



**2021**  
**Annual Report**





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## **2021 in perspective**

Just like the previous year, 2021 was also different. The continuity of the pandemic meant that the routines and work developed by the Associação Mico-Leão-Dourado (AMLD) remained in constant adaptation, in line with the fluctuations in the health scenario in the country. This did not, however, prevent our work from moving forward.

The priorities throughout the year were the continuity of vaccination of golden lion tamarins against yellow fever and the structuring of the Mico-Leão-Dourado Ecological Park. Even so, the other programs did not stop. The park, opened in 2022, is part of our ecotourism and environmental education strategy to bring people closer to the work developed by AMLD in favor of nature conservation. In addition, it consolidates this new moment of the Association, now with its own headquarters, being able to better share all the work with partners and the public.



This new chapter of AMLD makes us look to the future with new perspectives and more opportunities to increase the impact of our initiatives on society. In 2022 we celebrate 30 years of AMLD's existence. A landmark and a symbol of this long history of nature protection that we have written together in these last decades. The celebration of this anniversary, as well as the opening of the park and the gradual (and long-awaited) end of the pandemic, fill us with good expectations for the year 2022 despite so many difficulties in the environmental area in Brazil.

This work would not have been possible without the firm support of our partners, whom we thank for staying by our side even at this difficult time. These partnerships allowed us to continue our work and get here with breath for many more years to come. And it's next to you that we want to celebrate this history!



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# 2021 Report

The pandemic remained a central challenge this year, but 2021 marked the beginning of the vaccination of Brazilians against Covid and symbolized the hope of better days. By the end of 2021, the entire Associação Mico-Leão-Dourado (AMLD) team had been vaccinated with at least the first dose against Covid. Still, most face-to-face activities remained suspended. Activities such as

courses, training and visits to the Mico-Leão-Dourado Ecological Park had to be adapted or postponed.

The economic impacts of Covid were felt strongly by some of AMLD's partners, such as nurseries and farms that work with tourism. The pandemic also delayed the analysis of yellow fever antibodies in tamarin blood samples, necessary before these animals could be translocated to the Poço das Antas Biological Reserve.



## Our goal by 2025

To ensure a viable population of golden lion tamarins, which means having 98% retention of genetic diversity and 0% probability of extinction in 100 years (as determined by scientific modeling - Vortex), it is necessary to have at least two thousand tamarins living in 25 thousand hectares of connected and protected forest.

This is the goal of Associação Mico-Leão-Dourado (AMLD) for the year 2025.

Despite the Covid pandemic, AMLD has made important strides towards achieving its conservation goals for golden lion tamarins and their habitat. do mico-leão-dourado e seu habitat

## Highlights

### Mico-Leão-Dourado Ecological Park.

Completion of the Park infrastructure at Fazenda Igarapé, where the AMLD headquarters are located. Two observation decks were built, one of which overlooks the forested highway overpass, one of the Park attractions.

**Management Plan.** Beginning the development of the Management Plan for the Park, a part of which will become a Private Reserve of Natural Heritage- RPPN.

**Vaccination.** By the end of 2021, 206 tamarins had been vaccinated against yellow fever, a disease that decimated about a third of the tamarin population after two outbreaks between 2016 and 2018.

**Monitoring.** AMLD increased the number of monitored golden lion tamarin groups from 4, in two Metapopulation Management Units, to 18 groups, spread over six Management Units, recovering the losses of monitored groups caused by yellow fever.

**Communication.** To expand communication efforts and coordinate actions such as updating the website and making better use of social networks, AMLD hired a journalist to join the AMLD team.

**Stability.** Unlike other organizations that suffered cuts with the pandemic, AMLD managed to keep its full staff for another year, the second of the health crisis.



**Restoration.** AMLD's proposal for the reintroduction of bromeliads and orchids (vascular epiphytes) in restored forest was approved by Funbio's Atlantic Forest Biodiversity and Climate Change Program, providing two years of support for this activity as part of AMLD's Forest Restoration Strategy.



