

IUCN Conservation Outlook Assessment 2017 **(archived)**

Finalised on 09 November 2017

Please note: this is an archived Conservation Outlook Assessment for Atlantic Forest Southeast Reserves. To access the most up-to-date Conservation Outlook Assessment for this site, please visit <https://www.worldheritageoutlook.iucn.org>.

# Atlantic Forest Southeast Reserves

## SITE INFORMATION

Country:

Brazil

Inscribed in: 1999

Criteria:

(vii) (ix) (x)

Site description:

The Atlantic Forest South-East Reserves, in the states of Paraná and São Paulo, contain some of the best and most extensive examples of Atlantic forest in Brazil. The 25 protected areas that make up the site (some 470,000 ha in total) display the biological wealth and evolutionary history of the last remaining Atlantic forests. From mountains covered by dense forests, down to wetlands, coastal islands with isolated mountains and dunes, the area comprises a rich natural environment of great scenic beauty.

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## **SUMMARY**

### **2017 Conservation Outlook**

#### **Significant concern**

Along with two other distinct properties encompassing the most valuable remnant of the Interior Atlantic Forest (Iguaçu National Park) and a cluster of the key fragments of the North-eastern Atlantic Forest (Discovery Coast Atlantic Forest Reserves), respectively, this serial property is a most encouraging response to the fate of the biome and recognition of its global importance. The establishment of protected areas within the remaining Atlantic Forest was an important step to prevent the irreversible loss of a unique and exceptionally diverse forest ecosystem altogether. However, many of the conservation units that make up the property are very small and vulnerable to outside influences. However, there are important continuous blocks including Serra do Mar, Carlos Botelho and Intervalos which require increased protection to ensure long-term conservation of the area and remaining connectivity. Much of the implementation, in particular as regards coordination of efforts between actors and stakeholders, remains to be consolidated. Urgent action seems needed to improve integrity and mitigate the existing threats, including ongoing illegal resource extraction and land use. In the buffer zone agriculture, ranching, plantation forestry, infrastructure development add up to put increasing pressure on the property. If predicated climate change is added to the factors, considerable erosion of important conservation values seems highly likely in the absence of major responses. At the same time, the recent budgetary cuts in federal budgets in Brazil, including for protected areas, raise serious concerns over the already limited resources to address these issues.

#### **Current state and trend of VALUES**

**High Concern**

**Trend: Deteriorating**

The establishment of protected areas in this crucial area of the remaining Atlantic Forest halted a longstanding process of deforestation and forest

degradation just in time to prevent the irreversible loss of a unique and exceptionally diverse forest ecosystem altogether. The establishment as such, however, will not ensure the long-term maintenance. Further investments in management and coordination are needed in addition to more environmentally-friendly land use in the broader landscape, including forest restoration. While systematic data on key species across the entire serial property is not available, some data indicate that many have been declining, for example the jaguar (*Panthera onca*) whose population decreased by 80% in the last 15 years in the Atlantic Forest biome and whose remaining population in the entire Atlantic Forest area was estimated at 250 individuals in 2012 (Gonçalves Morato et al., 2013; Beisiegel et al., 2012).

## **Overall THREATS**

### **High Threat**

The most significant current threats for the property are the ecological and biological isolation of its various components and associated with it edge effect, ongoing illegal resource extraction and land use. In the buffer, zone agriculture, ranching, plantation forestry, and infrastructure development add up to put increasing pressure on the property. If predicated climate change is added to the factors, considerable erosion of important conservation values seems highly likely in the absence of major responses.

## **Overall PROTECTION and MANAGEMENT**

### **Some Concern**

The establishment of protected areas within the remaining Atlantic Forest was an important step to prevent the irreversible loss of a unique and exceptionally diverse forest ecosystem altogether. However, some of the protected areas, mostly the private ones that make up the property are very small and vulnerable to outside influences.(IUCN Consultation, 2017). However, there are important continuous blocks including Serra do Mar, Carlos Botelho and Intervalos which urgently require increased protection to ensure long-term conservation of the area and remaining connectivity (IUCN Consultation, 2014). Much of the implementation, in particular as regards coordination of efforts between actors and stakeholders, remains to be consolidated. Urgent action seems needed to improve integrity and resilience given the increasingly unfavorable conditions in the wider landscape. At the same time, the recent budgetary cuts in federal

budgets In Brazil, including for protected areas, raise serious concerns over the already limited resources to address these issues.

