroforestry Systems (AFSs), four areas were selected at the Dois Riachões, Dandara, Terra de Santa Cruz and Demétrio Costa settlements in Serra Grande. The management of *cacau cabruca* production with the recommended techniques will enable the recovery of degraded areas and improvement of soil fertility, making production more efficient and sustainable.

Finally in 2020, technical monitoring began to ascertain and record the presence of target bird species and of the golden-headed lion tamarin (*Leontopithecus chrysomelas*) in *cacau cabruca* areas. These are indicator species, and their numbers provide a good measure of the conservation of local ecosystems. The first survey, conducted between March and June, recorded 43 species of bird at the Terra de Santa Cruz settlement and 25 species at Dois Riachões. The monitoring will be repeated in 2021.

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AMAPÁ FUND

The aim of the Amapá Fund, a partnership between FUNBIO, the Gordon & Betty Moore Foundation, and Conservation International Brazil (CI-Brazil), with financial backing from CI's Global Conservation Fund (GCF), is to help maintain and consolidate municipal, state-run and federal Protected Areas (PAs) and Indigenous Territories (ITs) in Amapá. Located in the northeast, Amapá is considered the best-preserved of all Brazilian states, with a good portion of its land area—representative of the Amazonian biome—under some form of protection.

Launched in 2015, the Amapá Fund envisages the long-term viability and sustainability of the state's PAs and ITs. Toward this end, it was set up as an endowment fund, a model that

consists in financing projects only from the yields on the invested seed funding. The mechanism allows funds to be raised from a range of sources, such as donations, payments for the provision of environmental services, and Consent Decrees.

In 2020, FUNBIO, the GCF, CI-Brazil and the Amapá Department for the Environment met to align the fund's goals and strategies, focusing on growable production chains and the identification of new investments in the bioeconomy and opportunities to reinforce the existing PAs. Amapá is a state with a huge vocation for activities that explore the potential of preserved forests, and currently stands out nationwide for its production and sale of açai and chestnut, as well as its booming fisheries.



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ABROLHOS LAND AND SEA FUND



Group of white-lipped peccaries at Descobrimento National Park (PND), Bahia. Photo: Archive/PND



West Indian lantana (*Lantana Camara*) found at the PND. Photo: Thainá Goldman



Masaranduba tree on the Gindiba Trail at Descobrimento National Park (PND). Photo: Welton Basilio

Stretching over 89 million hectares of marine and coastal ecosystems between the south of Bahia and northern Espírito Santo, the Abrolhos Land and Sea Territory houses the greatest biodiversity in the South Atlantic. To support the execution of environmental protection actions there, FUNBIO joined forces with Conservation International Brazil to help create, consolidate, maintain and institutionally strengthen federal Protected Areas (PAs). This union led to the inauguration of the Abrolhos Land and Sea Fund (ALSF).

Designed in 2016, the fund, which is under public/private governance, received seed funding from Conservation International's Global Conservation Fund (GCF). FUNBIO is responsible for the financial and executive management of the ALSF, with CI-Brazil providing technical support. Given the nature of its goals, the fund is a long-term financial mechanism operating in perpetuity, with project funding drawn exclusively from the yields on the GCF's initially donated principal.

In 2020, the fund developed support actions for the structuring of two federal PAs: the Abrolhos National Marine Park, created

in 1983—the first of its kind in Brazil—, and the Descobrimento National Park, founded in 1999, the year before Brazil celebrated its 500th anniversary. In order to kick off the planned activities, the first redemption was drawn from the ALSF in October, and disbursed to CI-Brazil.

Also in 2020, the Abrolhos Land and Sea Fund Managing Board was structured, and its Project Operational Manual (POM) approved at the first session. The POM sets out the rules for the fund's scope, remit, and target public.

Some of the funding will be used to draw up architectural plans for the renovation and expansion of the national parks' headquarters on the southern Bahia coast. The fund is also preparing to launch a call for proposals for the provision of consulting services to assess the potential for sustainable tourism in the Abrolhos Land and Sea Territory. The intention is to identify community-based activities already underway in the region that could be reinforced or multiplied. The two actions are part of the drive to consolidate the public use of these PAs.

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GEF MAR

Marine and Coastal Protected Areas Project

Natural swimming pools at Japaratinga, Costa dos Corais Environmental Protection Area, Pernambuco/Alagoas. Archive: ICMBio

Against covid-19, a representative of the Lagoa do Jequiá Marine Extractive Reserve, in Alagoas, receives sanitation kits to distribute to the community



The Marine and Coastal Protected Areas Project (GEF Mar) has cemented its status as one of the most successful biodiversity conservation initiatives in Brazil. Over the last six years, the project has reached some important milestones, with 95.1 million hectares of marine and coastal biome receiving support (the initial target was 17.5 million ha) across 30 PAs, of which 23 are federal and 7, state-run. The project's reach now extends to 26% of the country's entire marine and coastal surface, an area roughly equivalent to France, Portugal and Britain combined. Seven research centers and four community projects are also covered by GEF Mar.

GEF Mar is co-developed by the Ministry for the Environment, ICMBio and FUNBIO, and it is financed by the Global Environment Facility (GEF) through the World Bank. In 2019, it also began to receive funding under a consent decree signed between IBAMA and Petrobras as part of the oil company's environmental offset measures whilst undertaking to comply with wastewater disposal legislation on its offshore platforms. Once again, FUNBIO is responsible for financially managing these funds.

In 2020, GEF Mar had to adapt to the new conditions imposed by covid-19, but managed to keep its PA support activities going all the same. Assistance was provided in drafting executive projects for renovation and construction work at two TAMAR Project bases, one in Regência and the other in Guriri, both in Espírito Santo. The initiative also collaborated

on infrastructure renovation at the Baleia Franca Environmental Protection Area, in Santa Catarina, and the Costa dos Corais EPAs, in Alagoas and Pernambuco.

GEF-Mar also overhauled the Soloncy Moura research ship, operated by the South/Southeastern National Center for Marine Research and Biodiversity Conservation (CEPSUL). CEPSUL monitors biodiversity in the marine biome along the entire south/southeastern coastline.

Throughout 2020, emergency measures and strategic actions were planned and carried out to tackle two unexpected events that had an enormous impact on project-backed PAs and local community agents: a crude-oil spill off the Northeastern coast, late in 2019, and the covid-19 pandemic, in March 2020. The project scrambled R\$ 2.6 million to assist the PAs.

Roughly R\$ 2.3 million was also channeled into essential support actions for the areas affected by the environmental disaster, especially those communities that had to temporarily suspend their economic activities. A further R\$370 thousand was distributed among 19 Protected Areas so they could tackle the impacts of the new coronavirus. The measures taken included purchasing PPEs, distributing basic needs hampers and providing incentives for local income generation, such as by hiring seamstresses to make face masks.

