



Social conflicts and areas of nature protection in Brazil: the case of RebioTinguá

Conflitos Sociais e áreas protegidas no Brasil: o caso da RebioTinguá

Ana Lucia Lucas Martins

ABSTRACT: This article discusses the disputes between different social actors regarding environmental conservation assignment to categories in one of Brazil's Atlantic Forest conservation units in the metropolitan region of Rio de Janeiro. Conflicting values and practices about conservation among representatives of non-governmental (NGOs) entities, local residents, tourism entrepreneurs and public policies have created the social dynamics in which the relation between environmental conservation and leisure emerges as a mediating instance of a model for protected area.

KEYWORDS: Protected Areas; Conflicts; Leisure; Models of Nature Protection.

RESUMO: Este artigo discute as disputas entre diferentes atores sociais pela atribuição de categorias de proteção à natureza em uma área de Mata Atlântica de unidade de conservação na região metropolitana do Rio de Janeiro. Os conflitos decorrentes de choques de valores e práticas sobre conservação entre representantes de entidades não governamentais (ONGs), moradores locais, representantes do empreendedorismo turístico e poder público criam uma dinâmica social em que a relação entre preservação da natureza e lazer surge como uma instância mediadora de um modelo de área protegida.

PALAVRAS-CHAVE: Áreas Protegidas; Conflitos; Lazer; Conservação da Natureza.

Introduction

The effect of protected areas on social interactions is discussed in this article out of the problem of conflict under the Atlantic Forest environment. The approach of conflict is posed by understanding that the Brazilian environmental policy is based on the regulation and prohibition of access to the resources and on the territorial ordering with the creation of parks and other conservation units with human settlement, expansion of agricultural borders and urban growth. This policy results in the interaction of a set of actors who dispute territory, forest assets, projects etc. Some relevant part of the analysis concern with the preferential relation given to the issue of protected areas in rural environments and the tradition populations which conflicting scenario would be exposed in the demarcation of the territory and constraints of use by populations who would count on the forest assets for

their way of living. This article claims an analysis on the disputes over the attribution of one category of nature protection in the Atlantic Forest area seated in a metropolitan context. The practice of protecting forests in metropolitan areas carry social dynamics which are not well-known, and its study enables the understanding of possibilities of mediating interactions which constitute a (dis)functionality of the model of protected areas in Brazil.

Protected areas in Brazil

According to Thomas (1989), the transformations of the conceptions of nature are related to social, cultural and historic dynamics. The creation of protected areas which have occurred systematically since the 20th century is way societies act to protect their natural resources and landscapes. The meaning of nature in each society is a conditioning for the generation of protection models. Medeiros (2003) suggests that the notion of protection of nature should be oriented towards three basic ideas: until the end of the 19th century, space control had a managerial connotation; from the end of the 19th century to the second half of the 20th century, preservation of landscape was associated with the protection of collective asset and evidence of an existing wild nature; from the second half of the 20th century on, the main idea was to protect nature for future generations overlapping the issue of biodiversity, a predominantly 20th century idea. The idea of sustainable use for protected areas had its origin from European countries whose social practices linked to agriculture and use of the soil has resulted in a culture of using the soil for agricultural means. Nature carries a distinct meaning in the Americas. Breaking the unknown land resulted in an idea of hostile nature, incompatible man and nature. North America has developed a notion of protection of wilderness remainders which consisted of keeping the landscapes untouched for contemplation and as an asset for future generations.

Therefore, two meanings related to practices of protection guided the building of models. One meaning is the idea of conserving, making good use of natural resources, and the other is the idea of preserving, defending wilderness with the aim of keeping remainders untouched for contemplation and as witnesses for future generations, providing for man's distance from these refuges of wildlife protected from direct use. This model, born with the creation of the National Yellowstone Park in the United States in 1872, was adopted as initial landmark in the end of the 19th century and the beginning of the 20th century (Canada, 1885; New Zealand, 1894; Australia, South Africa and Mexico, 1898; Argentina, 1903; Chile, 1926; Ecuador, 1934; Brazil and Venezuela, 1937). In Europe, the laws on forest conservation were enforced in Sweden in 1886 and in Finland in 1903 and are related to the specific laws of uses of the soil.