# FULL ASSESSMENT

## Description of values

### Values

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#### World Heritage values

► **Exceptional natural beauty**

**Criterion:(vii)**

The Atlantic Forest South-East Reserves World Heritage site is located in the states of Paraná and São Paulo. It contains some of the best and largest examples of Atlantic forest in Brazil. The 25 protected areas that make up this site (some 470,000 ha in total) display the biological wealth and beauty of the last and highly threatened remaining Atlantic forests that cover densely forested mountains with hundreds waterfalls and over 300 splendid caves down to wetlands, dunes, estuaries, marshes and mangroves, as well as numerous bays and coastal islands, the area comprises a very diverse natural environment of great scenic beauty. Two of the caves are specially interesting: Casa de Pedra with the largest opening in the world and Santana, with a beautiful ornamentation (World Heritage Committee, 2015; IUCN Consultation, 2014).

► **Highly diverse forest region**

**Criterion:(ix)**

Partially isolated, the Atlantic Forest has historically evolved into a highly diverse forest region. As a consequence of the high diversity of ecosystems (from mountainous to coastal and marine) represented in the area coupled by the relative isolation of this biome during millennia, its degree of endemism is extraordinarily high. It is estimated that 53% of the tree species are and 77% of other plants are endemic to this biome. (Fernandes, 2003).

Current knowledge indicates that this complex biome contains a species diversity higher than most of the Amazon forests (Colombo and Joly, 2010). As one of the most important conservation mosaics of the Atlantic Forest, the property is of key importance for the conservation of the entire terrestrial biome, including its interlinkages with coastal and marine ecosystems nearby (World Heritage Committee, 2015).

### ► **High species diversity**

#### **Criterion:(x)**

The flora is among the most diverse in the world, and in some areas one can encounter over 450 species of trees per hectare. As for mammals, they number 120 species, probably the largest in Brazil. Amongst the flagship species are the jaguar, ocelot and the bush dog (*Speothos venaticus*). The property is rich in primates, some of which are highly endangered, such as the woolly spider monkey (*Brachyteles arachnoides*), the largest primate in the Americas, and the little “black-faced lion” monkey (*Leontopithecus caissara*), recorded only in 1990 and endemic to the region. The avifauna is very diverse with 350 species recorded, including the blue-cheeked Amazon (*Amazona brasiliensis*), classified vulnerable. The scarlet ibis (*Eudocimus ruber*), a large bird with bright red plumage, is a local symbol (World Heritage Committee, 2015).

### **Other important biodiversity values**

#### ► **Other international designations**

The site lies within a Conservation International-designated Conservation Hotspot, a WWF Global 200 Ecoregion, a WWF/IUCN Centre of Plant Diversity, a BirdLife-designated Endemic Bird Area and a UNESCO Biosphere Reserve (UNEP-WCMC, 2011).

## Assessment information

### Threats

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#### Current Threats

##### High Threat

The most significant current threats for the property's component protected areas are the ecological and biological isolation of the various components, ongoing illegal resource extraction and land use. In the buffer zone of components, agriculture, ranching, plantation forestry, infrastructure development add up to put increasing pressure on the property.

##### ► **Housing/ Urban Areas, Tourism/ Recreation Areas, Roads/ Railroads**

###### **Very High Threat**

**Inside site**

**Outside site**

Infrastructure in the buffer zone such as settlements, mining, roads, tourism facilities, water impoundment, and drainages degrade and fragment natural habitats, impede habitat restoration, contribute to pollution and sedimentation, and impact wildlife (BirdLife International, 2012; UNEP-WCMC, 2011; Parkswatch, 2002; WWF, n.d.).