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GOVERNOS ESTADUAIS DA COSTA DO BRASIL



MINISTÉRIO DO MEIO AMBIENTE



SEA GARBAGE IN SP

Sea Garbage Monitoring and Assessment Plan,
São Paulo



A technical/scientific cooperation agreement between public authorities, private initiatives, civil society and academia took an important step in defining strategies to tackle the marine debris problem in São Paulo State. The action, which is backed by the Norwegian Embassy in Brazil, pooled the efforts of scientists, specialists and public managers to devise and execute the project "Building knowledge to combat marine litter in São Paulo State: marine litter monitoring and assessment plan in São Paulo".

The drive is a partnership between FUNBIO, the Norwegian Embassy, the University of São Paulo's Advanced Studies (IEA) and Oceanographic (IOUSP) Institutes, and the Environmental and Infrastructure Department of São Paulo. Launched in August 2019, the initiative was designed to create a Strategic Plan for Monitoring and Evaluating Marine Debris in the State of São Paulo and to create a communication network integrating all stakeholders on the sides of science and management.

Data organized by the Joint Group of Experts in Scientific Aspects of Marine Pollution (GESAMP), the advisory body to the UN on all matters pertaining

to marine-environment preservation, revealed that somewhere between 4.8 and 12.7 million tons of untreated plastic waste reach the world's oceans each year. The group's findings also show that plastics are the single highest pollutant affecting our seas and pose a very grave threat to all marine life.

In order to carry the project forward, FUNBIO launched a public call for consultancy and supported the organization of two workshops: the first held in 2019, and the second in September 2020. The participants in these workshops, engaged in a collective learning process, sought to share information and experiences, as well as distinct technical visions, in order to help design and foster actions to tackle marine debris. Also discussed were the impacts sea litter has on fishing, tourism and food security.

The project represents the various sectors and stakeholders engaged with the theme, thus nurturing a participative method of development. With the plan's completion and publication in January 2021, the hope is that the document can effect real change. Having marine debris properly monitored and measured

Beach at the Xixová-Japuí State Park, in São Vicente, São Paulo, where even rubble can be found in the sand. Photos: GerminAção

SEA GARBAGE IN SP

“

The Strategic Plan for the Evaluation and Monitoring of Marine Debris was the result of a rich and successful process of collaborative construction involving various stakeholders made possible by the multi-institutional partnership between the UNESCO Chair for Ocean Sustainability, the São Paulo State Department for Infrastructure and the Environment, FUNBIO and the Norwegian Embassy. Its results were integrated into the São Paulo State Plan for Solid Waste and concretized as long-term goals. Testifying to its relevance as a strategy for building knowledge networks to tackle the problem of marine debris, the project's actions and products are highly replicable and aligned with the Global Partnership for Marine Litter (GPML), part of the United Nations Environment Program; the UN 2030 Agenda's Sustainable Development Goal 14 ("Life Below Water"); and the United Nations Decade of Ocean Science for Sustainable Development Implementation Plan."

ALEXANDER TURRA coordinator of the São Paulo State Strategic Plan for the Evaluation and Monitoring of Marine Debris, University of São Paulo Oceanographic Institute

Among trash and cigarette butts on a beach in São Vicente, São Paulo. Photos: GerminAção



will be an effective instrument in pressing to see ocean waste treated in as technical and correct a manner as possible, and so help clean up the marine environment along São Paulo's coastline.

Among the benefits for science and society are: reduced uncertainty concerning the real impact of marine debris; more and better data comparison and sharing; encouragement for inter-sector cooperation; dissemination of best practices; contributions towards the

integration of results into different public environmental planning and conservation policies; and a push toward achieving the UN's Sustainable Development Goals (SDGs), especially SDG 14, "Conserve and Sustainably Use the Oceans, Seas and Marine Resources".

The Strategic Plan for Monitoring and Evaluating Marine Debris is also considered an important contribution toward the creation of a future state-wide plan for tackling marine debris in São Paulo.

SDG



LEGAL OBLIGATIONS

Unit

73 **FRANCISCANA CONSERVATION**

76 **ENVIRONMENTAL EDUCATION**

78 **MARINE AND FISHERIES RESEARCH**

81 **SUPPORT TO PAs**

82 **WINDOWS ONTO THE RESTINGA DE BERTIOGA STATE PARK**

83 **GREEN AGAIN**

84 **TCSA PORTO SUL**



FRANCISCANA CONSERVATION

Conservation in Franciscana Management Area I

Breakthrough photos prove the existence of franciscana dolphins near Paraty, Rio de Janeiro. Photo: Maqua/Uerj



The Franciscana Conservation project is the largest scientific effort yet mustered to protect Brazil's most endangered dolphin species. Since 2015, the project has fostered and promoted the production and propagation of technical knowledge about the franciscana (*Pontoporia blainvillei*), and the results obtained so far may one day contribute towards the implementation of public conservation policies in support of this incredibly rare species, which is only seen nationally at a handful of points between Espírito Santo and Rio Grande do Sul. The franciscana is exclusive to the coast of Brazil, Uruguay and Argentina.

A shy mammal about which little is known, the franciscana dolphin is the subject of six lines of study, pursued simultaneously, as part of the Franciscana Conservation Project. The research institutes involved have been working to achieve a greater knowledge on such themes as the species' biology and genetics, distribution along the country's coastline, population dynamic and main causes of death. The project is seen as a unique opportunity to learn about the franciscana through information gathering and exchange.

In November 2020, the project made an important discovery on the southern Rio de Janeiro coast. For the first time ever, a pod of franciscana—often referred to as the “invisible” or “ghost” dolphin—was seen in Ilha Grande Bay, near Paraty. The sighting was made by

an expedition of scientists from the State University of Rio de Janeiro (UERJ), and it filled researchers with hope, as there had been rumors of the species' existence in the region since a franciscana skull turned up there some twenty years ago. The suspicions had since been fueled by fleeting appearances here or there, but nothing caught on camera.

The sighting occurred on November 24, when biologists from the UERJ Aquatic Mammals and Bioindicators Laboratory (Maqua), one of the institutions supported by the Franciscana Conservation project, were out surveying the area after a long period of inactivity. The franciscana task force, set up at the beginning of the year, had suspended its activities due to the covid-19 pandemic. With the support of local fishermen, and armed with subaquatic microphones and drones, the researchers were finally able to resume their search.

The encounter was filmed by a team that managed the rare feat of getting close to the pod in a boat. Drone footage was obtained a few days later, which was very important, as the specialists needed to confirm that the animals in question were not just passing through or part of another pod, also identified in 2019, known to reside in Ubatuba, on the São Paulo coast.