The definitions and policies on preservation of landscapes have developed for 70 years. During this process, in 1992, the International Union of Conservation of Nature [*União Internacional de Conservação da Natureza* (IUCN)], created in 1948, acknowledges seven categories of protected areas: strict natural reserve; wildlife areas; national park; natural monument; area for handling habitat and species; protected landscape; protected area for handling natural resources. From the Convention of Preservation of Fauna

and Flora in London in 1933 to the Durban Agreement in South Africa in 2003 a question posed in this scenario is how to problematize the relation between local populations and protected areas (BENSUSAN, 2006).

In the Brazilian case, the creation of the National System of Conservation Unit) [*Sistema Nacional de Unidades de Conservação da Natureza* (SNUC)¹, in Portuguese] in 2000 represents a change in the process of building a system of categories of conservation units. The SNUC sets criteria and norms for the creation, implementation and management of conservation units. Although there is some correspondence with the international categories, there are differences in the system of Brazilian categories and other countries.

The concept of “conservation unit” was created in Brazil by the former 1934 Forest Code² which set for a) protective forests and b) remaining forests (national, state and municipal parks), both of inalienable domain and everlasting conservation, being the first one under private domain and the second one under public domains and c) revenue forests.

New categories were created with the re-edition of the Forest Code in 1965. They were defined Permanent Protection Areas [*Áreas de Proteção Permanente* (APPs), in Portuguese] which enlarged the protection defined in law for the old Protecting Forests. The APPs incorporated forests on mountains tops, river margins, around water sources, steep hillsides and sandbanks. The 1965 Forest Code defined the legal reserves which the owners are obliged to keep in their properties and forest replacement in case of forest removal. In this Code, there was also the increase of the existing categories of Conservation Unit. In addition to National Parks and Forests there were decrees for the creation of Biological Reserves, Ecologic Stations, Ecologic Reserves and Environment to meet particular conservation demands (MEDEIROS, 2003).

The conservation units under SNUC are divided in two groups with specific characteristics: Integral Protection Units and Sustainable Use Units. The basic goal of the Integral Protection Units is to preserve nature allowing only the indirect use of its natural resources, except the cases covered by law. The basic goal of the Sustainable Use Units is to conform to nature conservation with sustainable use of part of its natural resources. The group of Integral Protection Units is comprised of the following categories of conservation unit: Ecologic Station; Biologic Reserve; National Park; Natural Monument; Wildlife Refuge (Law 9985/00).

RebioTinguá and integral protection

The forest protection which nowadays comprises RebioTinguá had its origin in the 19th century when, in 1833, an imperial decree turned it into an inaccessible area aiming at protecting the water sources which supplied Rio de Janeiro. Later on, the 1934 Forest Code created the Federal Protecting Forests of Tinguá, Xerém and Mantiqueira, federal unalienable public domain land. The Biologic Reserve was created by decree in 1989.

Different occupation processes which left material records circumscribe the history of Tinguá Biologic Reserve: farms and sugar cane

culture, sugar manufacturing and brandy mills; 'new ways'³ (18th century); Estrela Gunpowder Plant; the Royal Commerce Road; flour mills, train station (19th century), transformations in the use of soil (20th century) with the citriculture crisis in the 30's that turned the city of Nova Iguaçu into a region of building sites for part of the urban population, and forest preservation measures in Tinguá Mountains.

The background history of the forest preservation which comprises Tinguá Biological Reserve is directly associated with the lack of water supply in the city of Rio de Janeiro in the 20th century, which can be explained by the deforestation ridge due to the intense agriculture practice of the coffee cycle. With the loss of forests on ridges and riverbeds, water supply became a persistent problem in the city.

