

# Golden Lion Tamarin (*Leontopithecus rosalia*)

## Strategic Plan 2016-2025

### 2018 Annual Progress Report



**Associação Mico-Leão-Dourado (AMLD)** is a Brazilian non-governmental organization founded in 1992 to keep GLTs from extinction.

**Save the Golden Lion Tamarin (SGLT)** is a United States based public charity created in 2005 to provide technical and financial support to help AMLD continue work to achieve this vision.



Photo Andreia Martins

#### *Our vision for the future:*

*a landscape with enough protected and connected lowland Atlantic Forest to harbor at least one self-sustaining Golden Lion Tamarin population and continue to provide ecosystem services that improve the well-being of people who also live in the region.*

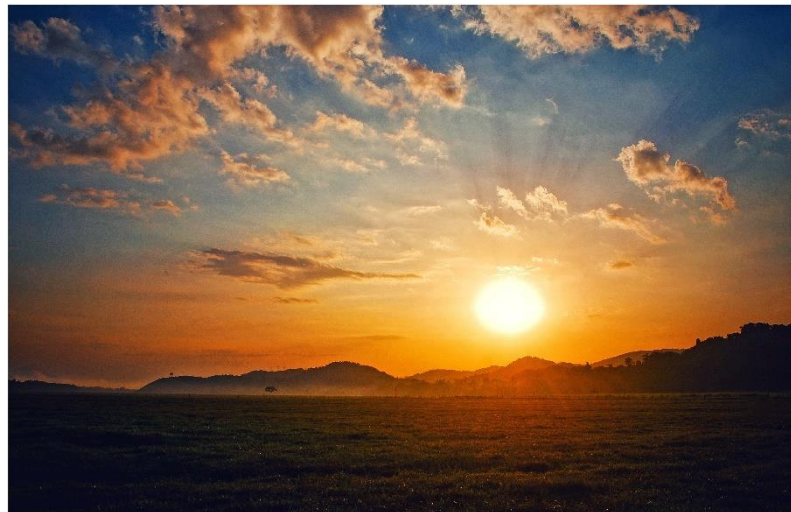
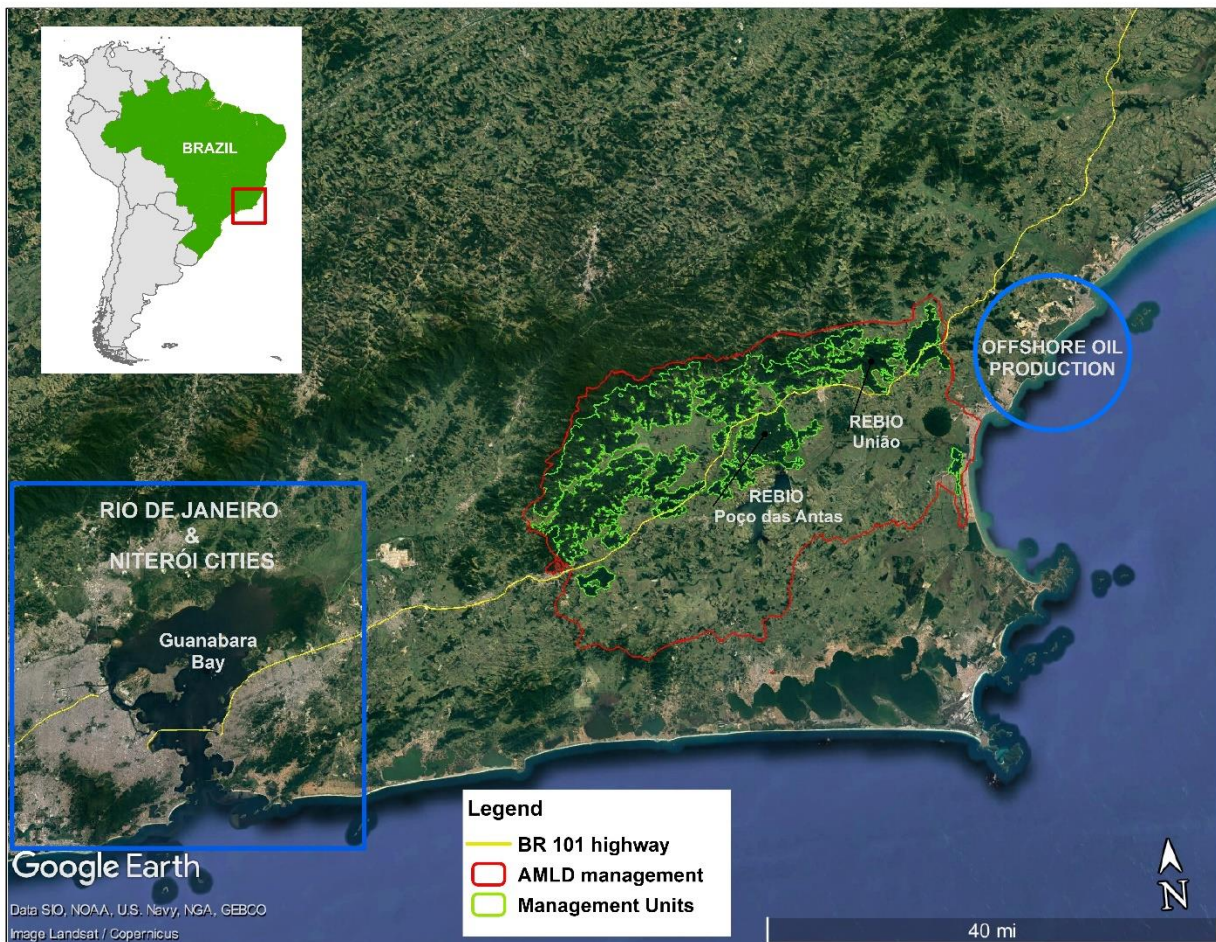


Photo: Luiz Thiago de Jesus

## Background

**About Golden Lion Tamarins:** This tiny red-gold monkey once occurred throughout the coastal region of Rio de Janeiro State, Brazil. Captured for the pet trade in Europe beginning in the 1500's, the population in the wild was reduced to an estimated 200 individuals by the time the practice was halted in the 1970s. Successful reintroduction of zoo-born individuals increased the wild population by an estimated 25%, but was concluded in 2000 due to lack of additional available habitat.

**Their Habitat:** The Golden Lion Tamarin habitat (lowland Atlantic coastal forest) remaining today is located in the São João and Macaé River Basins in the north of the state of Rio de Janeiro, Brazil – about 80km from the Rio de Janeiro metropolitan area. This forest was greatly reduced and fragmented by centuries of deforestation for timber, then firewood, and then for agriculture. Deforestation no longer occurs, but the remaining forest is fragmented into isolated forest islands separated by towns and cattle pasture. None of these fragments is large enough to support a viable population of Golden Lion Tamarins.