In fact, monitoring continued on the Ubatuba franciscana throughout last year, carried out by the Rio Grande do Sul Aquatic Mammals

FRANCISCANA CONSERVATION



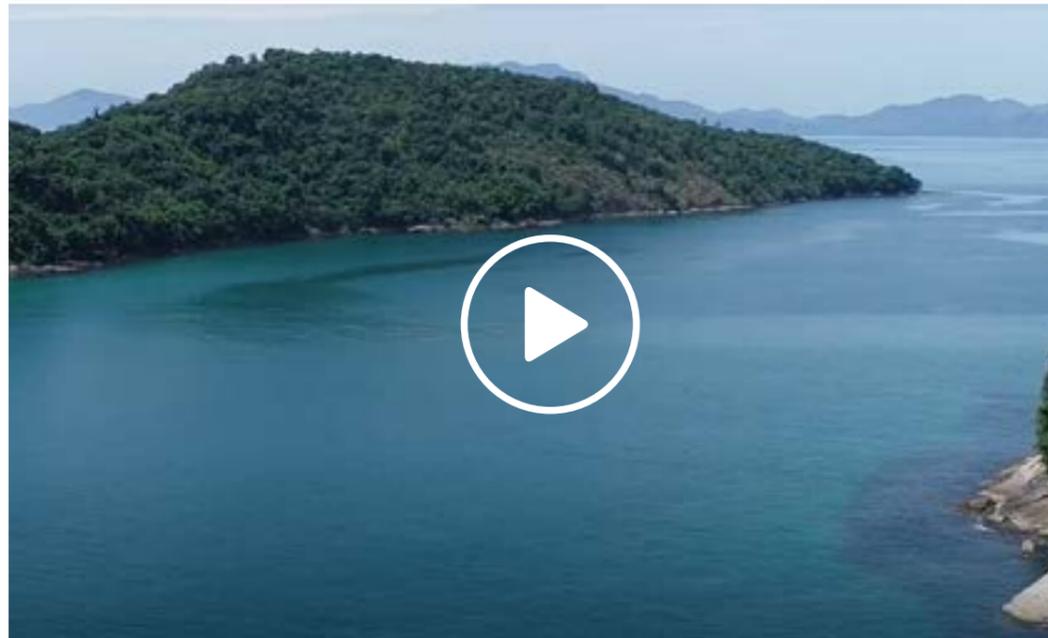
DANIEL DANILEWICZ

from GEMARS, has been studying the franciscana dolphin since 1992, but saw his first living specimen only 12 years later

“In fact, I never thought, not even in my wildest dreams, that I would one day get to film a franciscana live in the wild. Nursing a calf is something we saw for the first time just now. It's such a joy. Really something that has to be shown.”



WATCH “FRANCISCANAS IN UBATUBA: NEW HORIZONS”



JOSÉ LAILSON BRITO JÚNIOR

from Maqua/Uerj, has been studying franciscana since 1997

“Discovering a population of an endangered species that has characteristics of its own gives us hope that we can succeed in keeping the franciscana alive and well in the waters of Brazil and South America”.



WATCH “THE DISCOVERY OF FRANCISCANAS IN ILHA GRANDE BAY”

Study Group—GEMARS, another institution supported by the Franciscana Conservation Project. Four expeditions were launched during the year, with helicopters used to track the pod. In both Paraty and Ubatuba, researchers noted the presence of adults and calves, yielding footage of some previously unrecorded parent-offspring interaction. The specialists will now concentrate on analyzing the data obtained in order to propose new studies to better understand franciscana behavior.

Also in 2020, GEMARS and the Associação MarBrasil continued their research on franciscana mortality in São Paulo, Paraná, Santa Catarina and Rio Grande do Sul. The studies use drifters specially designed to simulate the behavior of floating animal carcasses to ascertain how sea currents influence their dispersion. They also use prototypes, which are dummies that simulate franciscana carcasses, and help researchers estimate the species' mortality rates based on the percentage of the prototypes that actually wash ashore.

Despite the adversities imposed by covid-19, the project also managed to keep up its fisheries monitoring activities in franciscana habitat throughout 2020 in order to obtain more information about the species' contact with fishermen. In November, the MarBrasil Association held meetings to present the preliminary results to the fishermen at coastal communities in São Paulo,

Santa Catarina and Paraná. At these gatherings, the technicians tried to understand the work craft fishermen had done throughout the year, the kind of fishing they employed, and their own perceptions of how the conservation project was developing.

With GEMARS support, the MarBrasil Association also organized fly-overs to spot-count franciscana from the air. The idea was to raise a sample from which they could estimate the number of franciscana living along the São Paulo, Santa Catarina and Paraná coast. Given their small size, franciscana dolphins are frequent accidental by-catch. They are also highly susceptible to pollution and dips in prey numbers, not to mention loss of habitat caused by environmental degradation.

Still in 2020, an online campaign was launched to mark National Franciscana Day, created in 2019. The date—October 1—coincides with the birthing period of franciscana calves, and it was celebrated with a range of actions by programs backed by the project.

The activities and research carried out under the Franciscana Conservation project's remit service the goals set forth in the National Action Plan for the Franciscana. The concerted effort to make scientific study on the species viable is an important part of ensuring its future conservation. There are thought to be fewer than 20 thousand franciscana dolphins in Brazil today, and the specialists believe that the

FRANCISCANA CONSERVATION



LISTEN TO THE PODCAST

FROM SHY DOLPHIN TO THE DIGITAL INFLUENCER OF THE SEAS

The nation's most mysterious and least known dolphin is now much easier to locate. However hard it might be to find the franciscana in the wild, just a few clicks is all it takes to track it down online. To help conserve the species, a recently-launched initiative aims to boost this diminutive dolphin's popularity, and one way found to achieve that goal was to make it the star of a podcast. Hence "Franciscana: the extinction of the invisible dolphin", Brazil's first fictional environmental profile.

Since its debut on October 30, the program has chalked up some expressive results and already ranks in the top-50 fiction podcasts on Spotify. This innovative podcast uses a fictional story to promote environmental awareness about the species, the nation's most threatened dolphin. At the end of each of the seven episodes, interviews with scientists and specialists talk the listener through the franciscana's characteristics and lay out the reasons why this species has to be saved and protected.

The podcast tells the story of a journalist who is investigating the deaths of 33 dolphins off the coast of Ubatuba, São Paulo. Initially uninterested in environmental issues, the character, played by the actress Camila Márdila, gradually changes her outlook as she learns more about the dangers the species faces. In the process, she plies the listener with valuable information about the franciscana and its incredible history. The actress Alice Braga voiced the introduction.

In addition to the podcast, the franciscana also has an account on Instagram (@toninha_pontoporia), a communication channel that is very popular with the younger public, and so helps rally a wider demographic behind the species' defense. Another important communication front is the e-zine Linhas do Mar (Lines of the Sea), which ran four issues last year (January, April, July and November), presenting information about the Franciscana Conservation Project. The newsletter is sent out to all the initiatives supported by the project.

Pods found in Rio de Janeiro and Espírito Santo remain isolated from other populations known to inhabit the nation's southern coasts, a situation aggravated by the fact that franciscana numbers tend to dwindle the further north you go.

Much of the scientific interest in the franciscana is owing to its history, as it derives from a dolphin species that migrated to South America from the Caribbean somewhere between 13 and 18 million years ago. This species settled in the Amazon, where

it gave rise to the homonymous river dolphin (*Inia geoffrensis*), while a splinter group travelled south to the Plata River Basin, and spread from there into the Atlantic, resulting in the franciscana (*Pontoporia blainvillei*).