##### ► **Other Ecosystem Modifications, Other**

###### **Very High Threat**

**Inside site, widespread(15-50%)**

**Outside site**

This property encompasses the biggest Atlantic Forest remnants in the country and is the biggest remaining block of the biome. Nonetheless, some of the protected areas, mostly the private ones, that make up the property are very small and vulnerable to outside influences. The isolation is being exacerbated by human interventions that further degrade and fragment habitats, and by climate change and will result in the loss of biodiversity over

time (Birdlife International, 2012; UNEP-WCMC, 2011; WWF, n.d., Perry, 2011). It is important to note that since the inscription of the property on the World Heritage List, 2 state protected areas mosaics were declared by the state of S.Paulo government within the region and other Federal PAs were created in the Parana state. (IUCN Consultation, 2017).

### ► **Logging/ Wood Harvesting, Poaching**

#### **Very High Threat**

**Inside site, scattered(5-15%)**

**Outside site**

Poaching, timber extraction, non-timber forest products, palm harvest, commercial and subsistence agriculture, and commercial fishing are significant threats for the protected areas, causing further fragmentation of habitats, and degrading wildlife populations. Within the region of the sites in Sao Paulo State, there is an increase of pinus eliotti plantations, which is also an invasive species that is pressuring the Atlantic Forest remnants outside and inside protected areas (Birdlife International, 2012; UNEP-WCMC, 2011; Parks watch, 2002; WWF, n.d. ; IUCN Consultation, 2017).

### ► **Tourism/ visitors/ recreation**

#### **Low Threat**

**Inside site, localised(<5%)**

Some areas experienced a tourism boom in late 90s that threatened both their environment and their native communities with rapid unregulated development. Restrictions on developments and day limits for visitors have been introduced since then, along with infrastructure for visitor which helped organize the visitors flow. When well-structured, tourism and ecotourism activities are perceived by stakeholders as one of the best ways to support protected areas and to decrease pressures over the Atlantic Forest remnants. (IUCN Consultation, 2017).

## **Potential Threats**

### **High Threat**

Climate change is a significant threat that is expected to accelerate the loss of biodiversity in the property.



## ► **Habitat Shifting/ Alteration, Temperature extremes**

### **Very High Threat**

**Inside site, throughout(>50%)**

**Outside site**

Climate change is already causing extreme weather events, which are projected to increase in frequency and severity in the future together with increased temperatures and rainfall, and sea-level rise. The property is rated as being among the top 20 natural World Heritage sites to be impacted by climate change (Nobrel, 2012; Perry, 2011). General result shows not only a significant reduction in the potential distribution of the species studied but also that the Atlantic Forest may be restricted to a more southern position in Brazil (Colombo and Joly, 2010). Other studies project that species in upper elevations in the Atlantic Forest are at risk from climate change as restriction to mobility towards less warm higher elevations will not be possible (Sodhi and Ehrlich, 2010). A combination of climate change and land use change pose a major threat to the tropical biodiversity (Tabarelli et al., 2004) and might have very significant impacts on the values of the property given the already high fragmentation of the Atlantic Forest.

## **Protection and management**

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### **Assessing Protection and Management**

#### ► **Relationships with local people**

**Some Concern**

Relationships with local people continue to be strained. The Advisory Councils, set up by the management units, helped to solve many conflicts, but the lack of integrated and long-term plans to maintain the involvement of the stakeholders in the management jeopardize the gains achieved in some areas (IUCN Consultation, 2017).

#### ► **Legal framework**

**Some Concern**

The legal framework for the property has been developed by a mosaic of 10

protected areas established by federal decree (1 National Park, 1 Ecological Station, 3 Wildlife Zones, 3 Environmental Protection Areas); as well as protected areas in Sao Paulo State established by state decree ( State Parks, Ecological Stations, Wildlife Zone, Environmental Protection Area); and protected areas in Parana State established by state decree (5 State Parks, 1 Ecological Station, and 1 Environmental Protection Areas); and 1 Private Natural Heritage Reserve. Some protected areas in S. Paulo were divided into other areas (Jacupiranga State Park and Jureia-Itatins Ecological Station), increasing the territory that was strictly protected and adding protected areas which allow sustainable use (UNEP-WCMC, 2011, IUCN Consultation, 2017).