## Current major Threats to Golden Lion Tamarin conservation

### *Threats that permanently prevent the reconnection of forest fragments:*

- Conversion of forest and pasture to weekend homes and commercial development.
- Highways, gas and oil pipelines, and high-tension electric lines that pass through the center of the São João/Macaé River Basins.

### *Threats that could eliminate the entire Golden Lion Tamarin species population:*

- Potential catastrophes such as disease – In 2017 a major outbreak of yellow fever in our region killed humans and non-human primates. In May 2018 the first GLT death was confirmed.

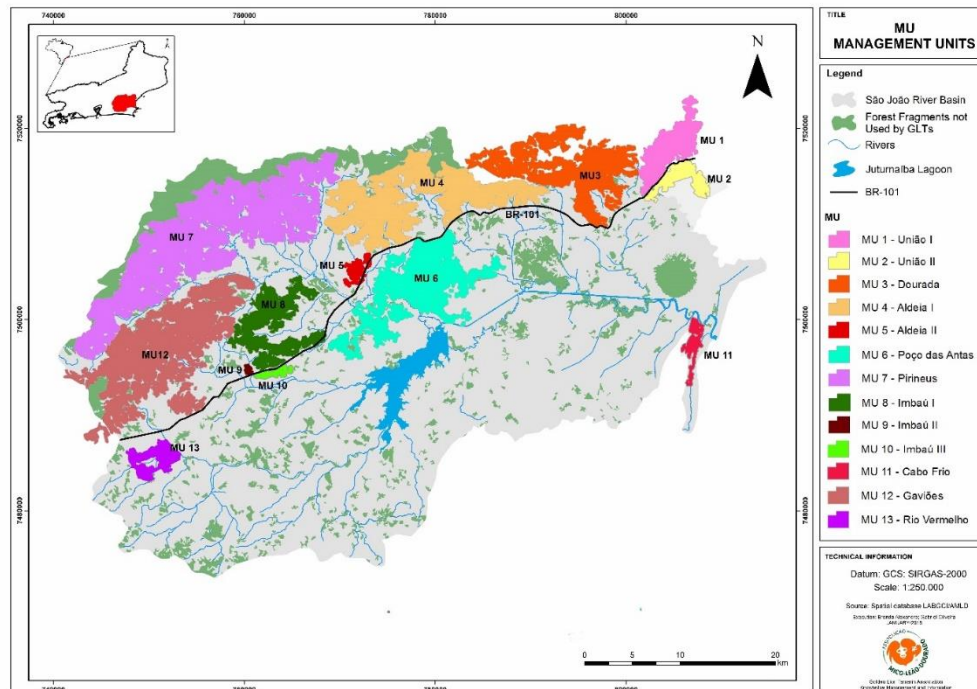
## Our Strategic Plan 2016-2025

In 2015, AMLD and partners developed a 10-year strategic plan to secure at least one viable population of GLTs with 98% retention of its genetic diversity and 0% probability of extinction. This plan follows the Open Standards for the Practice of Conservation.

### **Our Goal:**

**By 2025, 2000 GLTs in 25,000 hectares of protected and connected forest**

**Geographic Scope:** Our work focuses on the 13 largest remaining GLT habitat fragments, that we call GLT Management Units - MUs, all in the São João and Macaé River Basins in Rio de Janeiro State, Brazil (See map).



**AMLD's Actions to achieve the goal:** Connect the Management Units so GLTs can move among them, and permanently protect the forest habitat and the GLTs from current and new threats that may occur.

**Our 2016-2025 strategic plan contains 13 strategies that together are designed to achieve our goal:**

- ***Four strategies focus on restoring the GLT population to viability***
  - Scientific monitoring of the viability of the GLT population in its forest habitat.
  - Field monitoring and management of the GLT Metapopulation in the wild.
  - Emergency plan to reduce effects of epizootic disease -- newly designed in 2018 in response to an outbreak of yellow fever.
  - Management of the ex situ GLT Metapopulation to support the in situ GLT Metapopulation.
- ***Four focus on connecting forest fragments and permanently maintaining forest cover***
  - Forest Protection.
  - Forest Restoration.
  - Influence widening of interstate highway BR101 to include bridges for GLTs and other wildlife.
  - Influence the development and implementation of local, regional, and national public policy.
- ***Three help local people to understand the value of the forest for their own well-being and engage them in the restoration and long-term protection of a connected forest landscape.***
  - Sustainable agriculture - empower farm families to use agroecology practices to generate forest-friendly income and thus not sell their land to developers.
  - Environmental education – both in schools and the communities.
  - Develop regional sustainable tourism.
- ***Two strategies support the implementation of all strategies to achieve our Goal:***
  - Communications and marketing use media to reach local, national and international publics with messages designed to further achieve strategy objectives.
  - Strengthen and sustain AMLD's institutional capacity to assure implementation, evaluation, and adaptation of the 10-year strategic plan.