# AMLD Monitor:

Number of golden lion tamarins: 2,516 (desired target - 3,706 / total before yellow fever outbreaks)



Available forest: 49,159 hectares

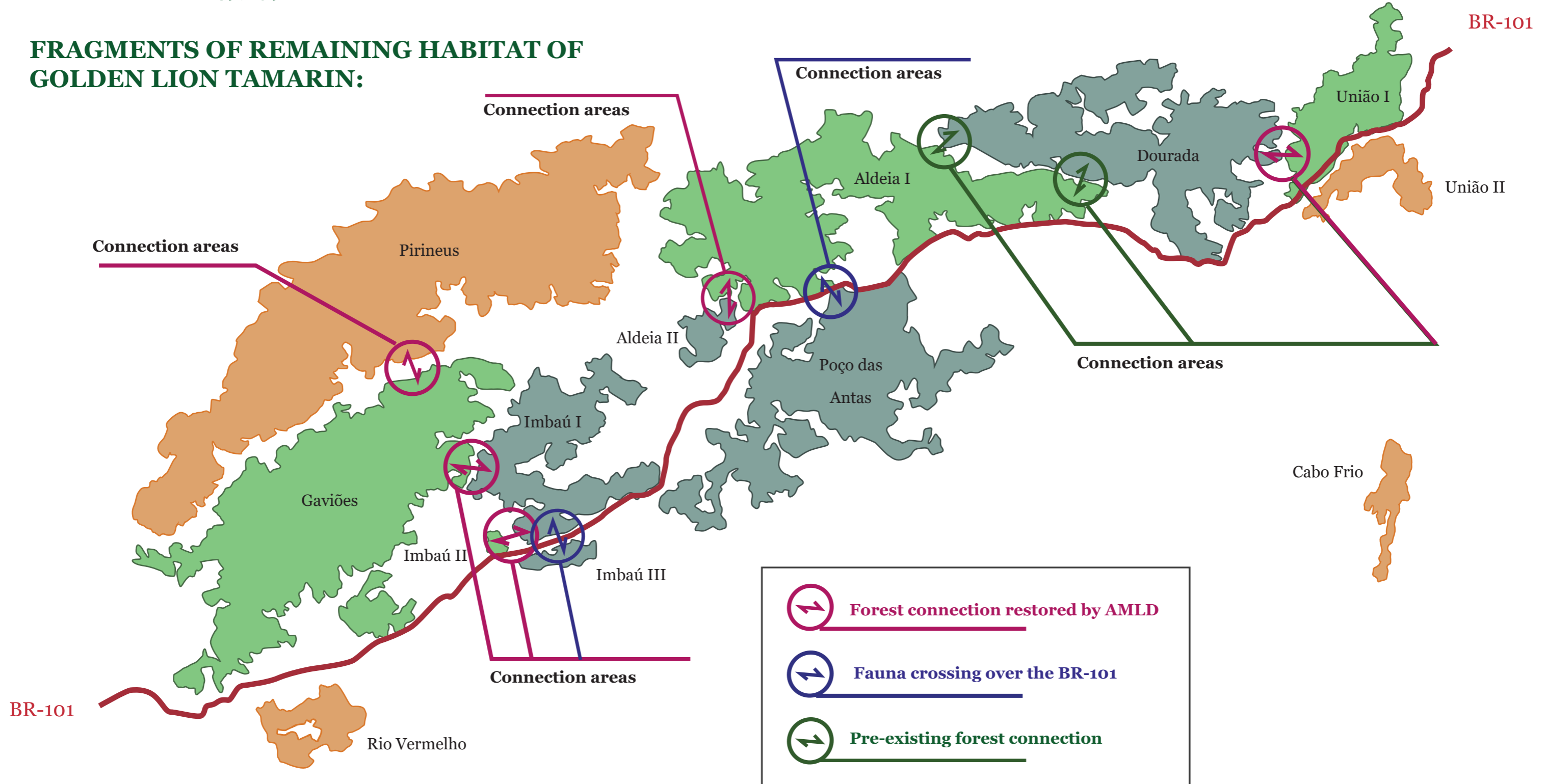
Number of tamarins in the largest connected forest block: 1,158 (target = 2,000)



Largest block of connected forest: 15,240 hectares (target 25,000 hectares)



## FRAGMENTS OF REMAINING HABITAT OF GOLDEN LION TAMARIN:





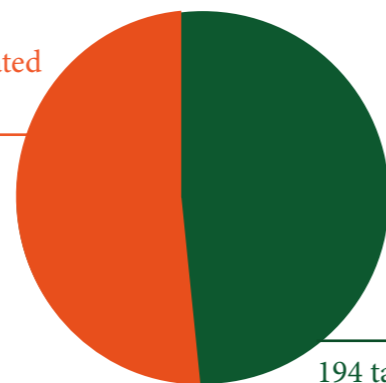
# Vaccination, monitoring and management

Between 2016 and 2018, two yellow fever outbreaks occurred in the region killing almost a third of the population of golden lion tamarins in the wild. The disease reduced the estimated population from 3,706 to 2,516 individuals and highlighted the species' vulnerability to the virus. Given the seriousness of the situation and the threat it poses to the tamarins, which remain threatened with extinction, it was necessary to seek an innovative emergency strategy. Several government agencies and non-governmental organizations joined forces and identified a way to adapt human yellow fever vaccines for non-human primates, first in captivity, then in the wild. The objective is to immunize enough GLTs to ensure a viable population protected against yellow fever in the wild in the event of a new outbreak.