Tinguá Biological Reserve was created on May 3, 1989, by Federal Decree 97,780. With a 26,260-ha extension, it is regarded a large conservation unit when compared with the average area of the units of the same category and it is the largest biological reserve of the Atlantic Forest, corresponding to 8% of Rio de Janeiro protected forests. Seated in the southwest of Brazil⁴, a region with high percentage of forest loss due to urban-industrial activity, seated in metropolitan areas, the reserve has strategic relevance within the National System of Conservation Unities. The accreditation as Biosphere Reserve in 1991, granted by the Organization of the United Nations for Education, Science and Culture (UNESCO), institutes and extends new rights and rules for the reserve protection so as to join conservation and development. In 2006, Tinguá protection area got its first management plan to regulate policies for biological conservation and coordination of actions to provide for the maintenance of the area as a whole. Although RebioTinguá is a reserve under the category of integral protection, that is, it is protected from direct use, in practice, its location turns this protection quite problematic. In Brazil, decrees of integral protection occur in areas with population concentration and occupation by human activity. Impacts and conflicts are in the origin of the birth of the conservation units and turn into relevant issues to understand the implementation of the protected area model.

Material and Method

The spatial focus of this study is one of the nine APAS that make up the surroundings of the biological reserve, the APA of Rio Tinguá-Iguaçu, whose population is about 3,900 inhabitants.

With the aim of understanding the social interactions between different actors and the protected area, based on the social uses of forest assets, in particular water, field observations and interviews with local residents, owners and employees of leisure enterprises were chosen, NGO representatives and the reserve manager. As well as access to secondary data obtained from print media, advertising, research databases on local tourist potential and bibliography.

Location of the study area

The region of conservation unit is surrounded by six municipalities on the border of the Mountainous Region and the so-called Baixada Fluminense⁵ in Rio de Janeiro metropolitan region. Around it there are the municipalities which comprise the two regions of the unit: the territories of Petropolis and Miguel Pereira in Mountainous Region and Duque de Caxias, Nova Iguaçu in the metropolitan region, including Baixada Fluminense. The most relevant borders, in terms of population density and reserve border, are in Xerém District (municipality of Duque de Caxias) and Tinguá Villa in Nova Iguaçu (see MAP).

The insertion of this conservation unit into a region with high urban expansion makes it a privileged issue for the problematization of protected areas and urban population issues since the studies focus on protected areas and rural populations.