# Golden Lion Tamarin Strategic Plan 2016-2025

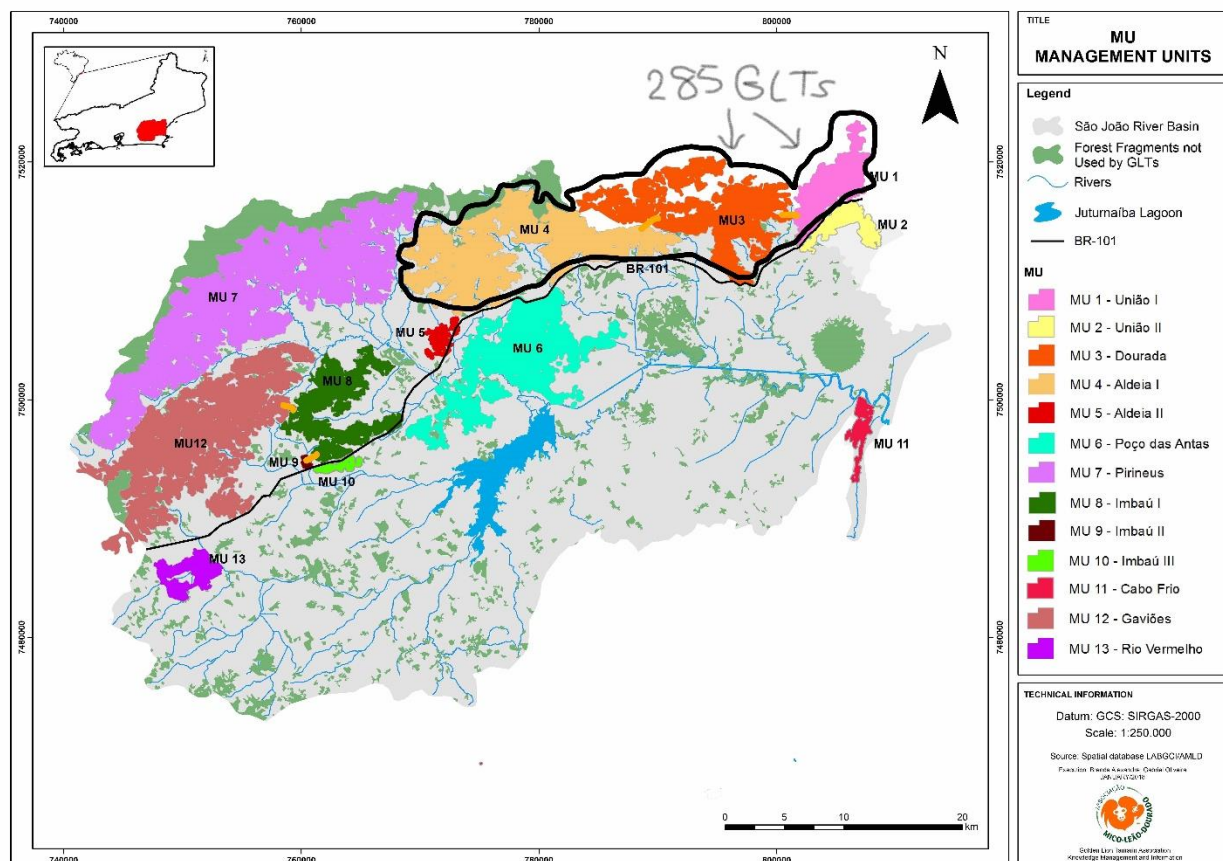
## 2018 Annual Progress Report

### Our Goal:

By 2025, 2000 GLTs in one block of 25,000 hectares of protected and connected forest

### Status December 31, 2018:

- We have a total of 2414 GLTs in 49,159 hectares of forest, but not all is yet connected and protected.
- So far, the largest block of connected & protected forest is 6841 hectares and only has 285 GLTs (MU1 + MU3 below).



Orange lines show 4 functional connections (GLTs seen crossing) between MUs. Heavy black line indicates the largest block (15,240 hectares) of functionally connected forest. MU1 and MU3 (6,841 hectares) are “protected” by the portion of the União Biological Reserve north of BR101. These 6,841 hectares of connected and protected forest contain 285 GLTs.

## Our strategies and results achieved in 2018

### **I. Restore the GLT population to viability**

#### **Scientific monitoring and management of GLTs in their forest habitat.**

Focused directly on restoring the GLT metapopulation to viability, this strategy includes field activities to scientifically manage GLT populations in small, isolated habitat fragments, collection and analysis of data on GLT biology and status and detection of and reaction to potential threats to the GLT population, e.g. epizootic diseases. AMLD's database contains information on ca. 15 groups of GLTs and their habitat collected continuously over 36 years. This information guides our conservation work and informs about our progress.



Photo: Andreia Martins

#### **Measures of progress toward our goal - 2000 GLTs in 25,000 hectares of connected and protected forest habitat:**

##### **Indicator 1: # GLTs in the São João and Macaé River Basins (current GLT distribution)**

Desired status: 3,700

Baseline 2014: 3,706 (Analysis of 2014 survey was completed in January 2019)

Status 2018: **2,414**

There is no evidence that numbers decreased between 2014-2017.

Preliminary results of 2018 survey suggest 35% loss due to Yellow Fever, with greatest losses in largest MUs and those with greatest indices of connectivity: MU6 Poço das Antas (75% reduction), MU7 Pirineus (71% reduction).

##### **Indicator 2: # hectares of available forest habitat in São João & Macaé River Basins**

Desired status: >25,000

Baseline 2015: No measurement available

Status 2018: **49,159**

There is enough forest to meet our goal, but the forest is fragmented.

The amount of forest hasn't decreased since 2015, but our ability to measure it has improved with progressively higher resolution satellite images and better analysis technology.

##### **Indicator 3: # of the 13 GLT MUs that have one or more \*functional connections to other GLT Management Units**

Desired status: 11 (MU13 Rio Vermelho and MU11 Cabo Frio are too far from other MUs to allow their connection with planted forest corridors).

Baseline 2015: zero

Status 2018: **6** – (see Map) MU1 União I, MU3 Dourada (2 connections), MU4 Aldeia I, MU8 Imbaú I (2 connections), MU9 – Imbaú II, MU12 – Gaviões

\*Functional connections are points where GLTs were seen crossing between MUs. Two functional connections (MU1 União I + MU3 Dourada; MU8 Imbaú I + MU9 Imbaú II) were made possible by corridors AMLD planted. In 2018, AMLD documented occurrences of GLTs crossing from MU8 using corridors planted by AMLD and reproducing with GLTs in MU9.

**Indicator 4: # hectares in largest block of functionally connected MUs**

Desired status: 25,000

Baseline 2015: no measurement available

Status 2018: **15,240**

The largest block is MU1 União + MU3 Dourada + MU4 Aldeia I.

To meet our goal of 25,000 hectares of connected forest we need to:

- plant corridors to connect:
  - MU7 Pirineus to MU4 Aldeia I (known as Bananeiras)
  - MU7 Pirineus to MU12 Gaviões (known as Patis)
  - MU6 Poço das Antas to MU4 Aldeia I (Highway BR101 forested overpass)
- maintain or reinforce fragile forest connections
  - MU12 Gaviões + MU8 Imbaú I
  - MU4 Aldeia I + MU3 Dourada (canopy to canopy bridge over 2-lane road)
- investigate in MU6 if there still are points where GLTs can cross over the São João River between the Cambucaes area and the Poço das Antas Reserve.
- engage communities living in these priority connection areas in AMLD's forest restoration and protection activities

**Indicator 5: # hectares of “protected” forest in largest block of connected MUs**

Desired status: 25,000

Baseline 2015: No measurement available

Status 2018: **6,841**. This includes the portion of the União Reserve in the MU1+MU3+MU4 block. We have not yet analyzed forest cover of private reserves, RLs, or APPs in this block.

To be considered protected, an area must meet 3 criteria:

1. has permanent legal protection as a public park or reserve with resolved land tenure, a private reserve, or an APP or RL (areas of private property where Brazil's Forest Code requires forest cover).
2. covered by mature or regenerating forest
3. have a conservation program

In 2017, MU3 Dourada, already connected to MU1 via an AMLD-planted corridor, was officially added to União Reserve. In 2018, government funds were allocated for the indemnification of landowners. AMLD has restored all possible degraded areas in União Reserve, adding 40 hectares of “protected” forest. See Google Earth Photos 2010 and 2018. AMLD already restored all degraded areas within the Poço das Antas Reserve adding 157 hectares of protected forest to MU6, which is not yet connected to any other MU. See Google Earth photos 2012 and 2018.