After a long period of development and testing that involved several partners, such as Fiocruz, vaccination began in October 2020 and gained scale throughout 2021. By the end of the year, 206 tamarins had been vaccinated – and the work continues! AMLD's goal is to vaccinate 400 tamarins by the end of 2022. All vaccinated animals are monitored, with no side effects detected. In November 2021, 50 blood samples from vaccinated tamarins were analyzed revealing the occurrence of an immune response in 94% of these individuals.



206 vaccinated tamarins



194 tamarins unvaccinated

Yellow fever was especially critical in Poço das Antas Biological Reserve, where the initial estimate indicated that the disease decimated 92% of the tamarin population. Recent playback research efforts did not detect golden lion tamarins in this area, indicating that local extinction may have occurred in the Reserve. One of the actions planned by AMLD is to translocate five vaccinated groups to the reserve and monitor them to verify their integration with the environment and the remaining tamarins, if any. However, this action was postponed to 2022 because the partner laboratory that performs the blood tests was overwhelmed by the Covid-19 analyzes until the end of 2021. The translocation could not be carried out without confirmation that the tamarins to be released in Poço das Antas are protected against yellow fever.

The task of vaccinating the tamarins is carried out by the Metapopulation Management Strategy team, which is also in charge of another activity fundamental to AMLD's mission: monitoring wild groups of golden lion tamarins. The work aims to detect threats and eventual population declines in each of the thirteen largest remaining forest fragments that serve as habitat for this small primate, referred to as Metapopulation Management Units (UMMPs). This action also helps to track progress toward achievement of the overall conservation goal and adapt our strategies to better protect the tamarins and their habitat.

In 2021, AMLD expanded the monitoring of tamarins from four groups, distributed in two UMMPs, to 18 groups in six UMMPs, compensating for the losses caused by yellow fever. The team monitored the groups outfitted with radio collars twice a month to collect data on location, group size and composition. Through direct observations, camera traps and reports from people in the region, the team also collected data on groups which were previously known, but not monitored by telemetry, in their respective territories. Over the course of the year, the number of known groups without a radio collar grew from just one to 34, spread across seven UMMPs. Collar-monitored groups are captured twice a year for renewal of body marks, biometric data collection, battery maintenance, and identification tattoos for new individuals. AMLD has also reorganized its methods for collecting, storing, and backing up data.







# Zoos around the world and integrated management of the ex situ population

Ex situ management, that is, management carried out outside the natural environment, in captivity, is fundamental to guarantee the conservation of an endangered species such as the golden lion tamarin, restricted to a small, fragmented, and vulnerable habitat - as shown by yellow fever. Therefore, zoos are essential partners in one of AMLD's strategic lines of action. Currently, there are 156 zoos around the world that participate in the integrated management of an insurance population of golden lion tamarins that could recuperate the wild population should a disaster occur in the wild. This strategy aims to strengthen the flow of information among these

zoos, the corresponding regional zoo associations, ICMBio (the federal government agency responsible for the protection of biodiversity in Brazil), and AMLD itself, so that a sufficient number of capable zoos include space for GLTs in their collections and follow the official management rules for breeding to ensure retention of genetic diversity in the global captive population over the long term and the availability of individuals when needed to strengthen the GLT population in the wild. The cooperation and sharing of information among this global network of institutions also serves to eliminate trade and theft of this endangered



species. Additional objectives of the ex situ GLT population are to conduct relevant conservation research, provide knowledge and management tools, increase public awareness of the species' status, and thus political and financial support for its conservation.

The pandemic forced most zoos to close to visitation during 2021, which resulted in lost revenue and staff cuts. Remaining staff are overworked with little time for anything except animal care. Despite these hardships the 156 zoos together continued to maintain a viable population of golden lion tamarins in captivity – that will 96.1 % of the genetic diversity of the wild source population over 100 years. AMLD received financial support from 18 zoos, including continued support from its major zoo partners: Copenhagen Zoo, Disney Conservation Fund, Philadelphia Zoo, Smithsonian's National Zoo and Zoo Atlanta.