### ► **Enforcement**

#### **Some Concern**

The enforcement of the PAs management plans and the policing their buffer zones has been becoming weaker. One reason is the shortage of staff and financial resources at all government levels. In Parana state, the absence of the Environmental Police agreement with the state exacerbated the problem (IUCN Consultation, 2017).

### ► **Integration into regional and national planning systems**

#### **Serious Concern**

The establishment of the individual protected areas and their consideration as one coherent property represents an adequate attempt to increase the scale of conservation intervention. The fundamental challenge to promote more sustainable land and resource use in the broader landscape remains. The integration of the PAs planning into other regional and national plans continues to be weak (IUCN Consultation, 2017).

### ► **Management system**

#### **Serious Concern**

Management of the property is divided among federal and the two concerned state protected area authorities, and the administration of the private reserve. The management of each protected area is guided by a management plan, though several are outdated and their implementation is limited by insufficient human and financial resources. (UNEP-WCMC, 2011;

IUCN, 1999; de Oliveira, 1998; IUCN Consultation, 2014). The key concern is the coordination of management among the many protected areas that make up the property (UNEP-WCMC, 2011). More recently, progress has been made in the further development of the "conservation mosaic", but this has not been translated into the formal design of the World Heritage property as of yet. Besides the federal mosaic (Lagamar), other two mosaics were created in the State of Sao Paulo, due to the redesign of Jacupiranga Park and Jureia-Itatins ecological station limits (IUCN Consultation, 2017).

## ► **Management effectiveness**

### **Some Concern**

The ICMBio applied the RAPPAM method twice for its protected areas (2005-06 e 2010). Those studies allowed the ICMBio to enhance the management of its PAs. Similarly did the S. Paulo state in 2004 for its PAs. . Since 2015, besides RAPPAN, ICMBio is annually applying the SAMGE (Monitoring and Evaluation System) while the RAPPAN is applied every 5 years. In 2015, ICMBio launched the SIGTerra - Protected Areas Territorial Information Consolidation System, whose goal is to compile land tenure information of the federal protected areas. Independently of the results, brought about by those evaluation systems, the overall key challenge, continuous to be how to better coordinate management across the entire serial property. (IUCN, Consultation 2017)

## ► **Implementation of Committee decisions and recommendations**

### **Mostly Effective**

In its inscription decision, the Committee recommended that the State Party "should be encouraged to restore natural conditions in the Serra do Mar State Park, which potentially could be incorporated in the site". No action has been reported to this effect. Although the Serra do Mar State Park received a significant amount of investment since the inscription, and improved its natural conditions, there aren't initiatives or interest aiming at adding this protected area to the World Heritage property. (IUCN Consultation, 2017).

## ► **Boundaries**

### **Some Concern**

The property consist of 25 component protected areas and lies entirely within

a much larger buffer zone of 1,223,557 ha which is managed as a UNESCO Biosphere Reserve (IUCN, 1999). Nonetheless, many of the conservation units that make up the property are very small and vulnerable to outside influences - of the 25 protected areas comprising the property, 12 cover less than 5,000 hectares each (World Heritage Committee, 2015).

## ► **Sustainable finance**

### **Serious Concern**

Conservation of the Atlantic Forest is considered a very high conservation priority at the state, national, and global level, and over the years a large number of projects have been financed by multilateral and bilateral organizations, national and state governments, and international and national NGOs and foundations over the years to consolidate management (UNEP-WCMC, 2011;; IUCN, 1999; de Oliveira, 1998). From 2010 to 2014, the Ministry of Environment (MMA) coordinated the Atlantic Forest Protection Program. From 2010 to 2015 the Program invested US\$ 16 million, donated by the German government, for sustainable management and recovery activities to mitigate climate change effects. The FUNBIO, a Brazilian conservation trust fund, operated those resources. Significant support was provided by the Brazilian Foundation Boticário both in research and in situ conservation (IUCN Consultation, 2017). In 2017, however, the budget situation has worsened significantly with significant cuts of the Ministry of Environment budget (IUCN Consultation, 2017).