Next priorities to achieve our goal of 25,000 hectares of protected and connected forest:

- Connect the two parts of União Reserve (MU1 and MU2) that are separated by BR101 highway.
- Evaluate forest cover of private protected areas (reserves, RLs, APPs) in each MU.
- In MU4: promote the resolution of land tenure and identify areas for forest restoration in Corrego do Veado Municipal Park; create a private reserve to protect AMLD's recently purchased Igarapé Farm and restore 100 hectares of forest.
- In MU6 Poço das Antas, evaluate forest cover of any private protected areas (reserves, RLs, APPs). In MU7 Pirineus, evaluate forest cover of private protected areas (private reserves, APPs, RLs); assess land tenure and identify areas for reforestation in Três Picos State Park.

**Indicator 6: # GLTs in the protected portion of the largest block of connected Management Units (#GLTs in connected and protected forest)**

Desired status: 2,000

Baseline 2015: No measurement available

Status 2018: **285** (14 GLTs in MU3 portion, and 271 in MU1 portion of União Reserve).

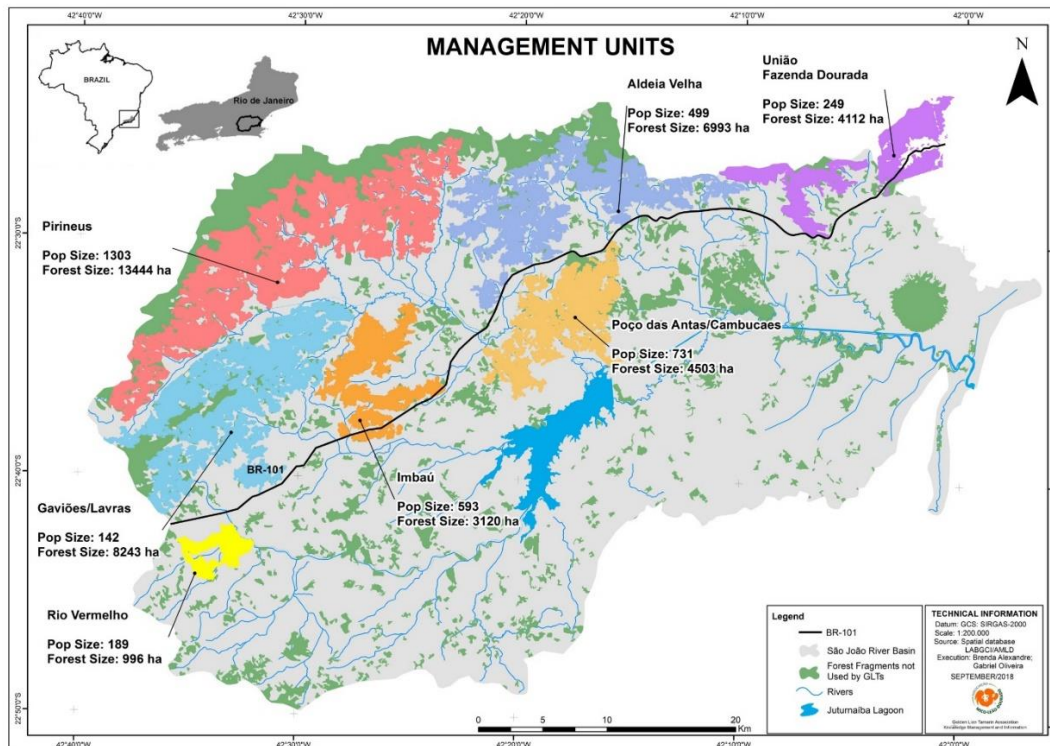
Results are preliminary pending completion of analysis of 2018 census.

**Emergency plan to reduce effects of epizootic disease on the GLT population**

In January 2017, dead and dying monkeys were reported in states adjacent to Rio de Janeiro. The cause was yellow fever, a mosquito-borne virus that infects humans and nonhuman primates. Mortality in nonhuman primates is high in some species and serves as an indicator of yellow fever presence, thereby signaling the need for mass vaccination of the local human population. In 2018, AMLD worked with Brazilian human health and environment authorities, yellow fever specialists, and field researchers to develop and begin implementation of an emergency action plan to reduce the impact of yellow fever on GLTs as well as the humans living and visiting the area. The plan includes: collaboration with local health officials to ensure that all people in the region are vaccinated for yellow fever; an awareness campaign to protect people and monkeys in the area; a census of GLT populations to estimate losses to yellow fever; and collaboration with partners to develop a safe and effective yellow fever vaccine for GLTs.

**Measures of Progress in 2018:**

- Safe and effective vaccine was developed for GLTs
- All people in the region vaccinated for YF
- 2018 GLT census completed. Analysis is in progress for comparison with 2014.



Map shows GLT population sizes in GLT Management Units as determined from a 2014 census (Ruiz et al. in review).



### **Integrate management of the ex-situ and in-situ populations.**

This strategy aims to improve the flow of information and support among the 150 zoos holding GLTs worldwide, Brazilian federal agencies and AMLD to ensure that a scientifically managed ex-situ GLT population exists to rebuild the in-situ population after any potential catastrophe and also to prevent the return of the GLT pet trade. Participants in the design and implementation of this strategy include: AMLD staff; Save the Golden Lion Tamarin board members; the international studbook keeper and regional coordinators (North America, Europe, Brazil) who manage the ex-situ GLT populations; representatives of the European zoo association (EAZA) and the IUCN Conservation Planning Specialist Group; and Brazilian government officials responsible for the National Action Plans for Endangered Primates. This strategy's activities include: genetic and demographic management of the ex-situ GLT population; development of Brazilian government policies and agreements for the management of ex-situ GLT populations located in North America, Europe and Brazil; capacity building for Brazilian zoo educators and animal care staff; and providing the zoo community worldwide with updated information about in-situ GLT conservation.

### **Measures of Progress in 2018:**

- GLT ex-situ population maintained and scientifically managed in 150 holding institutions. Capable of providing GLTs for reintroduction should the need occur.
- Staff members of 16 (11%) of the 150 GLT holding institutions were trained in GLT conservation.
- 18 (12%) of the 150 GLT holding institutions engaged in educating their publics about GLT conservation.
- The Brazilian Zoo Society campaign “Year of the Golden Lion Tamarin” 2017-2018 reached 48,000 Brazilians.