The Franciscana Conservation project project is an offset measure established under a consent decree agreed between the company PetroRio and the Federal Public Prosecutors' Office in Rio de Janeiro. It is implemented by FUNBIO.

Franciscana dolphin in Ubatuba. Photo: Helena Wolfenson



SDG



ENVIRONMENTAL EDUCATION

Implementing Environmental Education and Income-generation Projects for Improved Environmental Quality at Fishing Communities in the State of Rio de Janeiro

Project uses discarded fishing nets to create street-market bags. Photo: Beatriz Mattiuzzo/ Marulho



The Environmental Education project was created to become a key ally in biodiversity conservation in Brazil's marine and coastal zones, as well as in the sustainable use of fisheries resources and the strengthening of craft fishing. Its initiatives are all designed toward one end: to ensure the activity's environmental, social and economic sustainability in Rio de Janeiro. In order to reach these targets, the project will run socioeconomic diagnostics and devise lines of action that further community strengthening, environmental education and income generation in the state.

In 2020, due to the adverse conditions posed by the covid-19 pandemic, the project had to alter its planning

and revise its targets regarding the communities and fishermen and women it supports. FUNBIO launched an emergency call for projects for the execution of activities that could help mitigate the impacts of the restrictions imposed to stem the spread of the new coronavirus.

After selection and approval, proposals were accepted for nine initiatives receiving combined investment of R\$ 950 thousand. Most of the funding requests FUNBIO received focused on income-generation and support for local craft fishing institutions. The activities will be rolled out in four regions: Costa Verde, Baía de Guanabara, the Lake District and the north of Rio state.

9 SUPPORTED PROJECTS

"Seu" Filinho, from the In the Net project, with one of the bags still in the making. Photo: Beatriz Mattiuzzo/ Marulho

Bag made from ghost and discarded nets. Photo: Beatriz Mattiuzzo/ Marulho



ENVIRONMENTAL EDUCATION



From the Cooperative, Conceição Julião (left) and Flora Franco (right) fishing in Arraijal do Cabo, RJ. Photo: Zenilda Maria da Silva/ Mulheres Nativas

Support helped restructure the co-op's base. Photo: Zenilda Maria da Silva

The sub-projects receiving support include the structuring and strengthening of a cooperative for the shellfisherwomen of Prainha (MUPAAP-Marisqueiras da Prainha), in the Lake District; actions to bolster the institutional self-management of the Association of Crab Fishers and Friends of the Magé Mangroves in Baía de Guanabara; and steps to improve the attendance provided to members of the Z-27 Fishing Colony on the Northern Rio coast.

To boost income-generation, five sub-projects will benefit the Boatmen and Craft Fishermen's Association of Trindade, in Paraty; the Jurujuba Free Association of Marine Farmers, in Niterói; the Boto Cinza Institute, in Mangaratiba; the Institute for Marine Research, Architecture and Renewable Resources (IPEMAR), in Angra dos Reis; and the Cooperative of Craft Fisherwomen and Native Plant Producers in the Lake District. With a focus on mental health, also selected was the sub-project submitted by the Association of Residents and Friends of Aventureiro Beach, which supports the Caiçara Surf School there, on Ilha Grande.

The planned activities include the administering of courses in project management, sanitary procedures and techniques in the handling of fish hauls, and the piloting of vessels engaged in tourism activities. The project will also support the purchase of fish processing and storage equipment, the maintenance of mussel-processing machinery and the construction of a traditional coastal-community market that will help generate higher revenues by providing improved conditions for the sale of fisheries resources.

All of these initiatives, scheduled for this year, will be evaluated during execution to see if they qualify for continuity and additional funding through future project calls.

The Environmental Education project project is an offset measure established under a consent decree agreed between the company PetroRio and the Federal Public Prosecutors' Office in Rio de Janeiro. It is implemented by FUNBIO.



The Technical Working Groups formed with the other stakeholders, all of recognized expertise in given thematic areas, have afforded a more diverse approach in project calls and selection and yielded decisions that aim for inclusiveness in terms of the public benefited by the Consent Decree's actions."

EMERSON MARCONDES, Environmental Analyst COEXP/DILIC/IBAMA



[READ THE FULL TEXT](#)

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MARINE AND FISHERIES RESEARCH

Support for Marine and Fisheries Research in the State of Rio de Janeiro Project



The aim of the project “Support for Marine and Fisheries Research in Rio de Janeiro”, created in 2015, is to provide incentives for scientific research with a view to fostering knowledge-building for the development of fisheries and the marine ecosystem, thus supporting the sustainable use of natural resources in Brazil’s second-largest producer of fish stocks. Over the last five years, the project has helped generate and propagate technical information about the sector and the marine environment, with special focus on commercial fish species, such as the Brazilian sardine and skipjack tuna.

From the outset, the project has supported 16 initiatives that spurred the collection of data on a range of themes: research on the ecology, biology, distribution and numbers of endangered fish species or commercially relevant catch; economic aspects of fisheries and the nutritional value of fish; coral reef ecosystems and rocky shores; invasive marine species; women’s participation in craft fishing; the social impacts of oil and gas exploration on fishing communities; relationship with the consumer;

and the monitoring of fishing boat unloading at port.

In 2020, ten subprojects wrapped up their technical activities. Some of these initiatives helped publicize the results, while others carried out data analyses and drafted reports. In the case of the Skipjack Project, which studied the ecology and socioeconomic aspects of skipjack tuna fishing, a closing seminar was held with specialists and authorities. The event coincided with the launch of the book **“Sustentabilidade da Pesca do Bonito-listrado no Brasil”** (“The Sustainability of Skipjack Fishing in Brazil”), which presented the three years’ worth of information gathered about the country’s second most widely-fished species. Just shy of 23 thousand tons of skipjack tuna are fished in Brazil every year, according to an International Commission for the Conservation of Atlantic Tunas (ICCAT) report.

The study also endeavored to assess the amount of edible protein energy provided by different animals and compare that value against the total industrial energy consumed in its

Skipjack tuna with monitoring chip. Photo: Lauro Madureira

MARINE AND FISHERIES RESEARCH



SEE "IMPACT ON FISHERIES"



SEE "I AM A FISHERWOMAN"

production/acquisition. Factoring in socioeconomic perspectives as well, the intention was to underscore the varying environmental impacts of different food production activities. These results gave rise to a Nutritional, Environmental, Social and Economic Index, with tuna (55.8% return on input) performing far better than swine (43.4%) and chicken (39.8%).

The Monitoring of Fisheries Activities in Northern Rio State (PMAP, in Portuguese) presented industrial and craft fishing statistics for 15 of Rio's municipalities, as well as collated data on the socioeconomic profile of the fishermen and women involved, the types of vessel used and the support infrastructure in place.

Coordinated by PUC-RJ, the Petrosardine subproject sought to assess Brazilian sardine exposure to petroleum contamination and to analyze how safe the species is for human consumption. Of the sample collected only 4% presented contaminant concentrations above the maximum levels permitted by Brazilian legislation.