## ► **Staff training and development**

### **Serious Concern**

The severe staff shortages are of serious concern. Much higher levels of staffing are needed to ensure adequate management (UNEP/WCMC, 2011; IUCN Consultation, 2017).

## ► **Sustainable use**

### **Some Concern**

Conservation and research are the main uses of the protected areas that make up the property, and in some areas, tourism and recreation are encouraged. In general, research activities are being carried out in an adequate and sustainable manner; however, tourism and recreation are not

well controlled in some areas and might become a source of new risks (IUCN Consultation, 2014). Infrastructure investments for public use in the PAs helped better organize public visitation and encouraged the development of local small sustainable businesses in the region. As an example, the Quilombolas, one of the traditional populations living within the site territory, developed community based tourism. (IUCN Consultation, 2017).

## ► **Education and interpretation programs**

### **Some Concern**

Past projects have given significant emphasis to environmental education, and a number of programs have been developed (WDPA, 2011). However, in 2016 the Sao Paulo state government closed its Environmental Education programme (IUCN Consultation, 2017).

## ► **Tourism and visitation management**

### **Mostly Effective**

When the property was inscribed, it was reported that the entire area was visited by around 1.3 million people in 1997. However, forest conservation is the paramount aim of the reserves, so that visitation to many of the sites is restricted to certain areas or trails, as at the research stations. These latter do encourage ecotourism, ecological researchers and environmental education. The IDB signed two loan agreements with the SP state government. One in 2006 (US\$ 15 million – 9 million from IDB and 6 million from the government) and another one in 2010 (US 165 Million from the bank and other similar amount from the state government). The first agreement helped the state to plan and develop public use infrastructure in 5 state Parks (Carlos Botelho, PETAR, Intervalos, Caverna do Diabo and Ilha do Cardoso). Those PAs are well equipped, have information centres, with visitor facilities and good trails. The other agreement focused on the Serra do Mar mosaic (outside the World Heritage site) but included the Jureia-Itatins Mosaic, which is part of the World Heritage property. (IUCN Consultation, 2017). Overall, tourism and its impacts are localized; however, their concentration in some areas might be too high and these areas become over-utilized (IUCN Consultation, 2017). Between 2007 and 2016, ICMBio reported a 2,79 % increase in visitor numbers in all its National Parks. (IUCN

Consultation, 2017)

## ► **Monitoring**

### **Some Concern**

Despite monitoring being carried out in many of the property's components, an overall monitoring system for the property remains absent. Overall, for the Atlantic Forest Biome “there is very limited direct observation, let alone geo-referenced monitoring data, on the states, trends and functions of ecosystem services and biodiversity indicators. Thus, decision - makers lack fundamental information to guide them” (IADB, 2009). Since 1985, The SOS Mata Atlantic Foundation and The National Institute for Space Research (INPE) monitor the Atlantic Forest remnants in all 17 states where it occurs. Between 2015 and 2016, 130.973.638 hectares (93%) of the total area under the Atlantic Forest Law were evaluated. The deforestation in that period was 29.075 ha. Compared with the previous period of 2014 and 2015, an increase of 57,7% in the deforestation was registered. (IUCN Consultation, 2017).

## ► **Research**

### **Mostly Effective**

There 6 Ecological Stations in the property have research facilities. Their great value is in the preservation of genetic resources and good samples of Atlantic forest biodiversity, for research into speciation and into the future of sustainable exploitation of indigenous species, especially for their medical uses (UNEP-WCMC, 2011;). Significant research is funded by a number of foundations, such as Boticario Foundation, which invested in the Lagamar region (PR and SP states) the amount of US\$ 982.540.09 in the last 5 years. Another example is the Project to conserve the Red Tailed Parrot (*Amazona brasiliensis*) which changed the classification of the species from threatened to almost threatened (IUCN Consultation, 2017).

