

Evaluations of endangered species programs: The golden lion tamarin as an example

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US E/T expenditures Fiscal Year 2000 (Federal & state)

Total, non-land acquisition: US \$524 mill

listed species: 1235

Median for species (>US \$ 100): \$19,400

species > US \$ 1 million: 55

Top 5 species: 4 species salmon, steelhead

& US expenditures on international ES programs

Annual program costs (@2004)

Golden lion tamarins: ~ US \$ 0.8 mill

Reintroduction, reforestation/ corridors, education, policy, ecology, monitoring

Channel Island grey fox: ~ US \$ 1.2 mill

Invasive species removal, captive breeding, reintroduction, monitoring

Black-footed ferret: > US \$ 2.0 mill

Prairie dog protection, captive breeding, reintroduction, monitoring

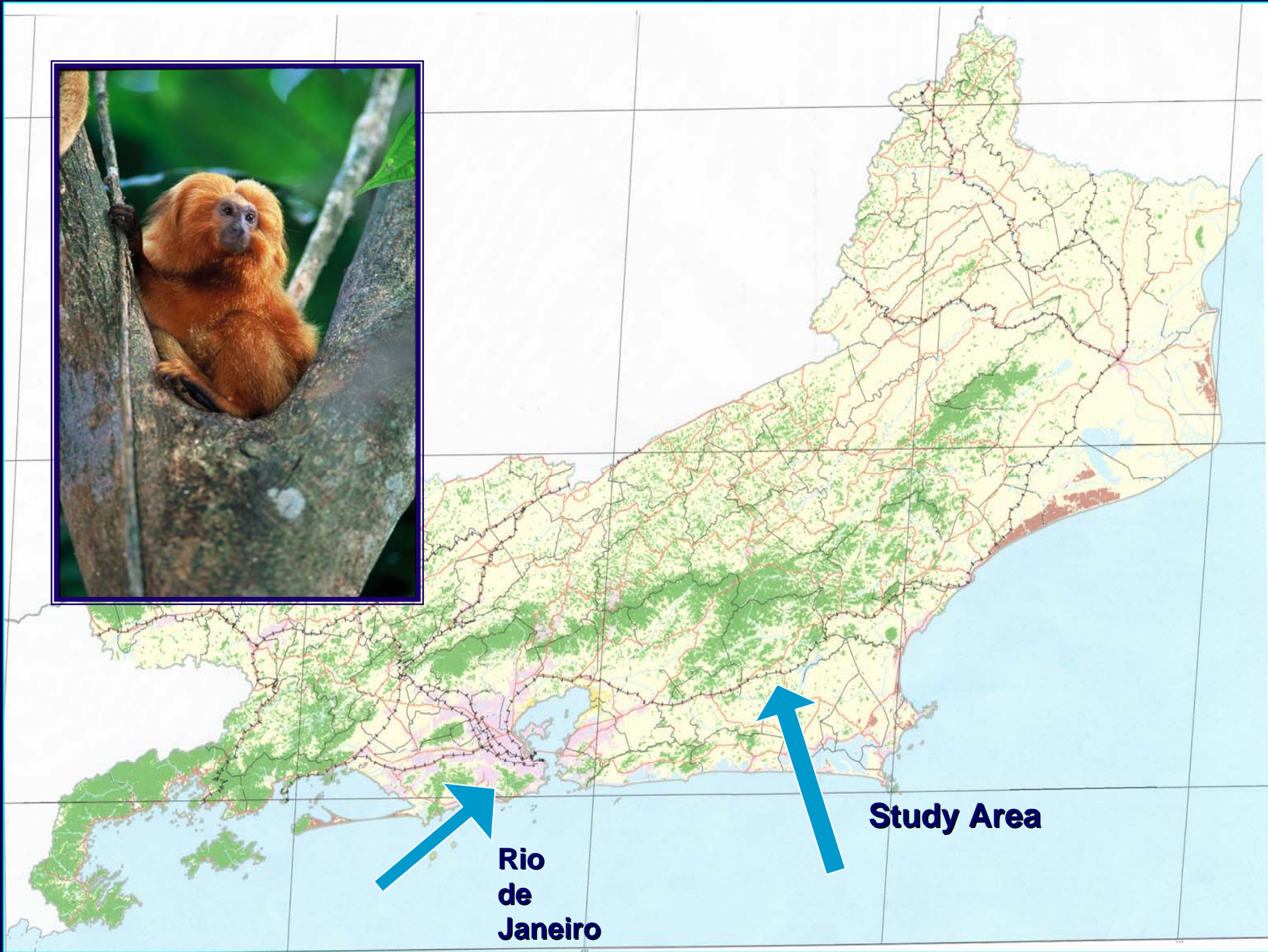
Whooping cranes: ~ US \$ 1.5 mill

Captive breeding, imprinting, reintroduction & migration, monitoring

Golden Lion Tamarins:

A flagship species program to recover a species and protect, restore and expand the Atlantic rainforest of Brazil & its biodiversity (also an international zoo success story)





**Rio
de
Janeiro**

Study Area

Golden Lion Tamarin Status in 1972

NUMBERS:

In wild:

Several 100 ?

In zoos:

@ 75 GLTs

of zoos:

16



Adelmar Coimbra-Filho

**James Dietz/ Andy Baker/
Carlos Ruiz-Miranda –
ecology/ behavior**

**Lou Ann Dietz/ Elizabeth
Nagagata- education**

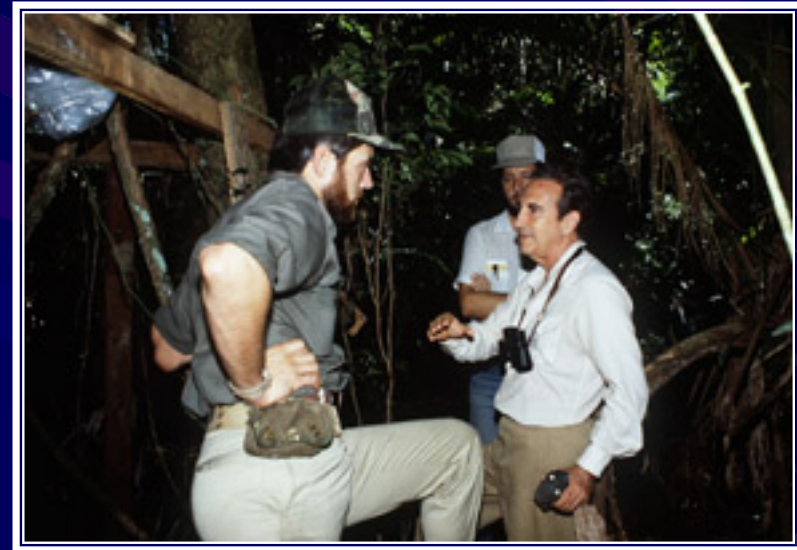
**Ben Beck/ Andreia Martins
- reintroduction**

**Jon Ballou – captive
population management**

**Denise Rambaldi– AMLD
Executive Director**

**Cecilia Kierulff/ Paula
Procopio- ecology,
translocation**

**Collaborators:
Sharing the
journey (to 1997)**

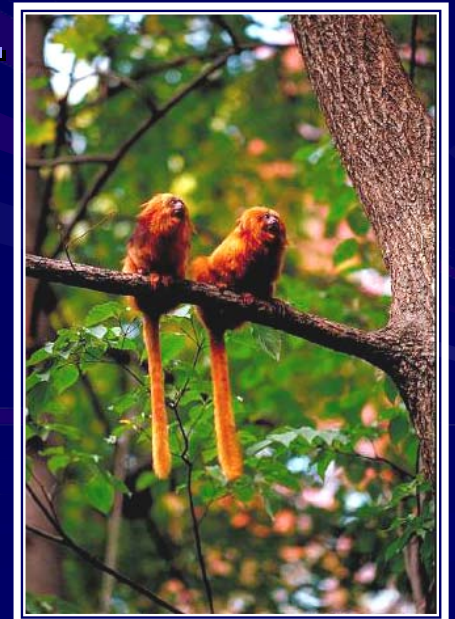


Setting long-term objectives: Golden lion tamarins & the Atlantic forest

REQUIRED FOR 2025

For a naturally evolving population of Golden Lion Tamarins by 2025, we need.....