The Eco-Nutrition subproject, executed by the Federal University of Rio de Janeiro (UFRJ), undertook to identify and measure the nutritional potential of bycatch currently discarded or underused due to their low commercial value. The idea is to create niches for these species on the consumer market, and so avoid environmental unbalance by relieving some of the pressure on the more heavily targeted species. The subproject analyzed the following frequent bycatch: the Brazilian menhaden (*Brevoortia aurea*), guri sea catfish (*Genidens genidens*), swordfish (*Trichiurus lepturus*), Atlantic anchoveta (*Cetengraulis edentulus*) and malacho (*Elops smithi*). The work will result in recommendations for the better use of the species demonstrating the highest nutritional potential.

Finally, following the strategy adopted by the Maréss Interdisciplinary Laboratory, located on the São Lourenço do Sul campus of the Federal University of Rio Grande (UFRG), the subproject Impact on Fisheries turned to video and documentary-making as a means of presenting its results directly to society. The audiovisual material,

200 GRANTEES

16 SUPPORTED PROJECTS FROM

20 INSTITUTIONS

MARINE AND FISHERIES RESEARCH



NEW RULES FOR BRAZILIAN SARDINE FISHING

In 2020, the Support for Marine and Fisheries Research Project reaped the rewards of its adoption of scientific data as a way of informing public fisheries policy: new rules were established for the closed season on Brazilian sardine fishing along the Southeastern and Southern coasts. After 15 years, closed season will no longer occur in two periods (winter and summer), but will concentrate on the warmest months of the year, thus covering the species' entire reproductive cycle.

Climate changes, such as rising sea temperatures, have caused some alterations in Brazilian sardine behavior. Research carried out by the Vale do Itajaí University (Univali) found that the species'

breeding period now arrives earlier and lasts longer. Up until the 1990s, reproduction occurred during a three-month period, but this has now been extended to six.

The new closed season on the Brazilian sardine will last for the same five-month duration, but without any intervals. According to Univali, backed by the Support for Marine and Fisheries Research Project, this respite is key to stock replenishment. Univali was directly involved in the technical discussions that resulted in the change of dates.

The measure was passed into law in Norm nº 18 issued on June 12 by the Department for Agriculture, Fisheries,

Livestock and Supply. Under the new legislation, closed season will extend from October 1 to February 28, and will be monitored and reassessed at the end of the first semester of 2021. The intention is to analyze biological and fisheries-related aspects of the Brazilian sardine, as well as the economic effects the new period has on the activity and its production chain. The Brazilian sardine is the country's premier catch. In Santa Catarina, where most sardine canneries are located, the species is directly responsible for generating 20 thousand jobs. Combined, the state's companies supply approximately a million tins of sardine to points of sale per day.

which is available on YouTube, deals with two of the project's core themes: how oil and gas exploration/production and tourism affect craft fishing populations (the documentary: **"Impacts on fisheries: the project in documentary"**) and the issues faced specifically by fisherwomen (the documentary **"I, the fisherwoman"**).

Also in 2020, the Support for Marine and Fisheries Research Project saw the inauguration of a new Integrated Marine Biology Laboratory (LIBMAR), run by the Macaé Center for Ecology and Socio-environmental Development. The initiative was supported by the subprojects Multifisheries and Rocky Shores of Northern Rio State. Among the new research center's goals are: fine-tuning biodiversity studies; fostering the formation of new scientists; promoting environmental education actions;

and providing appropriate storage conditions for scientific collections.

In a bid to bring scientific research closer to society, the project went online with some of its history, results, and demonstrations of the dedication of the researchers and technicians on the 16 initiatives it supports. The videos are available on FunbioTube, the fund's YouTube channel. The material offers a summary of the work carried out by the subprojects as well as interviews with their coordinators.

The Support for Marine and Fisheries Research in Rio de Janeiro project project is an offset measure established under a consent decree agreed between the company PetroRio and the Federal Public Prosecutors' Office in Rio de Janeiro. It is implemented by FUNBIO.

Marine research vessel. Photo: Luciano Fischer/ Laboratório de Tecnologia Pesqueira e Hidroacústica (IO-FURG)



SUPPORT TO PAs

Conservation and Sustainable Use of Biodiversity in Federal Coastal and Estuarine Protected Areas in the States of Rio de Janeiro and São Paulo



Signage is installed on an island in the Cagarras Archipelago, Rio de Janeiro, warning against illegal practices in the region. Photo: MONA Cagarras Archive/Tatiana Ribeiro

The project “Conservation and Sustainable Use of Biodiversity at Coastal and Estuarine Federal Protected Areas in the States of Rio de Janeiro and São Paulo (Support to PAs)” pursues two main goals: to collaborate toward a more qualified management of environmental protection areas; and to support improved physical structuring so as to heighten performance in marine and coastal ecosystem conservation and the sustainable use of fisheries resources.

Created in 2016, the project has rolled out support actions at nine PAs covering a combined 260 thousand hectares, roughly equivalent to the cities of São Paulo and Rio de Janeiro put together. The activities are designed to help draft management plans, boost organizational strengthening, provide capacitation for craft fishermen and women, install PA signage and introduce measures to improve the PAs’ visitation structure.

In 2020, the initiative made progress on the executive project for the

creation of a trail and stilted walkway in the mangroves of the Guapimirim Environmental Protection Area and the Guanabara Ecological Station, both in Rio de Janeiro. These PAs are powered by a more sustainable, solar-based energy system. Also in planning phase at the Guapimirim APA is the construction of a multi-use center for visitors. Work is expected to get underway in 2021.

At the Serra da Bocaina National Park, on the Rio/São Paulo border, plans are in place for a visitors center at Trindade, whilst at the Tamoios Ecological Station, located between Paraty and Angra dos Reis, a new vessel is being built to help with marine-environment monitoring around the Bay Islands and Ilha Grande. Delivery is expected in 2021.

The Support to PAs project is an offset measure established under a consent decree agreed between the company PetroRio and the Federal Public Prosecutors’ Office in Rio de Janeiro. It is implemented by FUNBIO.



WINDOWS ONTO THE RESTINGA DE BERTIOGA STATE PARK

The core aim of the Windows onto the Restinga de Bertioiga State Park project is to support sustainable alternatives that improve quality of life and boost income-generation for the communities living in the environs of the Protected Area (PA), located in Bertioiga, on the northern coast of São Paulo. The strategy follows directives outlined in the management plan drafted by the PA's managers and published in December 2018.

Created in 2010, the state park, which occupies over nine thousand hectares, encompasses 98% of the remaining restinga (broadleaf (sub)tropical forest growing in sandy, coastal soils) in the Santos Lowlands. The PA houses 37 species of flora that feature on one or more endangered species list, whether as vulnerable, endangered or critically endangered. Perhaps chief amongst these are *Mollinedia cf. oligotricha* and *Piper hoehnei*, both of which are probably already extinct in the wild, but are still found at the PA.