## **Overall assessment of protection and management**

### **Some Concern**

The establishment of protected areas within the remaining Atlantic Forest was an important step to prevent the irreversible loss of a unique and exceptionally diverse forest ecosystem altogether. However, some of the protected areas,

mostly the private ones that make up the property are very small and vulnerable to outside influences.(IUCN Consultation, 2017). However, there are important continuous blocks including Serra do Mar, Carlos Botelho and Intervalles which urgently require increased protection to ensure long-term conservation of the area and remaining connectivity (IUCN Consultation, 2014). Much of the implementation, in particular as regards coordination of efforts between actors and stakeholders, remains to be consolidated. Urgent action seems needed to improve integrity and resilience given the increasingly unfavorable conditions in the wider landscape. At the same time, the recent budgetary cuts in federal budgets In Brazil, including for protected areas, raise serious concerns over the already limited resources to address these issues.

► **Assessment of the effectiveness of protection and management in addressing threats outside the site**

**Some Concern**

At this point in time, the establishment of buffer zones in component protected areas appears to reflect intentions rather than tangible conservation action. While an important first step, consolidation is needed to prevent decreasing overall landscape integrity and connectivity.

## **State and trend of values**

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### **Assessing the current state and trend of values**

#### **World Heritage values**

► **Exceptional natural beauty**

**Low Concern**

**Trend:Stable**

The Atlantic Forest South-East Reserves World Heritage site remains an area of exceptional natural beauty with a high variety of landscapes (draft SoOUV, 2011).

► **Highly diverse forest region**

**Critical**

**Trend:Deteriorating**

Only about 16% of the original Atlantic Forest remains (Ribeiro et al., 2009); what remains is isolated and fragmented and largely occurs in small isolated patches (Alexandrino, 2016). The establishment of protected areas in this crucial area of the remaining Atlantic Forest which form part of the World Heritage site halted a longstanding process of deforestation and forest degradation just in time to prevent the irreversible loss of a unique and exceptionally diverse forest ecosystem altogether. The establishment as such, however, will not ensure the long-term maintenance. Further investments in management and coordination are needed in addition to more environmentally-friendly land use in the broader landscape, including forest restoration.

### ► **High species diversity**

**High Concern**

**Trend: Deteriorating**

The fragmentation and isolation of protected areas that make up the property poses a serious threat to the long-term conservation of some species. However, there is a lack of consolidated data on the current state of key species populations and their trends. While systematic data on key species across the entire serial property is not available, some data indicate that many have been declining, for example the jaguar (*Panthera onca*) whose population decreased by 80% in the last 15 years in the Atlantic Forest biome and whose remaining population in the entire Atlantic Forest area was estimated at 250 individuals in 2012 (Gonçalves Morato et al., 2013; Beisiegel et al., 2012).

## **Summary of the Values**

### ► **Assessment of the current state and trend of World Heritage values**

**High Concern**

**Trend: Deteriorating**

The establishment of protected areas in this crucial area of the remaining Atlantic Forest halted a longstanding process of deforestation and forest degradation just in time to prevent the irreversible loss of a unique and exceptionally diverse forest ecosystem altogether. The establishment as



such, however, will not ensure the long-term maintenance. Further investments in management and coordination are needed in addition to more environmentally-friendly land use in the broader landscape, including forest restoration. While systematic data on key species across the entire serial property is not available, some data indicate that many have been declining, for example the jaguar (*Panthera onca*) whose population decreased by 80% in the last 15 years in the Atlantic Forest biome and whose remaining population in the entire Atlantic Forest area was estimated at 250 individuals in 2012 (Gonçalves Morato et al., 2013; Beisiegel et al., 2012).

## **Additional information**

### **Benefits**

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#### **Understanding Benefits**

##### **► Outdoor recreation and tourism**

The property is located in the vicinity of Sao Paulo, South America's largest city and metropolitan area suggesting a touristic potential in attractive areas, in particular near the coast.

##### **► Importance for research**

As the last remnants of the southern Atlantic Forest, the property is of great value for researchers as it provides an opportunity to study the great biodiversity of this region in the last unaltered natural expressions of the biome.