Brazilian Zoo Educators learned to plan conservation education projects in a 20-hour workshop led by AMLD & SGLT educators and sponsored by the Brazilian Association of Zoos and Aquariums and Baurú Zoo (São Paulo)

## II. Connect forest fragments and permanently maintain forest cover

### Forest restoration.

This strategy aims to restore connections between isolated fragments of GLT habitat and to increase the forest cover of legally protected land. This is accomplished through: analysis of existing forest connections and priorities for restoration; developing partnerships with landowners to restore forest in compliance with legal requirements of the Forest Code in areas that are also critical for connecting GLT habitat fragments; developing partnerships with corporations required to finance forest restoration to mitigate their environmental impact; empowering local nursery owners to produce and sell ca. 75 species of native tree seedlings thus ensuring a supply chain in the region; planting forest corridors and restoring degraded areas in public protected areas; monitoring the progress of areas in the process of restoration, and monitoring the overall forest cover and connectivity in AMLD's geographic scope. To date, AMLD has planted 25 forest corridors and reforested 338 ha.



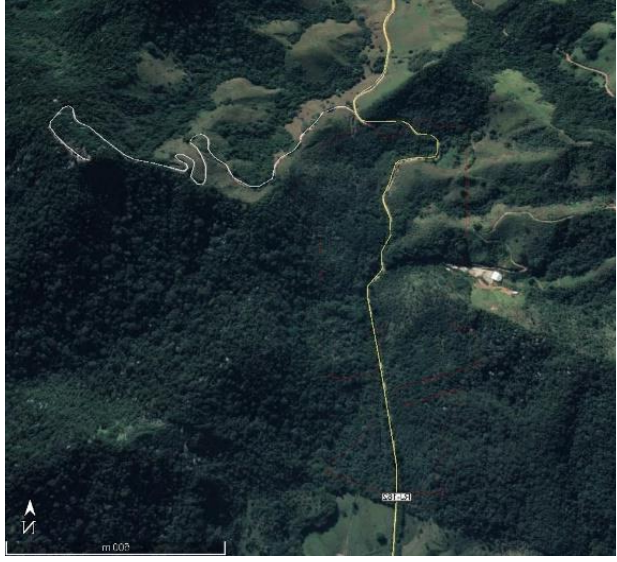
Above: Planting a corridor at Igarapé Farm.

Right: Measuring growth of a planted corridor



### Measures of Progress in 2018:

- 696,382 native tree seedlings planted since 1997 (43,726 planted in 2018)
- 338 hectares of GLT habitat and corridors restored or in process of restoration since 1997
- All degraded land (197 hectares) in Poço das Antas and União Reserves restored to forest



Google Earth Photos of the 40-hectare Dourada Corridor in 2010 and 2018. AMLD planted this corridor to connect MU1 and MU3. The area was annexed to the União Reserve in 2017.



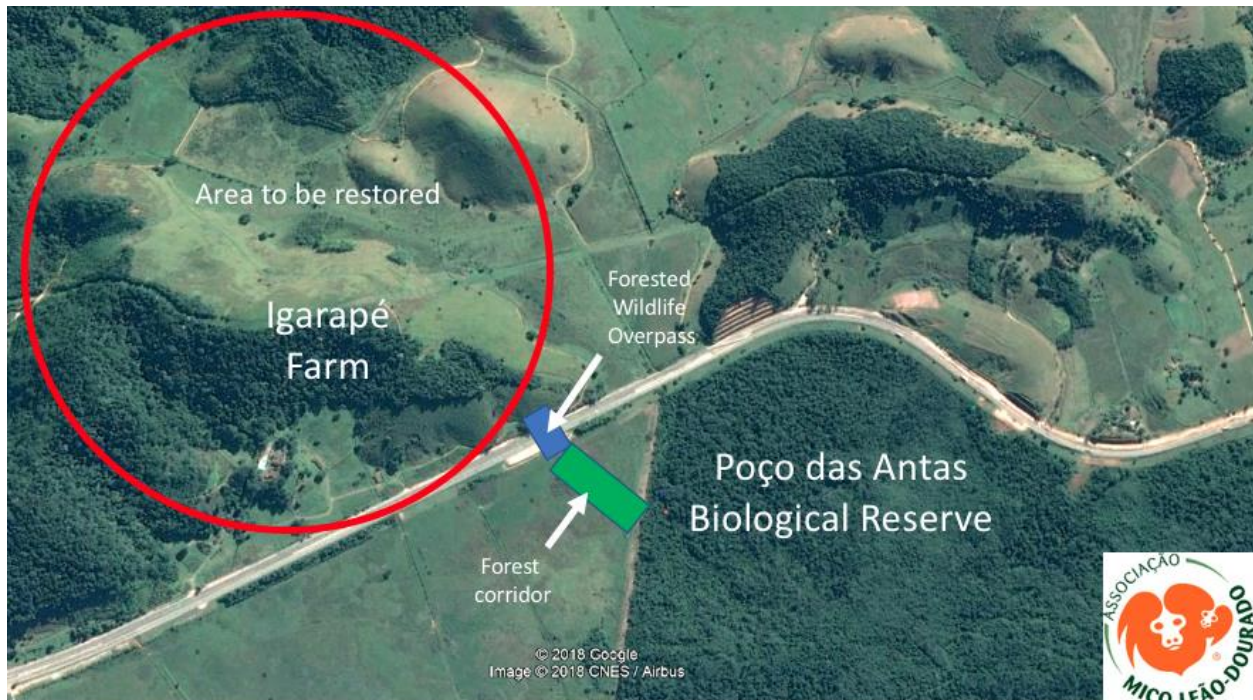
Google Earth photos in 2012 and 2018 showing 157 hectares of forest AMLD restored in Poço das Antas Reserve.

### **Forest Protection.**

This strategy seeks to permanently protect GLT habitat from the threats of development and further fragmentation by roads and energy-transport infrastructure. We define “protected forest” as areas that meet three criteria: 1. have permanent legal protection; 2. are covered with mature-stature forest or are in the process of restoration--which takes about 7 years; 3. have an effective management program. This strategy includes activities to increase the area, forest cover, and effective management of three types of legally protected land in the geographic scope: public conservation units (2 biological reserves, 1 state and 3 municipal parks); 43 permanent private reserves; and areas of private land where permanent forest cover is required under Brazil’s new Forest Code (Lei 12.651/2012). Rural landowners are required to register these areas in the “Cadastro Ambiental Rural” (CAR), a public online land registry that integrates forest cover and land ownership information. The Forest Code requires that rural landowners maintain forest cover on steep slopes and along watercourses (APP), and on 20% of their property (RL). AMLD uses CAR data and satellite image analysis to monitor compliance of the more than 600 privately owned rural properties in the region and to identify properties in which forest restoration is legally required and that will also increase forest connectivity. To date, 29,548 ha of forest is protected in parks, biological reserves and private reserves in AMLD’s geographic scope.