In August 2021, the National Center for Re-

search and Conservation of Brazilian Primates (CPB/ICMBio) convened a series of workshops to assess the need for ex situ management of 14 endangered primate species, including golden lion tamarins. The objective was to apply the guidelines of the One Plan Approach, developed by specialists (IUCN/CPSG One Plan Approach - OPA) to evaluate if ex situ management is an appropriate conservation tool for each species and to define which role(s), if any, ex situ management should play in the species' overall conservation strategy. In the case of GLTs, the need for an insurance population was confirmed, with advocacy, education, research, training, and fundraising as supporting roles. As a result, the management of the ex situ population of golden lion tamarins is now officially included in the National Action Plan for Conservation of the Atlantic Forest Primates and the Maned Sloth (PAN Primatas da Mata Atlântica e Preguiça-de-coleira).





# Connectivity

The golden lion tamarin lives in the interior of the state of Rio de Janeiro, close to one of the most important areas for oil exploitation in the country. The area is crossed by many structures that cut, fragment and isolate the remaining areas of forest and, consequently, the animal species that live in these “green islands”. Gas pipelines, oil pipelines, roads, electric transmission lines, in addition to pastures and cities, have transformed the tamarin’s habitat into a patchwork quilt. Ensuring the connection between these forest fragments and the populations living in them is one of AMLD’s most important missions.

In 2020, we completed an important step in our strategy to connect the tamarin landscape - the forested overpass, which connects the Poço das Antas Reserve on one side of the BR-101 highway, to the Mico-Leão-Dourado Ecological Park, on the other side of the highway. In addition, the company responsible for the highway, Arteris Fluminense, also built ten canopy-to-canopy bridges and 17 underground tunnels along the 4-lane stretch of BR-101. The structures were required by ICMBio to mitigate the negative impact of the widened highway on the wildlife the São João River Basin /Mico-Leão-Dourado Environmental Protection Area.

AMLD won in court the right to plant the



overpass and monitor the vegetation for four years, which we are doing with our own resources. Planting on the structure was completed in June 2021 and we continue to maintain the restored area. Through camera traps, AMLD has already registered several species making use of this wildlife bridge: crab-eating fox (*Cerdocyon thous*), armadillo (*Dasypus novemcinctus*), seriema (*Cariama cristata*), lesser grison (*Galictis cuja*), anteater (*Tamandua tetradactyla*), and tegu lizard, are some of the animals documented. In all, AMLD has installed 25 camera traps along the forested overpass and adjacent corridor areas to monitor wildlife use.

A company contracted by the highway concession-holder is monitoring the other wildlife passages over and under the highway.

In 2021, progress was also made in connecting forests affected by the Petrobras oil pipeline. Although the pipelines are underground, for safety reasons no trees are allowed in a strip of about 15 to 20 meters wide, to avoid accidents with the roots. The Connect project, carried out by AMLD’s partner, Universidade Estadual do Norte Fluminense (UENF) with resources from Petrobras, installed six canopy-to-canopy bridges over sections of the pipeline. One of the bridges was installed inside the Mico-Leão-Dourado Ecological Park.

# Atlantic Forest restoration

The Atlantic Forest restoration program is also associated with the connectivity strategy to overcome the obstacles that cut through the golden lion tamarin's habitat. The program helps create corridors between forest fragments and increase the habitat available to the tamarins. Restoration is also critical to achieve AMLD's goal of 25,000 hectares of protected and connected forest, which will ensure the conservation of golden lion tamarins over the long term.

Restoration involves not only planting native Atlantic Forest species, but also monitoring areas of existing forest; mapping priority areas for connecting forest fragments; soil analysis and correction; removal of exotic plants and grasses; and the preparation and maintenance of the seedlings after planting. The seedlings are supplied by a network of local nurseries continuously supported by AMLD.

In addition, another important step is the raising of financial resources and the establishment of partnerships with rural landowners who allow AMLD to use a portion of their land, usually along fences and riverbanks, to restore important areas for the golden lion tamarin.

One of the priority areas for restoration is a region known as Patis, a strip of about 700 meters of pasture that separates the two largest fragments of the golden lion tamarin's habitat. AMLD is negotiating with the owners of a 103-hectare ranch in this region who are open to selling the property. AMLD has submitted a proposal to fund the purchase for consideration by the Rainforest Trust. The objective is to reforest the 40 hectares of pasture to become a wide corridor for the movement of animals between the two forest fragments.

Meanwhile, AMLD continues to maintain and monitor an area of about 90 hectares it has restored in the Mico-Leão-Dourado Ecological Park and also on the forested highway overpass, where some of the trees – about two meters high, are starting to form a canopy. Since 1997, AMLD has restored 441 hectares of forest, of which 149 hectares are in government protected areas and 292 hectares on private properties. Three quarters of this total, or 325 hectares, can already be used by golden lion tamarins.