The Bertioiga State Park is also home to 516 species of vertebrate, including 23 freshwater fish, 41 amphibians, 40 mammals, 53 reptiles and 353 birds, 49 of which are considered endangered. There are also eight endangered mammals, such as the brown howler monkey (*Alouatta guariba*), ocelot (*Leopardus pardalis*), cougar (*Puma concolor*), and South-American tapir (*Tapirus terrestres*). 38 bird species are in a similar bind, as are two species of fish and one reptile, the striped restinga skink (*Mabuya caissara*).

The strategy determines two lines of action for the project: collaborate to strengthen the park's public management, and promote economic activities aligned with its core objectives. With these ends in mind, the idea is to encourage community-based tourism, the keeping of stingless bees, and production and processing of non-timber forest resources.

The project will be structured with the active participation of the communities in the park's immediate vicinity: Vila da Mata, Environs of the Guaratuba River (Carvalho Pinto and Barreira do Itaguá clusters) and the Balneário Mogiano homesteads.

In 2020, a selection process began to hire a consulting firm to develop the planned activities. Fifteen workshops, five in each community, will be held to train locals and to devise action plans to suit the interests of each area. Priorities will also be set by the participants during the workshops.

Lastly in 2020, the project rolled out support actions for the Bertioiga PA. Equipment was purchased to improve infrastructure and park management, including computers, GPS devices, a drone, cameras, signage, uniforms for the agents, a brushcutter and chain saw, and a towboat to be delivered in 2021.

Designed in December 2019, the initiative is expected to run through to January 2022. The project is executed in partnership with the Foundation for Forest Conservation and Production in São Paulo State (Fundação Florestal), and is financed through a Consent Decree negotiated between the real-estate developer Figueiredo Empreendimentos Imobiliários Ltda. and the Federal Public Prosecutors' Office. FUNBIO is the financial and operational manager.



Três Poços in Itatinga, São Paulo. Photo: Francisco Cammarota Paulino

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GREEN AGAIN

Nature Conservation Program in Volta Redonda

Known as Steel City, Volta Redonda became much greener in 2020. As of November 14, the largest municipality in Southern Rio de Janeiro State has a Botanical Garden to call its own—the Antonieta Barreira Cravo Municipal Botanical Garden. The space blends leisure with environmental conservation on São João Island, which also benefited from some forest restoration work that replaced exotic species with native Atlantic Forest trees at a five-hectare Permanent Preservation Area on the banks of the Paraíba do Sul River.

The inauguration of the Botanical Garden meets one of the goals set by the Volta Redonda Nature Conservation Program—Green Again. The program is a Municipal Department for the Environment initiative financed by an Environmental Consent Decree signed between the Federal and State Public Prosecutors’ Offices, Volta Redonda City Hall and FUNBIO.

The Botanical Garden is divided into sectors corresponding to the nation’s various biomes, such as the Cerrado Savanna, Caatinga Scrublands,

Amazon Rainforest and Atlantic Forest. Each area contains only native species, 300 in all, while the Garden’s lake is stocked with Amazonian aquatic plants. The leisure area boasts a walking track, bicycle track, kiddies’ park, open-air gym, barbecue stations and interactive floor with water spouts.

Green Again had the added goal of expanding Volta Redonda’s native land cover, and carried out actions to arborize over 100 km of public thoroughfares and streets, and reforest the Ilha de São João Permanent Protection Area. To achieve this, 15 thousand saplings of 80 native species were acquired, as well as all the necessary agricultural materials and equipment to carry out the work (GPS devices, computers, a truck and digger).

Begun in 2018, the program received R\$ 5.4 million in funding and its initial goals were all reached in 2020. The interest on the initial investment has been earmarked for one further deliverable: fencing off the Botanical Garden, a job that is expected to reach completion in 2021.

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TCSA PORTO SUL

Project will cater to areas in Southern Bahia state. Photo: Ariane Cerqueira



The TCSA Porto Sul project was designed to ensure sustainable development, protect environmental integrity, and preserve ecological functioning and the provision of ecosystemic services in the area affected by the Port and Port Services Complex in South Bahia. The project was created through a Socioenvironmental Consent Decree (TCSA in Portuguese) signed in 2019 between the Federal Public Prosecutors' Office, the Prosecutors' Office of the State of Bahia and the State Government of Bahia—through its Department for the Environment (SEMA-BA) and Office of the Chief of Staff—, the Institute for the Environment and Water Resources (INEMA), Ilhéus City Hall, and BAMIN (Bahia Mining Inc.)

The Socioenvironmental Consent Decree Porto Sul is an environmental offset package undertaken by the

BAMIN port-zone construction project in the Aritaguá district 14km north of Ilhéus, Bahia. The initiative has outlined seven goals: Territorial Planning; Environmental Monitoring and Control; Integrated Environmental Assessment; Improved Surveillance; Consolidation/ Structuring of Protected Areas; Roll-out of Supplementary Offset and Compensation Measures for Flora and Fauna; and Strengthening of Environmental Governance.

In June 2020, FUNBIO signed a cooperation agreement to operationally and financially manage the project. The agreement provides for the execution of actions connected to the Porto Sul Socio-environmental Consent Decree to the tune of R\$ 45 million by June 2026.

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SPECIAL PROJECTS

Unit

86 SUZANO

87 PROJECT K



SUZANO

Emergency call support



Residents gather for an activity in Iguai, Bahia. Photo: Promotion/Suzano



The project encouraged income-generation initiatives during the covid-19 pandemic. Photo: Promotion/Suzano

In a bid to attenuate the impacts of covid-19, the company Suzano, in conjunction with FUNBIO, structured an emergency support strategy to assist the communities living near its facilities in the states of Bahia, Espírito Santo, Maranhão, Minas Gerais and Pará, where it develops bio-products from planted eucalyptus. With FUNBIO providing technical guidance, a call for projects was launched to reduce the impact caused by social isolation, with a focus on two main fronts: developing actions to prevent and combat the new coronavirus; and fostering income-generation initiatives in urban and rural areas.

Throughout 2020, 469 proposals were analyzed, of which 121 were approved: 63 on the combat front and 58 geared towards income-generation. 68 of these projects were centered on urban areas and 53, rural. The selected projects, all of which had the capacity to respond rapidly to the effects of the pandemic, received donations of up to R\$5 thousand. The whole process was conducted online, as per the protocols recommended by the health authorities.

The selectees included 84 civil society organizations, 28 individual micro-enterprises, 3 cooperatives and 6 companies. In addition to the diversity of the proponents, the initiative managed to draw submissions from 67 of the 71 localities covered by the call. In all, 41 of the selected projects came from Bahia, 29 from Espírito Santo, 34 from Maranhão, 5 from Minas Gerais and 12 from Pará.

With regard to combatting the pandemic, the supported actions distributed PPEs, produced foodstuffs in vegetable plots and free range farms, purchased food for health posts and helped transport patients seeking care. In order to generate income, small enterprises received cash injections to tide them over during this period of vastly decreased sales. Support was also provided to those who were just going into business when the pandemic hit, or needed to innovate to attract new customers and clients by moving their operations online.