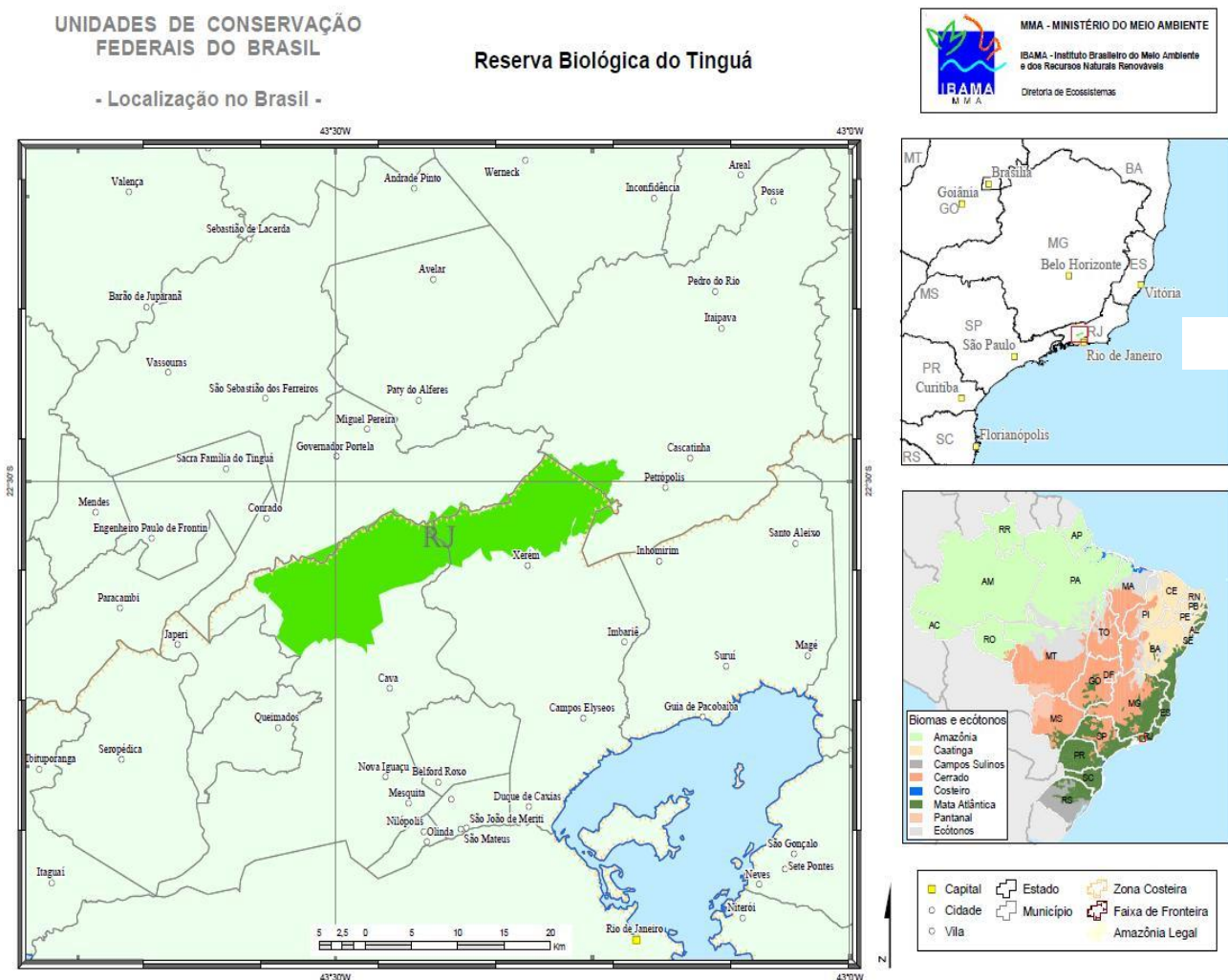


Figure 1: Map of Situation and Location of REBIOTinguá.
Figura 1: Mapa de Situação e Localização da REBIOTinguá.
Source: IBAMA. Ministério do Meio Ambiente (2011).
Fonte: IBAMA. Ministério do Meio Ambiente (2011).

Results and discussion

Actors in dispute: categorization of protected area

A historical dispute over categorization of protected areas, national parks or biological reserves, precedes the creation of the preservation unit in 1989. On the one hand, the conceptions defended by former Brazilian Institute of Forest Development (IBDF, in Portuguese)⁶ and groups interested in developing activities related to the visitation tourism of the forest area, who claim the creation of a national park; on the other hand, scientific community's representatives, defense ecology groups, a non-governmental organization, residents' representation and local actors who are against the creation of the park and defend a biological reserve.

There are various reports⁷ about the political activities of Tinguá Pro-Biological Reserve Movement that gather supporters for the creation of the biological reserve. The charges evidenced the inefficiency of IBDF employees' actions with practices that jeopardized conservation values, such as actions against palm tree planters, hunters, deforesters, the native forest destruction by collecting firewood to tileries, bakeries, pottery from Baixada Fluminense and surrounding regions, illegal action of clandestine rocks and sandbanks; the forest use for religion gatherings with predatory practices (*umbanda* and evangelicals); illegal water impounded from rivers to build swimming pools by leisure and recreation club owners. The idea of conservation, represented by the category of biological reserve, attracted political parties (the Green Party), the legislative (municipal bodies of Rio de Janeiro, Paracambi and Nova Iguaçu congresses), non-governmental organizations, universities, bar associations, students' entities, residents' associations and the Catholic Church, represented by clerical movements. A document made by natural scientists, the technical-scientific opinion, public hearings and signatures are the result of this process culminating with the biological reserve federal decree enacted in 1989 that put an end to the dispute for the categorization of the reserve.