Aiming to connect other landscape gaps in the priority area for the tamarin by 2025, AMLD hired a resident of the region to mediate contact with landowners interested in allowing forest corridors to be planted on their properties.

At the end of 2020, AMLD created the “Bosque da Memória” (Remembrance Woods), in honor of the victims of Covid-19, restoring four hectares of pasture with native seedlings. The initiative is coordinated by the Atlantic Forest NGO Network, Atlantic Forest Biosphere Reserve, Atlantic Forest Restoration Pact, AMLD and Apoena. The campaign is part of the UN Decade of Ecosystem Restoration. During 2021 AMLD held four events during which 117 people from 82 families planted trees to perpetuate the memory of loved ones lost to the disease. AMLD named its forest “Bosque Ana Beatriz Cordeiro”, in honor of our local partner, land and nursery owner who was one of the victims of the pandemic.

As part of the Pact for the Restoration of the Atlantic Forest, AMLD staff participated in a continuing education course throughout the year, where topics such as restoration and monitoring techniques, management and project design were addressed.

In August 2021, AMLD responded to a request from the Brazilian Biodiversity Fund (Funbio) for proposals to restore the Atlantic Forest. The project was approved and will enable AMLD to enrich 150.25 hectares of forest with native Atlantic Forest epiphytes (bromeliads and orchids). These forest areas were planted by the AMLD team and partners at different times over the last 25 years, but they have not been colonized by this group of plants so far. AMLD will monitor the establishment of epiphytes, and the learning generated from this experience will guide future projects to restore and enrich the Atlantic Forest. The project Beginning in January 2022, the project will train nursery owners to produce epiphytes; conduct research to monitor the use of enriched areas by different wildlife groups; as well as communication, environmental education and ecotourism activities.





# Protected forest

Ensuring the permanence of forests, whether they are old growth or regenerating, is another key element in achieving the golden lion tamarin conservation landscape. AMLD works to expand this forest cover and promotes its formal protection in Protected Areas, at the federal, state or municipal level, both public and private (in the case of Private Natural Heritage Reserves - RPPNs).

There are two federal biological reserves, a state park, three municipal parks and 26 RPPNs strictly protecting golden lion tamarin habitat. In addition, most of the tamarin's habitat is included within the São João River Basin /Mico-Leão-Dourado Environmental Protection Area (APA), a federal conservation unit for sustainable use, that is, it allows limited use of the protected environmental resources.

In the future, the Mico-Leão-Dourado Ecological Park itself will become an RPPN with permanent legal protection status. Toward this objective, AMLD has signed a partnership with the Laboratory of Applied Ecology at UFRJ, coordinated by Professor Maria Fernanda Quintela, to develop research needed to prepare the area's Management Plan, a fundamental document to guide the management of a protected area.

Since August 2021, ICMBio has established the joint management of the three fede-

ral protected areas in tamarin territory - the APA and the two biological reserves (União and Poço das Antas) - through the Mico-Leão-Dourado Integrated Management Nucleus (Núcleo de Gestão Integrada - NGI). AMLD is a member of the advisory board for the newly formed NGI.



Monitoring landscape changes continues as part of the daily work of AMLD's Knowledge and Information Management Laboratory (Laboratório de Gestão do Conhecimento e Informação - LABGCI). Mapping forest remnants and the properties of strategic partners, documenting rural extension and restoration activities, and monitoring threats such as road-kills, hunting and fire, require sophisticated geoprocessing equipment. In early 2021, a partner donated to AMLD a computer capable of processing this data. The updating of the different databases and geographic information is being conducted by a member of AMLD's staff, who is being trained for this geoprocessing work.

Throughout 2021, AMLD continued to integrate its registry of partner landowners

with the databases of the various programs in its strategic plan. Data collected over 30 years of operation are being retrieved and integrated with the support of Miradi software, which documents conservation project results according to the Open Standards for the Practice of Conservation. This structure will facilitate the management of AMLD's different strategies as well as the monitoring of progress towards our long-term goal and the documentation of adaptations of the strategic plan and learning generated over time.







# Family farming and seedling production

The conservation of forests and golden lion tamarins is directly related to the well-being of local communities and the way they use and occupy the land. The participation of farm families from agrarian reform settlements and rural landowners in the area where the species occurs is fundamental for tamarin conservation and for local sustainable development.