#### **Measures of Progress in 2018:**

- AMLD played an important role in União Reserve’s creation in 1998. In 2017, 4,531 hectares were legally added to União Reserve bringing the total area to 7,757 hectares. In 2018, government resources were allocated for indemnification. Land tenure is thus expected to be resolved in 2019.
- 9,040 hectares of forest are protected in 3 (União and Poço das Antas Reserves and Atalaia Municipal Park) of the 6 legally declared public parks and reserves. 197 hectares of this forest was restored by AMLD (see photo above). 5,362 hectares of forest in 3 parks (Três Picos State Park, Córrego do Veado and Mico-leão-dourado Municipal Parks) are not protected. In 2019, AMLD will identify areas for forest restoration and promote resolution of land tenure in Três Picos and Córrego do Veado Parks.
- Using satellite imagery AMLD verified 100% forest cover for the 18 private reserves – 1,535 hectares - for which maps were available. AMLD will verify forest cover for an additional 25 private reserves in the São João and Macaé River Basins when maps are obtained.
- In 2018, AMLD purchased the Igarapé Farm, located in MU4 Aldeia I at the point where the forested overpass over BR101 Highway will connect with Poço das Antas Reserve in MU6. AMLD initiated restoration of 150 hectares of pasture on the farm and plans to convert the entire property to a private reserve in 2019.



### **Influence widening of interstate highway BR101 to include bridges for GLTs.**

Widening of interstate highway BR101 threatens to permanently isolate three large forest fragments and their GLT populations (ca. 732 individuals) from fragments north of the highway. This separation would make it much more difficult for AMLD to achieve a viable population of GLTs. Forested overpasses that GLTs can use are the only effective solution. This strategy focuses on the opportunity presented by a federal law requiring environmental permits for infrastructure construction. Beginning in 2012, AMLD convened meetings, organized an international public petition and informed the many players involved in this issue: local, state, and federal offices of two federal government environment agencies, the federal transportation agency, the federal judicial system, the Brazilian company holding the highway concession, and its multinational shareholders. AMLD convinced federal agencies of the need for forested wildlife bridges over BR101 and that stipulation was included in the construction permit. In November 2018, following 7 years of negotiation and litigation by AMLD, construction began on Brazil's first forested wildlife overpass. The bridge is designed to connect wildlife populations of Poço das Antas Reserve with those in large forest fragments north of the highway. After completion, AMLD will monitor use of the bridge by GLTs and make recommendations for any adaptations that are deemed necessary.

#### **Measures of Progress in 2018:**

- After 7 years of negotiations, in November 2018 construction began on Brazil's first forested overpass, which will connect Poço das Antas Reserve (MU6) with MU4 at AMLD's recently purchased (2018) Igarapé Farm.
- AMLD planted forest corridors on both sides of the overpass site to assure the MU6+MU4 connection.
- Discussions are underway with the highway company and the federal environmental agencies to design a structure to connect the two sections of União Reserve (MU1 and MU2), now divided by BR101.



View from Igarapé Farm: AMLD planted a forest corridor in September 2018 connecting Poço das Antas Reserve (in background) with the site for the forested overpass over BR101.



In November 2018, the corporation holding the toll-road concession began construction of Brazil's first forested wildlife overpass. The bridge will span BR101 highway.

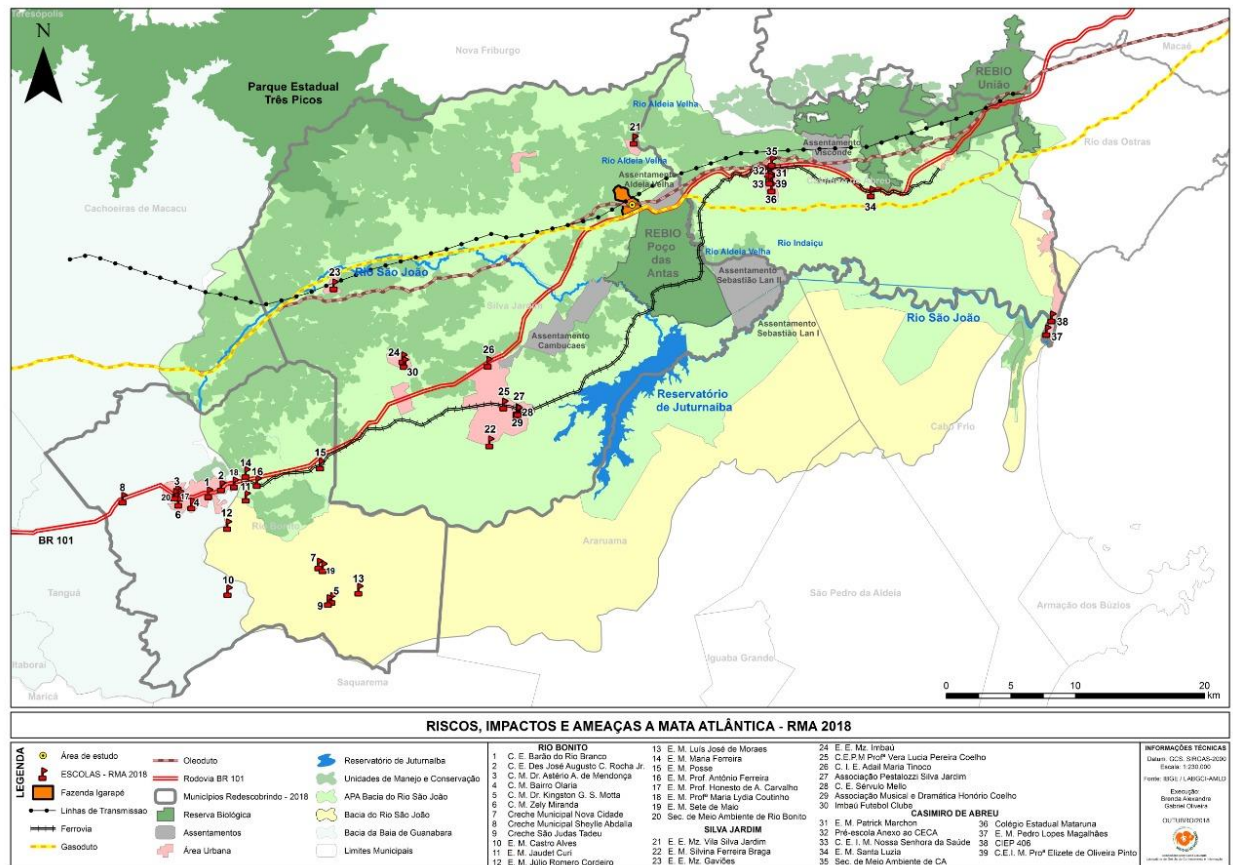
### **Public policy.**

This strategy aims to influence the development and implementation of municipal, regional and national public policies that contribute to forest protection and connectivity in AMLD's geographic scope, and restoration of a viable population of GLTs. Activities are designed to empower institutions in environmental planning, management, and oversight; ensure communication among government and non-governmental institutions involved in environmental management; and communicate details of public policies. AMLD participates in public policy forums and advisory councils for public protected areas, watersheds, endangered species, tourism, land use planning, and contagious-disease control.