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PROJECT K

Knowledge for Action

Project K wound up its activities in 2019 and was formally concluded in 2020. The final technical report was drawn up and sent to Fonds Français pour l'Environmental Mondial (FFEM) and the MAVA Foundation, the project's donors in conjunction with the GEF.

The external consultancy firm hired by the FFEM also concluded its own evaluation. The GEF's final

programmed instalment and the disbursement originally earmarked for the external assessment will be rerouted in 2020 into showcasing Project K's results at international events in a bid to support RedLAC in its new projects. The GEF will draw upon the FFEM evaluation. In 2020, the tour of international events was postponed due to the covid pandemic and the RedLAC Assembly ended up being held as a virtual event.



The project is presented at the RedLAC congress: Photo: Helio Hara/FUNBIO



GEF AGENCY FUNBIO

89 PRO-SPECIES



PRO-SPECIES

National Strategic Project for the Conservation of Endangered Species



—
Hysterionica pinnatisecta.
Photo: Gustavo Heiden



—
Killifish genus (*Anablepsoides cearensis*). Photo: Sérgio Maia Queiroz



—
Black-shouldered opossum (*Caluromysiops irrupta*). Photo: Márcio Martins

A mega-diverse country, Brazil faces the daunting challenge of protecting 3,286 species currently classified as at risk of extinction: 2,113 species of flora, and 1,173 of fauna. The figures are from the National Strategic Project for the Conservation of Endangered Species—Pro-Species. In order to contribute to environmental protection actions, the initiative works to preserve 290 Critically Endangered species (listed CR) that are not found at Protected Areas, and are not covered under Endangered Species Action Plans, participatively-drafted public management plans that outline priority actions for biodiversity conservation and natural habitat preservation.

The project strives to integrate state and federal government development initiatives and to implement public policies that foster the protection, conservation and management of these threatened species. As part of the strategy, 24 territories were selected for the adoption of protective measures to avoid environmental degradation across an estimated nine million hectares. The work is carried out in conjunction with 13 states: Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Minas Gerais, Pará, Paraná, Rio Grande do Sul, Rio de Janeiro, Santa Catarina, São Paulo and Tocantins.

As a complement to integrated environmental management, Pro-Species also focuses on organizing activities that help spread awareness of the effects of predatory fishing, hunting and illegal extraction, the dangers posed by wildlife trafficking

and the importance of rapid-detection and response to invasions by exotic species. Applied in an effective manner, these actions should trigger a knock-on effect that will benefit other species of fauna and flora at risk of extinction.

In 2020, progress was recorded in the production of Territorial Action Plans (TAPs), an essential mechanism for broadening the reach of protective measures. In all, four initiatives were officially approved and announced by the state governments, and these will benefit 82 species across five states: Bahia, Minas Gerais, Rio Grande do Sul, Santa Catarina and Tocantins.

On July 7, the Cerrado Tocantins TAP was approved, establishing 16 activities for the conservation of nine species (five fauna and four flora) listed critically endangered on the IUCN Red List, including *Bromelia braunni*, a ground-growing bromeliad that can reach a height of 40 cm; *Paratrygon aiereba*, known as the discus ray, the largest freshwater ray in the Araguaia-Tocantins River Basin; and a species of pacu *Mylesinus paucisquamantus*, a medium-sized fish from the Tocantins River. In November, an executive summary of the TAP was published, marking the final phase of development and kick-starting the implementation stage.

July also saw the state government of Rio Grande do Sul officially consolidate the Southern Tableland TAP, a joint initiative with the state of Santa Catarina. Twenty-two critically endangered Atlantic

Forest species (17 of flora, and 5 of fauna) will be catered to in this plan, including *Pulsatrix perspicillata pulsatrix* (spectacled owl), *Merostachys caucasiana* (a neotropical bamboo), *Aegla brevipalma* (freshwater crustacean) and *Hysterionica pinnatisecta* (a rare plant). *Hysterionica pinnatisecta* (photo), which grows on cliffside crevices in the Rio Rastro Mountains, is endangered by coal mining operations in Santa Catarina. The plan covers 39 municipalities across the two states.

Also approved, in late December 2020, was a TAP for the Mineiro mountain chain, located in mideastern Minas Gerais state. Conservation measures will be launched for 24 threatened species: nineteen of flora, three fish species and two invertebrates. Among the species the TAP will endeavor to protect are the orchid *Hoffmannseggella milleri*, and troglobite *Eukoenia sagarana*. During the same period, the Chapada da Diamantina-Serra da Jiboia TAP was also approved, and will focus on 27 CR species in Bahia.

Also in 2020, development continued on five more TAPs, at various stages of completion: The Campanha Sul and Southeastern Mountains TAP in Rio Grande do Sul; Capixaba-Gerais TAP in Minas Gerais and Espírito Santo; Meio Norte TAP, São Paulo TAP and Xingu TAP in Mato Grosso. In fact, Mato Grosso is home to one of the two CR mammals covered by Pro-Species: the black-shouldered opossum (*Caluromysiops irrupta*) [see photo]. This rare medium-sized mammal,



Governos Estaduais:
Amazonas, Bahia, Espírito Santo,
Goiás, Maranhão, Minas Gerais,
Pará, Paraná, Rio Grande do Sul,
Rio de Janeiro, Santa Catarina,
São Paulo e Tocantins.



MINISTÉRIO DO
MEIO AMBIENTE



PRO-SPECIES



Atlantic Forest Olive (*Chionanthus fluminensis*). Photo: Inara Carolina da Silva Batista/Divulgação Pró-Espécies

a solitary nocturnal tree-dweller, is severely threatened by habitat loss through deforestation.

In addition to the TAPs, Pro-Species conducted other activities throughout 2020. In January, the project was present at JAMCAM 2020, the inter-American conference that brought together eight thousand youths from 20 countries in Paraná. To mark the occasion, an awareness workshop—“Wildlife Patrollers”—was organized to inform people about the the need to combat wildlife trafficking. Two months later, an expedition was launched to gather data at the Caparaó National Park and environs for an Atlantic Forest Fish and Aeglas NAP, coordinated by the ICMBio in partnership with the University of São Paulo.

In July, preparatory workshops were organized for the Pollinating Insect NAP, with capacity to cover up to

sixty species across the various biomes. In September, the Brazilian Ministry for the Environment and the International Union for Conservation of Nature (IUCN) ran a course on biological invasion risk analysis and the Environmental Impact Classification of Alien Taxa (EICAT) methodology. In October, expeditions coordinated under the Endemic Flora of Rio de Janeiro NAP located five threatened endemic species in the Chacrinha, Grajaú and Serra da Tiririca State Parks.

Pro-Species is implemented by GEF Agency FUNBIO, in partnership with the Brazilian Institute for Renewable Natural Resources (IBAMA), the Botanical Garden of Rio de Janeiro, the Chico Mendes Biodiversity Conservation Institute (ICMBio) and the Brazilian Ministry for the Environment. The initiative is funded by the Global Environment Facility (GEF), and executed by WWF-Brazil.