Activities related to family farming seek to support rural producers to innovate their farming systems to generate income with crops that make landscapes more environmentally friendly. As part of this strategy, AMLD seeks to provide technical assistance and support to obtain inputs so that families can adopt organic, agroforestry systems, produce seedlings of native trees and/or mitigate environmental impacts on their properties. Several training courses on good agricultural practices and agroforestry

and organic production techniques have been offered to the local communities.

This strategy helps to keep people in the countryside, to reduce the impact of urban expansion in priority areas for the conservation of golden lion tamarins and to involve rural residents in the conservation of the species. It also helps reduce the impacts of forest fragmentation.

Because of the Covid-19 pandemic the AMLD team was unable to carry out the face-to-face events planned for 2021 - a seminar on environmental legislation for rural landowners, a modular 8-month course on sustainable agroforestry practices, and interviews with residents of the region to update the AMLD database. To fill this gap, AMLD raised funds to finance activities that homeowners could do on their own, individually and safely, on their properties

AMLD continued technical support for the five families that own the nurseries which supply native Atlantic Forest seedlings for AMLD's forest restoration. AMLD has continuously monitored these family nurseries for over ten years and provided many training cycles to enable them to supply up to 150,000 native seedlings per year, of more than 100 species. The pandemic has reduced demand for seedlings, imposing financial difficulties on nurseries. The Association obtained two emergency loans to buy basic items and two other loans for supplies, equipment and maintenance to help mitigate the problem.

A highlight of 2021, mentioned in the restoration strategy, was the approval of a project that by 2023 will train nursery owners and purchase a total of almost 40,000 seedlings of native epiphytes, such as bromeliads and orchids, to environmentally enrich areas undergoing restoration.

AMLD also installed signs at 13 AMLD partner properties that indicate the activities carried out with AMLD. These help to strengthen relationships and pique the interest of other landowners.

At its headquarters AMLD is developing an agroecology demonstration area that includes organic production, an irrigation system, a waste composting structure, and Agroforestry Systems (SAFs) that

will be used for training and dissemination of these practices, especially cocoa and forest garden SAFs. These SAFs are frequently visited by the wild golden lion tamarins, indicating that they are a good strategy for connecting forest fragments.





# Environmental education and social engagement

AMLD's Environmental Education Program is one of the oldest in Brazil aimed at raising awareness of the importance of protecting an endangered species and its habitat. The main objective is for the local public to value the forest and biodiversity and recognize the golden lion tamarin as a local symbol and part of the identity of the communities

living in the area where the species occurs. The actions target not only teachers and students, but also the residents of the region, in general, so that they become allies in the protection of the tamarin and its habitat.

Due to the health restrictions imposed by the pandemic, most face-to-face environmental education activities were postponed. To deal with the limitations, the AMLD team had to reinvent one of its most successful initiatives: the continuing education course Rediscovering the Atlantic Forest, for public and private school teachers in the municipalities of Casimiro de Abreu, Rio Bonito and Silva Jardim. For the first time since 2003, when it was first offered, the 2021 edition targeted course alumni (cohorts of 2003-2019) with the objective of updating their qualifications as environmental education professionals.



Instead of regular face-to-face meetings, the 2021 course was carried out through five online meetings between July and November, and a final in-person event where some of the participants had the chance to personally get to know the space of the future Mico-Leão-Dourado Ecological Park. Specialists were invited to join the educators in discussing threats to biodiversity, such as hunting, trafficking in wild animals, invasive species, and the impacts of the BR-101 on wildlife movement. AMLD also demonstrated its current actions to address such threats in the region. The course had 22 participants enrolled, most of them teachers, representing 16 schools in the region.

The Guardians of the Forest program, that trains young people from rural areas to act as environmental monitors, as well as the recreational events and tamarin watching activities that focus on raising environmental awareness of the region's children, all had to be postponed in 2021 because of the pandemic restrictions.

The Association instead concentrated on planning educational activities to be carried out in the Mico-Leão-Dourado Ecological Park. In addition to the permanent exhibition, interpretive trails were structured to support environmental education activities.



# Public policy

Part of the golden lion tamarin conservation strategy includes the development and implementation of local, regional and national public policies that support the restoration and protection of forests and populations of golden lion tamarins.

Actions include strengthening institutions to develop, manage and monitor environmental planning; ensuring dialogue between government and non-governmental entities involved in environmental management; and disseminating details of public policies related to nature conservation.

In 2021, AMLD hosted visits at its headquarters, by the newly elected mayors of the three municipalities that concentrate the largest populations of tamarins: Casimiro de Abreu, Rio Bonito and Silva Jardim.