In the 90s, various associative dynamics to guarantee rights and extend the accomplishments of the area protection were put in practice by university researchers, research centers, NGOs for nature protection with different orientations, the public power, the Environment Municipality Secretariat, the Brazilian Institute of Environment and Renewable Resources (IBAMA) etc. The issues posed by the actors, and which motivated the association, are still predominantly the biologic diversity protection and the restraint of harmful actions to preservation and environmental crime punishment. The compliance with the environmental legislation was a crucial element for the actors involved.

However, while, on the legal level, the categorization was defined so as to regulate the idea of conservation represented by scientific knowledge, fauna protection, local flora and water resources, in the daily practice, the decree did not provide for effective mediations for the conflicts. IBAMA inspection actions, the institution responsible for the performance of the environmental national policy, were not sufficient to stop illegal activities in a protected area, particularly the prohibition of sand extraction, palm tree planters' and hunters' actions,⁸ making vulnerable the actions of activists'

groups and local actors who supported the biological reserve. Moreover, the actors who claimed the creation of a national park remained active, particularly those who represented the interests of leisure and recreation entrepreneurs.

The discussion over the re-categorization of Tinguá Biological Reserve arisen in the newly created Chico Mendes Biodiversity Conservation Institute (ICMbio)⁹ as reactivated twenty years later the old debate national park versus biological reserve. This happens under new institutional grounds with changes in the meanings of protected areas and new logics of social interactions. If, on the one hand, the proposal of the re-categorization of the reserve results from local political disputes and economic interests, it is assumed that the ICMbio institutional changes in the management of protected areas are reoriented by the International Nature Conservation Union (UICN) more comprehensive policies of new paradigms about the world's protected areas.

Management dilemmas in RebioTinguá

Paige West *et al.* (2006) argue that protected areas impact people's lives and their surroundings as they are ways of seeing, understanding and (re)producing the world with fruitful productions and social interactions. Understanding the social effects of protected areas implies in learning society's relation with this kind of spatial production and the interaction of a diversity of actors, local populations, NGOs, government agencies, national and international bodies.

From 2003, a new model of management reserve emerges towards the relation of two questions for conservation: enlarge the participation of the communities and the creation of public policies. This new way of perceiving the issue of protected areas recognized the need of allying the issue of preservation to local problems. There is an understanding, on the part of the actors, natural scientists, NGOs and public power that acted together in the creation of Rebio, that the conservationist/preservationist ideas which supported the group's actions for over a decade had limitations. Poor local populations seemed little active actors.

The social processes which led to the categorization of the reserve and the creation of the protected area changed their dynamics: the dismissal of the natural scientists of a more engaged position to devote themselves to issues of biologic research in the reserve, divergences in the NGO which worked in the origin of the debates over the creation of the reserve and which practice was characterized by a 'militancy' of conservation, the emergence of new NGOs with pragmatic orientations (ecotourism, environmental education, income generation projects from garbage collection, vegetable-garden growing, reforestation etc. which dispute projects, financing etc. and the intensification of the conflicts due to the overlapping of federal, state and municipal powers.¹⁰ On the state level, the conflict results from the lack of the state body's counterpart by water collection inside the reserve. And, on the municipal level, conflicts are due to the lack of technical staff to deal with the structures of environmental management in the Environmental Protection

Area (APA, in Portuguese) of the reserve's surroundings whose members, in general, play the role of 'election supporters'.

As far as local populations were concerned¹¹, the effects of complying with biological reserve protection laws fell upon them: no access to the interior of the reserve; restriction on picking plants and herbs; control over religious expressions that identify symbolic places to sacred ones in nature; 'climbing the mountain' to pray in evangelical cults and use of forests and waterfalls for *umbanda* and *candomblé* rituals; criminalization of bird capture, a common habit in Brazilian rural life, hunting and palm heart harvesting.

The management strategy which started in 2003 proposed a dialogue with local population as a way to increase conservation value and to assure forest protection practices. We notice that the construction of such dialogue would face several obstacles, such as: the local population's low engagement in the nature conservation issue, a way of living wherein hunting and palm heart harvesting are still undertaken, lack of public power in the region to provide with basic services of water supply and sanitation, scarcity of finance, material and resources to implement management actions to implement actions for the management and the residents' activity in agriculture practices, which perception of protection forest is use restriction.