### III. Engage local people in the restoration and long-term protection of a connected forest landscape.

#### Environmental education—building awareness and citizenship.

This strategy aims to reduce threats caused by unplanned regional development, as well as to increase local public engagement in the restoration and long-term protection of a connected forest landscape. Activities are designed to help local residents learn about the local forest ecosystem (including GLTs), become aware of the benefits it provides to their own well-being, understand the threats to forests, and become engaged in local forest conservation actions. AMLD's 10-session in-service program Rediscovering the Atlantic Forest (RMA) trains an annual cohort of local teachers and community leaders to integrate these concepts into their teaching and other activities, and thus multiply the number of engaged citizens. AMLD uses social media groups to network RMA alumni and to support and monitor their continued activities in schools and communities. In 2018, AMLD initiated a new initiative, Guardians of the Forest, to engage adolescents living in rural communities adjacent to priority areas for connecting fragments of GLT habitat. Participants connect with nature and GLTs through experiences designed to inspire, engage, and encourage new discoveries and understandings. AMLD also involves local residents in educational activities conducted at the Education Center at Poço das Antas Reserve, in forests on private reserves and at events conducted in local communities.



Teachers participating in the 2018 RMA course mapped the location of their schools in relation to the São João River Watershed (yellow); municipal boundaries, remaining forest (darker green), the state and federal protected areas, Igarapé Farm (red), and threats: BR101 highway (red line); gas pipeline (yellow line); oil pipeline (pink dotted line); high tension electric lines (black dotted line); railroad (black track line); urban areas (pink) and settlement communities (grey).



Teachers participating in Rediscovering the Atlantic Forest (RMA) study local water resources. Here they are measuring the width of a stream to determine the amount of forest landowners must maintain on each side to protect it as required by Brazil's Forest Code.



AMLD partner and tree-nursery owner explains to RMA participants how she collects seeds from native trees, plants the seeds and raises seedlings to sell for forest restoration.

Local youth *Guardians of the Forest* learn from AMLD foresters how to plant a forest corridor





### **Strengthen sustainable agriculture on family farms.**

This strategy seeks to empower farm families to generate “forest-friendly” income and thus not sell their land to developers. Sustainable agricultural practices also reduce improper use of fire, one of the main threats to GLT habitat. To accomplish this, AMLD works in partnership with government and academic institutions to provide technical support to local agroforestry initiatives and to family-run tree nurseries that raise and sell native tree seedlings for use in reforestation. AMLD promotes and provides training in agroecological farming practices and maintains a database of rural landowner properties and conservation actions.



Owner of a local tree nursery delivers seedlings she sold to AMLD for reforestation at Igarapé Farm.



Local farm families learn the practice of agroecology as they work cooperatively. At left they are preparing an agroforestry plot with vegetables. At right they are preparing an agroforestry plot with fruit trees.

**Regional sustainable tourism.**

Sustainable tourism addresses threats caused by conversion of rural areas to urban areas by providing forest-friendly income to participating landowners and to the region. Sustainable tourism supports AMLD’s institutional sustainability, provides opportunities for visitors to connect with nature and become engaged in local conservation, and builds local pride in the region’s biodiversity and rural culture. AMLD initiated this strategy with visits to see GLTs in the forest and has since added meals and lodging at partnering family farms, visits to local agroforests, and planting tree seedlings in forest corridors. AMLD works with partners to develop sustainable tourism as a major economic alternative in a region which is one of the economically poorest in the state of Rio de Janeiro, but also the richest in biodiversity.

Local, national, and international visitors come to see GLTs in the forest



Local students learn to track GLTs in the forest and plant trees as part of their visit.

**Measures of Progress for Community Engagement Strategies in 2018:**

- 180 teachers from local schools in 8 cohorts (36 in the 2018 cohort) successfully completed AMLD’s award-winning Rediscovering the Atlantic Forest course since it was first offered in 2003.
- 3,633 children engaged in local environmental education activities by the educators who successfully completed the Rediscovering the Atlantic Forest course.
- 6,251 local people engaged in conservation since 2015 through AMLD’s community outreach efforts.
- 502 local people engaged since 2015 in forest-friendly economic development opportunities.
- Since 2015, AMLD provided 5,433 people with tools that help connect them with nature