AMLD participated in meetings of the Environment Councils of two municipalities, Silva Jardim and Casimiro de Abreu, in addition to meetings to develop their environmental education policies. AMLD remained a member of environmental and other councils that did not meet in 2021, due to the pandemic.

AMLD also continued GLT management activities included in the National Action Plan for the Conservation of Primates of the Atlantic Forest and the Maned Sloth (PAN PPMA). AMLD also joined

changes to environmental public policies.

AMLD played an important role in monitoring the impacts of the BR101 highway that crosses the area where the golden lion tamarin occurs, and in monitoring compliance with the environmental mitigation requirements set out in the licensing for the highway widening.



AMLD is a regional unit of the Pact for the Restoration of the Atlantic Forest and actively participates in the initiative.

AMLD also participates in the National Action Plan (PAN) for Endangered Primates of the Atlantic Forest and the Maned Sloth (PAN PPMA).

AMLD is a member of the national coordination group of the Atlantic Forest NGO Network and participates in several mobilizations for the conservation of the biome.





# Ecotourism and preparations for the Mico-Leão-Dourado

Nature tourism is a potential tool to ensure the protection of the natural environment and to generate employment and income for local residents. In addition, ecotourism is an opportunity for education and environmental awareness. Initially, AMLD only worked with tourism in guided tours to see the tamarins in the forest.

With the purchase of Fazenda Igaraapé and relocation of the AMLD headquarters from the Poço das Antas Biological Reserve, the Mico-Leão-Dourado Ecological Park began to be structured.

With the pandemic, all in-person and visitation activities were suspended, but the park structuring process continued at full steam in 2021! Two wooden observation decks were built, one close to the administrative headquarters and another that serves as a lookout over the forested highway overpass. In addition, construction began on another major attraction: a 15-meter high tower for observation of the restored area, completed in 2022.



Also in 2021, a permanent exhibit about golden lion tamarin conservation was designed in partnership with the company Art Unlimited, which specializes in large international shows. Assembly was completed in 2022. Other planning activities in 2021 included selection of an ecotourism specialist, development of visitation itineraries, trails and signage for the park, in addition to defining a service for scheduling visits.

Despite the pandemic having closed AMLD's doors for visitation throughout 2021, the Association helped promote local tourism events, such as hiking or cycling in nature. AMLD also maintained its partnership with ICMBio, Inea, municipal environmental secretariats and private reserve owners.



# Communication and media coverage

Communication is one of the strategies to multiply the reach of AMLD's work and to disseminate the concepts of nature conservation. This work is mainly done through social networks, but also with events, publications, newsletters and stories in the national and international media. The communication strategy is carried out in partnership with Save The Golden Lion Tamarin (SGLT). While the AMLD has as its main focus the Brazilian and regional public (in the municipalities in the area of occurrence of the golden lion tamarin), SGLT focuses on the general international public and on the zoo teams that together manage the captive GLT population. SGLT's role is essential to facilitate the relationship with international donors and to raise support for the cause of conservation and for development of AMLD's work.

In November 2021, AMLD hired a professional for the communication team to enhance and expand efforts of this strategy within the Association.

Given the pandemic scenario and restrictions, participation in events was limited or virtual. Still, the AMLD team participated in thirteen events and congresses in 2021.

In celebration of the International Golden Lion Tamarin Day, celebrated on August 2, AMLD held a virtual drawing contest with the theme "Connecting Tamarins: Planting Trees for Golden Lion Tamarins", with two children's categories and one for adults. About 30 people from three different countries participated in the contest. The three winners won a tree planted in their name at the Mico-Leão-Dourado Ecological Park, in addition to a kit of tamarin products.

In 2021, AMLD made 136 posts on Facebook, reaching more than 137 thousand people. AMLD's page had 24,346 followers. On Instagram, 75 posts were made throughout the year and AMLD's profile reached the mark of 9,780 followers.

The golden lion tamarin and AMLD were the subject of 64 articles in 2021, 37 of which were international and 27 national, with stories published by the international news agency Reuters, BBC Times and the Brazilian television program Fantástico, on Rede Globo. The most discussed topics were the forested highway overpass, yellow fever and tamarin vaccination and Bosque da Memória, an initiative to plant native trees in honor of the victims of Covid-19.

AMLD's North American partner Save the Golden Lion Tamarin (SGLT) had 12 thousand visits to its website, with 9.5 thousand unique visitors and 22 thousand page views in 2021. SGLT reached 910 subscribers to its newsletter. It had 3,600 followers on Facebook, where it made 90 posts and had 42,000 views; on Instagram, there were 63 posts and 154 followers; on Twitter, 114 tweets and 147 followers. The SGLT LinkedIn page was launched in November 2021 and has 39 followers.