For the older residents, the changes that have occurred since the creation of the protected area, population density and the resulting precariousness of local public services and the restriction to forest use, evoke memories of a time wherein rivers were clean, water from perforated wells was superior and abundant, hunting¹² and palm heart harvesting were activities practiced for living, "living in harmony with the forest". According to an old resident's report, hunting was a regulated activity, there was a license card establishing the hunting season of small mammals, rodents and birds (armadillo, opossum, *paca*, agouti, solitary tinanou, wild boar), Atlantic Forest native wild reptiles (lizards) and medium and large animals (monkeys, leopards, deer). Palm heart harvesting was regulated according to the needs of daily life, for example, "in Holy Week, everybody harvested palm heart".

Very little has been done about the idealized orientation for the biological reserve management. In terms of public policies, the projects are precariously and discontinuously presented. The Forest Brigade Project, a federal government training program for the region's youths to fight fires in the reserve woods, was discontinued in 2006 after a one-year experience; attempts to implement reconversion projects of small agriculturists to ecologically correct agriculture practices are discontinued; the "*biquinha* women's" movement, which claimed for water canalization for the population living in the forest's borders, was the most important attempt made in the management mediation with local popular demands for better life conditions. Five years later, in 2009, after an agreement with the public powers (federal, state and municipal) which was displeased by the reserve management as it did not include sanitation, a network of water canalization was implemented.

I gather that one of the reasons for the failure of a new form of management lies in the fact that the conception of conservation, so far represented by biological diversity value, is not increased and the inclusion of

local population arises as these local actors' strategy of instrumentalization so long as new values are not provided for the concept of conservation.

The issued is discussed in Descola (2007; 2008). For the author, biological diversity is a concept which universalizes itself as a value in nature protection international policies. Thus, he agrees that the conception of nature used in protection policies is special in relation to the one constituted in the west from the Age of Enlightenment based upon the idea that nature exists as a sphere independent of humans. The universalism of the scientific argument corroborated the concept of biodiversity, which provides the foundation for the value of nature, excludes other configurations which do not consider nature as an externality. If biodiversity protection rises as a universal value, what would local specificities be like then? Would it be possible to review the comprehensive principles of naturalistic universalism and recognize the existence of several natures and not only biodiversity nature? How effectively can we think of and practice nature protection from human activities in relation to and not in opposition to nature? The author assumes a relative universalism susceptible to allow an ethics to rule nature uses related to values which can be extended to different social groups.

Although the management discourse had, in its origins, an orientation towards the community's participation, we can note that, in practice, the alliance is built on natural scientists, universities and research centers. These are the actors that would be legitimating the category of biological reserve for the relevance of local biological diversity stated in scientific knowledge. However, this little use and low visibility of scientific knowledge obscures the identity of a protected area, that is, as a site of scientific production and divulgation.

Inspection is the focus of the group management attraction: the confrontations with hunters (see MARCELINO, 2010, TABLE 1), palm heart harvesters, wood companies, sandbanks' clandestine exploration, installment of waste management in areas next to the reserve, real estate speculation, tourism and leisure complexes, bathers' restrictions who invade the reserve looking for waterfalls, occupations of the reserve's border areas by leisure commerce, housing in the ciliar forest area etc. The murderer of a local resident, a retired forest warden and a NGO director with active participation in the creation of the reserve, and death threatens to IBAMA employees in 2005 defined, in my viewpoint, a trend towards the orientation of an implemented management model; repression to illegal activities performed by IBAMA employees, federal and military policemen. This limit of this trend limit could have been the dismissal of the biological reserve manager after being arrested by illegal weapon possession in 2009.

Table 1: Most hunted mesofauna and avifauna in Tinguá Biological Reserve.
Quadro 1: Mesofauna e Avifauna caçadas na Reserva Biológica do Tinguá.