##### **► Collection of genetic material**

The numerous endemic organisms are unique and could harbor highly valuable substances.

### ► **Water provision (importance for water quantity and quality)**

All remaining areas of the Atlantic Forest are important for water provision (Joly et al., 2014).

### ► **Fishing areas and conservation of fish stocks**

Although no specific information is available, many areas of Atlantic Forest cover probably affect the productivity of adjacent estuarine areas and coral reefs, therefore supporting subsistence and commercial fisheries along the Brazilian Atlantic coast (Hanazaki et al., 2009).

### ► **Collection of wild plants and mushrooms**

Many wild plant species form an important part of the diet of local and traditional people (Joly et al., 2014).

### ► **Carbon sequestration**

Even though, only patches of the Atlantic Forest remain, they remain extremely important for carbon sequestration.

## **Summary of benefits**

Because of the massive alteration of the Atlantic Forest Biome, the benefits of the property for conservation and for knowledge generation are highly valued at the state, national, and global levels.

## **Projects**

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### **Compilation of active conservation projects**

<b>Nº</b>	<b>Organ ization/ individuals</b>	<b>Pr oje ct du rat ion</b>	<b>Brief description of Active Projects</b>
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1	FUNBIO	Atlantic Forest Conservation Fund which aims to contribute to the protection, sustainable management and recovery of the Atlantic Forest. The fund seeks to support the identification of stakeholders and the establishment of Conservation Units (CUs) and Private Natural Heritage Reserves (RPPNs); stimulate projects on Payments for Environmental Services (PES) and the creation of a system of monitoring for the biome. The Project is part of the International Initiative for Climate Protection (ICI) of the Ministry of Environment, Nature Conservation and Nuclear Safety of Germany (BMU), which provides financial support through KfW Entwicklungsbank (Development Branch of the German Reconstruction Bank), through FUNBIO.
2	SOS Mata Atlântica/INPE	Atlas of the Atlantic Forest Remnants. Technical Report 2015-2016
3	GEF-IADB-Brazil's gov.	Brazil: Recovery and protection of climate and biodiversity services in the Paraíba do Sul basin of the Atlantic Forest of Brazil. The multifocal area project expects to contribute in the protection and restoration of ecosystem services of global importance in the Southeastern Brazilian Atlantic Forest (IADB, 2009).
4	IDB Loan	Environmental and Social Recovery of Serra do Mar and Marine Atlantic Forest Mosaics (including Jureia Itatins Ecological station. Overall the project expects to improve infrastructure and existing conservation units, monitoring, reducing impacts from population, etc.) (IDB, 2009)
5	TNC	In 2008, TNC launched a campaign to restore one billion native trees to the Atlantic Forest (note: not necessary in the Property) - See more at: <a href="http://www.nature.org/ourinitiatives/regions/southamerica/brazil/placesweprotect/atlantic-forest.xml#sthash.va66KAIJ.dpuf">http://www.nature.org/ourinitiatives/regions/southamerica/brazil/placesweprotect/atlantic-forest.xml#sthash.va66KAIJ.dpuf</a>
6	Fundação Grupo O Boticário	Boticário Foundation continuously invest in many research projects the Lagamar region (PR e SP), including the management of the Salto Morato Private Reserve.
7	Sociedade Pesquisa da Vida Selvagem e Educação	Project to conserve the Red Tailed Parrot (Papagaio da Cara Roxa) - Amazona brasiliensis.

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8	Atlantic Forest Biosphere Reserve	To be launched next year - A series of capacity building Courses for entrepreneurship towards sustainable tourism. Support is coming out the Diffuse Interest Fund.
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## Compilation of potential site needs

<b>Nº</b>	<b>Site need title</b>	<b>Brief description of potential site needs</b>	<b>Support needed for following years</b>
1	Communication	The site is poorly known in its regions and by those dealing with public policies and/or managing the PAs and its buffer zones	
2	Strategic planning	A Strategic Plan for the World Heritage Site could provide an important tool to help the coordination between the different management levels.	

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