Among the improvements planned for 2022 are an update of the AMLD website, with mobile phone adaptation and greater functionality.







# Thank You to All Our 2021 Supporters!

The AMLD Team – members, board, staff, and the more than 2.500 golden lion tamarins living in the wild – send our enormous thanks to our partners who believe in our work and help to make this enormous conservation effort a reality. This thanks is even more special in these difficult times of pandemic. We also thank our local partners, government and non-government, local communities, farmers, teachers, and so many others, without whom this work would not be possible.

In 2021, AMLD received financial support, directly and via our partners Save the Golden Lion Tamarin and Lion Tamarins of Brazil Fund, from the following institutions and individuals. In order of importance, the support was divided into categories: Major Partners, Golden Circle, GLT Champions, GLT Ambassadors, GLT Guardians and GLT Friends.



## MAJOR PARTNERS

(Institutions contributing US\$10,000+ for two or more consecutive years)

- Brazilian Biodiversity Fund FUNBIO/ ExxonMobil Brasil
- Copenhagen Zoo
- Disney Conservation Fund
- DOB Ecology
- EDF Norte Fluminense
- Philadelphia Zoo
- Smithsonian's National Zoo/ Conservation Nation
- Zoo Atlanta

## GOLDEN CIRCLE (Other Contributors of US\$5,000+)

Curraghs Wildlife Park, Fundação de Apoio à Pesquisa Científica e Tecnológica da UFRRJ – FAPUR, Menagerie du Jardin des Plantes, Mohamed bin Zayed Species Conservation Fund.

## GLT CHAMPIONS (Contributors of US\$1,001 – US\$5,000)

Beauval Zoo Park, Virginia & Bryan Burney, Amanda Collins/Adobe Inc., Lou Ann and James Dietz, Lili Theresa Engels, Gaia Zoo, Doug & Mary Kay Mitchell, Print Fresh, Milwaukee County Zoological Gardens, North Carolina Chapter of AAZK, Robyn Rowlands, Wellington Zoo.

## GLT AMBASSADORS (Contributors of US\$500 – US\$1,000)

Airon Physical Therapy, Toni Allen, Kara & Tom Arundel, Anne Baker & Bob Lacy, Ben & Beate Beck, Marcia B. Brown, Buttonwood Park Zoo and Zoological Society, CUMRU's Little Tamarins/ Governor Mifflin School District, Dickerson Park Zoo, Christine and John Engels, Susan Ford, Frankfurt Zoo, Honolulu Zoo Aloha Aina Conservation Fund, Wayne Jacobson, Sa Ming Foundation, Santa Ana Zoo, Jeff Taylor, Leslie Wilkes, Ian Yeomans.







### GLT GUARDIANS (Contributors of US\$101 – US\$499)

Grant (Lysa) Aemmer, Amazon Smile Foundation, Jon Robin Baitz, Baton Rouge Chapter of AAZK, James Beck & Joy Ferrante, Larry Broadwell & Marsha Broadwell, John Butler, Ines Castro, Geoffrey Coleman, Karla Crane, Carolyn Crockett and Bob Brooks, Nancy de Moraes, Roberto de Moraes, Douglas Reber Dunkel, Deborah Edlin, Andrew Engels, Tarsila C. Fonseca, Antony Francesconi, Ana Frace, Teresa Heathcote, Christy & Andrew Hoover, Idea Tours, Thomas Johnson, Kenton Kerns, Kristin Leus, Patricia Roberts, Joy Shneider, Matthew Steil, Moira Tamayo, Berry Wilson, Janusz Zaporski .

### GLT FRIENDS (Contributors of US1- US100)

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Grooming

### Zoo Support

In addition to the zoos and zoo-related organizations acknowledged above for their technical and financial support for GLT Conservation in situ, we are grateful to the 156 zoos around the world who participate in the GLT International Captive Breeding Program and the GLT International Studbook Keeper and Regional Coordinators who manage the ex-situ population of GLTs as insurance should a disaster occur with the wild population.

International Studbook Keeper: Jennifer Mickelberg (Zoo Atlanta)

Europe Regional Coordinator: Bryan Carroll (Bristol Zoo)

North America Regional Coordinator: Jennifer Mickelberg (Zoo Atlanta)

Brazil Regional Coordinator: Mara Cristina Marques (São Paulo Zoo)

Australia Regional Coordinator: Amanda Embury (Zoos Victoria)