- 1) Protected habitat = >23,000 ha
- 2) Protected GLTs = >2,000



Golden Lion Tamarin Conservation Program Activities (thru 1997)

I. *THE CAPTIVE POPULATION:*

Captive breeding and population management

II. *THE WILD POPULATION:*

Field research on population status and behavioral ecology

III. *REINTRODUCTION AND TRANSLOCATION:*

Preparation, release, and long-term monitoring

IV. *THE HABITAT:*

Protection, management, preservation, restoration

V. *CAPACITY BUILDING AND OUTREACH:*

Local education, national outreach, professional training

Timeline

- **1972- 82: Captive breeding & research**
- **1974: Poço das Antas Reserve established**
- **1983: Ecological studies begin**
- **1984: First reintroduction**
- **1991: First complete census**
- **1993: Golden Lion Tamarin Association created (AMLTD)**
- **1993: Tamarin translocations begin**
- **1997: 2nd Reserve (União) created**





Strategic Planning

**Informal strategic planning –
biannually (?): 1983 on**

**Formal species strategic
planning with IUCN/SSC CBSG:
1991, 1997**

Program evaluation: 1997

The Evaluation Team

- **Ross Simons, Chair - Smithsonian Institution**
- **John Robinson- Wildlife Conservation Society (WCS) (NY)**
- **Kent Redford - The Nature Conservancy and WCS**
- **Russ Mittermeier – Conservation International**
- **Marcio Ayres - WCS**
- **Suzana Padua – IPE (Brazil)**
- **Michael Wright - African Wildlife Foundation (had to drop out)**

Evaluation process

- ❑ **Surveys of zoos**
- ❑ **Self-reports by chief coordinators**
- ❑ **Evaluation Team had meetings and interviews with:**
 - Donors (e.g. WWF, CI-Brazil, etc)
 - Brazilian Staff
 - Invested stakeholders (e.g. government officials, university colleagues)
 - Non-invested stakeholders (competitors, colleagues, knowledgeable individuals)

Process Issues

- **Most Evaluation Team members knew the program – not impartial nor objective, but they understood the issues**
- **Evaluation team not paid – no Final Report ever completed, thus no closure**
- **Evaluation team inbred, highly placed, and not evaluators by training or experience - BUT, they were motivated (evaluations were not occurring in endangered species programs)**

Results & positive benefits from recommendations

- ❑ **> authority to Brazilians and local non-profit NGO**
- ❑ **> emphasis on the conservation value of research activities**
- ❑ **> focus on forging Brazilian university and research institute relationships & increased training of Brazilians**
- ❑ **> focus on social, institutional and economic issues within the region**

Lessons Learned for reviews of endangered species recovery programs

- Individual investment in a conservation program may be someone's career
- Program reviews must be impartial
- You don't get something for nothing
- An evaluation team should be diverse
- Know who the final audience is
- Understand the historical context of the program

Value of ES Evaluation & Future Needs



THANK YOU



Atlantic Forest Hotspot



Original covering –
1,200,000 Km²

Current covering –
90,000 Km²

Forest remnants – 7.3%

Human Demography:

@ 80% Brazilian population
>50% Brazil's GNP

The threats have evolved over time

- Deforestation
- Hunting
- Agriculture, misuse of fire & pesticides
- Oil/gas pipelines next to Reserves
- Major highways next to Reserves
- New settlements by “Landless”
- Trains carrying toxic chemicals within Reserves