SCIENTIFIC DISCOVERIES

The National Action Plan for the Conservation of Endangered Endemic Flora in the State of Rio de Janeiro (Endemic Flora of RJ NAP), part of which is supported by Pro-Species, obtained important results through its biodiversity protection strategy in 2020. Twelve species classified as Vulnerable, Endangered or Critically Endangered were identified by researchers, who then marked good mother trees, collected the seeds and began phenological analysis—all key conservation stages.

One of the standout discoveries was the wild olive *Chionanthus fluminensis* (Oleaceae), which is listed as Critically Endangered

(CR). The species was found in rocky groves in the Tiririca Mountains, between the municipalities of Maricá and Niterói. Some specimens were marked with numbered plaques and pinned on the GPS. To produce seedlings, seeds were collected, but failed to germinate, which means the study will have to try some new techniques to stir them from dormancy.

Of the 12 species located, another two are listed as Critically Endangered, eight as Endangered, and one as Vulnerable. The ones closest to extinction are *Rhipsalis pentaptera* and *Tibouchina*

hirsutissima—the latter not found since 1982. Seeds of the endangered *Terminalia acuminata* were collected and used to produce the NAP’s very first seedlings at the Guaratiba Nursery.

The field work focused on protected areas across Rio state, such as the Costa do Sol State Park, the Massambaba Environmental Protection Area, the State-operated Jacarepiá Ecological Reserve, and the Grajaú and Serra da Tiririca State Parks. All of these PAs lie within the territory of Rio de Janeiro and are covered by the Endemic Flora NAP and the Pro-Species Project.



SDG

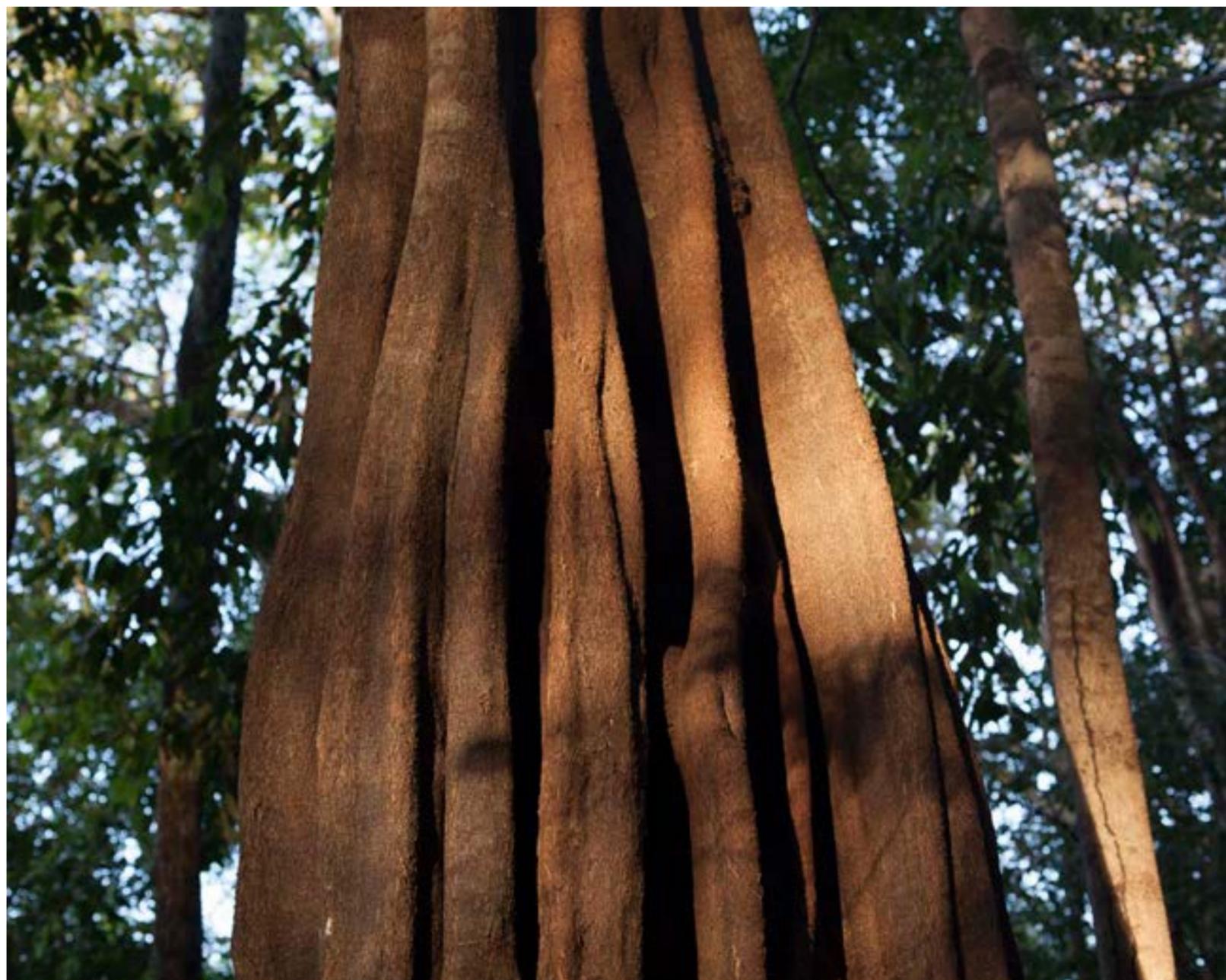


GFC AGENCY FUNBIO

92 **READINESS**



READINESS



Readiness is a line of GCF funding that sets aside USD 1 million a year for use in countries that are signatories to the United Nations Framework Convention on Climate Change (UNFCCC). Here, funding can be requested through projects put forward by the Ministry for the Economy, the GCF focal point in Brazil. The idea is to help countries prepare to apply for GCF funds. The money can be used to support national accredited entities, like FUNBIO, in structuring actions for the focal point, and to help prepare projects in accordance with GCF rules.

In late 2019, FUNBIO presented a project in the Readiness category

and was approved by the GCF. The first disbursements were made in 2020. The project “Strengthening Brazilian DAEs and executors for the implementation and execution of GCF projects” aims to support all three national accredited entities (FUNBIO, CAIXA and BNDES) in improving their capacities to operate in conjunction with the fund. The areas for improvement the project is focusing on are environmental and social safeguards, gender, and project monitoring. In addition, READINESS will support the initial drafting of projects and boost communication with public and private entities interested in accessing the GCF. Due to the Covid-19 pandemic, the project will be conducted entirely online.

Photo: Marizilda Cruppe/FUNBIO



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Cover

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Page 46

Common squirrel monkey, Amanã Sustainable Development Reserve, Amazonas. Photo: Victor Moriyama/FUNBIO

Page 72

Ubatuba, SP. Photo: Helena Wolfenson/FUNBIO

Page 85

Brejinho Productive Unit, Betânia, Pernambuco. Photo: Marizilda Cruppe/FUNBIO

Page 88

Velvet worm (*Epiperipatus adenocryptus*). Photo: Cristiano Sampaio Costa

Page 91

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