**IV. Support the implementation and adaptive management of AMLD’s long-term Strategic Plan**

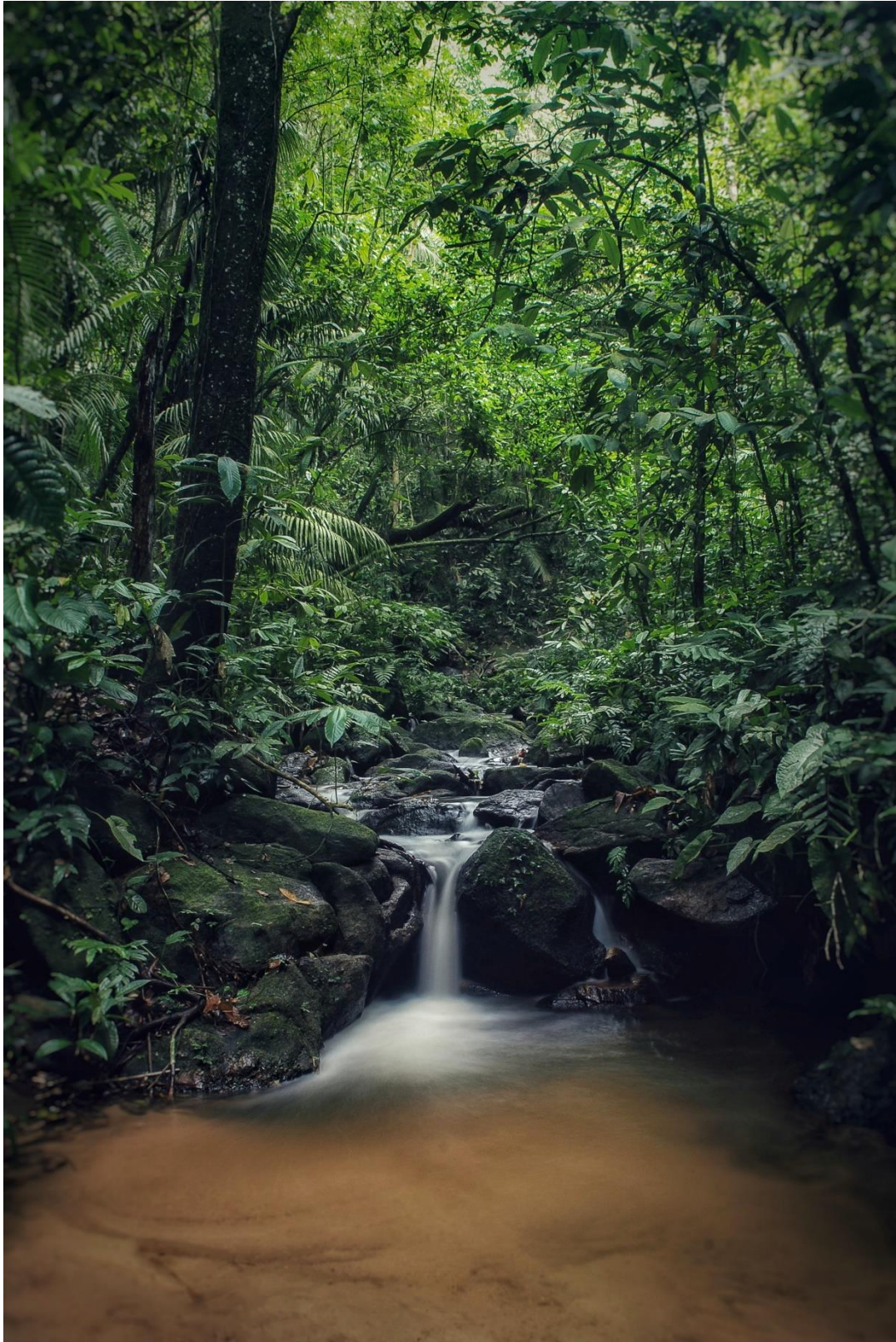
**Communications and marketing.**

This strategy uses mass media, websites, electronic newsletters, social media, technical publications, conferences, promotional materials, and face-to-face events to reach local, national, and international publics with messages designed to increase support for all of AMLD’s strategies.

**Strengthen AMLD’s institutional sustainability.**

Because GLT habitat is relatively small and fragmented, and under high pressure for development, the monitoring, management and protection of the species and its habitat will be necessary for the foreseeable future. With a dedicated and competent local staff and a large number of respected collaborators, AMLD is the only organization with the necessary commitment and capacity to coordinate the development, implementation, monitoring, and adaptation of a strategic plan to ensure a viable population of GLTs is achieved and maintained. This strategy focuses on building and maintaining AMLD’s capacity to implement all steps in its strategic plan. If it is to survive on the long term, AMLD must continually invest in improving all aspects of its administration: strategic, technical, financial planning, accounting, fundraising, personnel management, partnerships and communications.

	<p>Associação Mico-leão-dourado  <a href="http://www.micoleao.org.br">www.micoleao.org.br</a>  <a href="https://www.facebook.com/associaçãomicoleaodourado">www.facebook.com/associaçãomicoleaodourado</a>            Instagram @associaçãomicoleaodourado</p> <p>Caixa Postal 109 968            CEP 28860-970 Casimiro de Abreu – RJ – Brasil  <a href="mailto:micoleao@micoleao.org.br">micoleao@micoleao.org.br</a></p>
	<p>Save the Golden Lion Tamarin  <a href="http://www.SaveTheLionTamarin.org">www.SaveTheLionTamarin.org</a>  <a href="https://www.facebook.com/saveglts">www.facebook.com/saveglts</a>  <a href="https://twitter.com/SaveTheGLT">https://twitter.com/SaveTheGLT</a></p> <p>303 Cavalier Court            Silver Spring MD 20901 USA  <a href="mailto:Contact@SaveTheLionTamarin.org">Contact@SaveTheLionTamarin.org</a></p>



Gaviões Forest

Photo: Luiz Thiago de Jesus

# Thank You to Our 2018 Supporters!

*Your support made possible the progress described in this report  
and helps assure a future in the wild for Golden Lion Tamarins*



## **Thank you to our Major Partner Institutions for your long-term financial and technical contributions:**

Copenhagen Zoo  
DOB Ecology  
EDF Norte Fluminense  
Philadelphia Zoo  
Saving Species  
Smithsonian National Zoological Park/Friends of the National Zoo  
The Walt Disney Company  
Zoo Atlanta

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Miami University (Project Dragonfly - Earth Expeditions), Ohio, USA  
NHK TV, Japan  
Van Steen Idéia Tours, Brazil  
Wellington Zoo, Newtown, New Zealand

## **Supporters who made major financial contributions through SAVE THE GOLDEN LION TAMARIN:**

### **US\$10,000+**

American Association of Zoo Keepers (AAZK), USA  
Disney Conservation Fund, USA  
Harezo Shimizu, Japan

### **US\$1,000 - \$5,000**

Dr. Anne Baker and Dr. Robert Lacy, Jonesboro, Maine, USA  
Karen Bonnin, Silver Spring, Maryland, USA  
Brandywine Zoo AAZK Chapter, Wilmington, Delaware, USA  
Virginia Burney, McCordsville, Indiana, USA  
James and Lou Ann Dietz, Mount Jackson, Virginia, USA

John Engels, Gainesville, Florida, USA  
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Roger Williams Park Zoo AAZK Chapter, Providence, Rhode Island, USA  
Schwab Charitable/Regan Family Fund for Giving, USA  
Leslie Wilkes, Alexandria, Virginia, USA

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Baton Rouge Zoo AAZK Chapter, USA  
Buttonwood Park Zoo, New Bedford, Massachusetts, USA  
Dickerson Park Zoo/Friends of the Zoo, Springfield, Missouri, USA  
Terry Engels, Minneapolis, USA  
Georgia AAZK Chapter, Atlanta, Georgia, USA  
Jeremy Mallinson, Jersey, UK  
National Capital Chapter AAZK, Washington, DC, USA  
Jeffrey Taylor, Washington, DC, USA

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Kristin Leus, Antwerp, Belgium  
Kathryn Meredith, Vienna, Virginia, USA  
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Jennifer Mickelberg, Atlanta, Georgia, USA  
Clyde Nishimura, Alexandria, Virginia, USA  
Paradise Wildlife Park, Hertfordshire, England, UK  
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Mathew Steil, Washington, DC, USA  
Pilar Useche  
Kate Warner  
Ian Yeomans, Manchester, England, UK  
Elizabeth Yoshimi Nagagata, Fairfax, Virginia, USA  
Janusz Zaporski, Rio de Janeiro, Rio de Janeiro, Brazil

## ZOO PARTNERS

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*Obrigado! Thank you!*



Photo: Andreia Martins