Species - Mesofauna	Popular name	Reason for hunting
<i>Panthera Onca</i>	Jaguar, Onça-Pintada	Fur trade – Extinct in the Reserve
<i>Tapirus Terrestris</i>	Anta, Tapir	Game – Extinct in the Reserve
<i>Mazama Americana</i>	Veado - Mateiro	Game
<i>Tayassu Pecari</i>	Queixada, Porco-do-Mato	Game
<i>Tayassu Tajacu</i>	Caititu , Porco-do-Mato	Game
<i>Potus Flavus</i>	Jupará, Macaco-da-Noite	Living animals' trade
<i>Bradypus Torquatus</i>	Preguiça-de-Coleira	Living animals' trade and game
<i>Nasua Nasua</i>	Quati	Game
<i>Puma Concolor</i>	Suçuarana, Onça-Parda	Fur trade and slaughters without apparent motive
<i>Dasyprocta leporina</i>	Cutia	Game
<i>Cuniculus Paca</i>	Paca	Game
<i>Coendou prehensilis</i>	Ouriço-Cacheiro	Animal trade and game
<i>Leopardus Pardalis</i>	Jaguatirica	Fur trading
<i>Leopardus Wiedii</i>	Gato-Maracajá	Fur trading
<i>Lutra Longicaudis</i>	Lontra	Fur trading
<i>Cebus Apella</i>	Macaco-Prego	Animal trade and game
<i>Alouatta Guariba</i>	Bugio, Barbado	Game
<i>Cabassous Tatouay</i>	Tatu-de-Rabo-Mole	Game
<i>Dasybus Novencinctus</i>	Tatu-de-Nove-Faixas	Game
<i>Didelphis Aurita</i>	Gambá	Game
<i>Brachyteles Arachnoides</i>	Muriqui, Mono-Carvoeiro	Game
Species – Avifauna	Popular name	Reasons for hunting
<i>Pipile Jacutinga</i>	Jacutinga	Game – Extinct in the Reserve
<i>Crypturellus Noctivagus</i>	Jaó	Game – Extinct in the Reserve
<i>Penelope Superciliaris</i>	Jacupemba	Game
<i>Crypturellus Variegatus</i>	Inhambu-Chorão	Game
<i>Crypturellus Obsoletus</i>	Inhambu-Guaçu	Game
<i>Crypturellus Parvirostris</i>	Inhambu-Chitã, Chororó	Game
<i>Tinamus Solitarius</i>	Macuco	Game
<i>Sarcoramphus Papa</i>	Urubu-Rei	Animal trade and slaughters without apparent motive
<i>Spizaetus Ornatus</i>	Gavião-de-Penacho	Animal trade
<i>Odontophorus Capueira</i>	Capoeira	Game
<i>Leptotila Verreauxi.</i>	Juriti	Game
<i>Ramphocelus Bresilius</i>	Tié-Sangue	Animal trade
<i>Tangara Seledon</i>	Saíra-Sete-Cores	Animal trade
<i>Sicalis flaveola</i>	Canário-da-Terra	Animal trade
<i>Procnias Nudicolis</i>	Araponga	Animal trade
<i>Thraupis Sayaca</i>	Sanhaço	Animal trade
<i>Aratinga Aurea</i>	Periquito-Rei	Animal trade
<i>Baillonius bailloni</i>	Araçari-Banana	Animal trade
<i>Selenidera Maculirostris</i>	Araçari-Poca	Animal trade
<i>Volatinia Jacarina</i>	Tziu	Animal trade
<i>Zonotrichia Capensis</i>	Tico-tico	Animal trade
<i>Saltator Similis</i>	Trinca-Ferro	Animal trade

Source: Wallace Marcelino /UFRJ. 2010.

Fonte: Wallace Marcelino, UFRJ/.2010.

Leisure and recategorization: biologic reserve x national park

Leisure activities in Tinguá APA region, the surroundings of the biological reserve, have imposed themselves during the years from two vectors: a) leisure has been an element of conflict and political and economic interests for at least 20 years and b) leisure is a way the local population and from surroundings of the suburban metropolitan region historically use the forest resources and its surroundings for engaging in activities.

A debate held by John Terborgh e Carel van Schaik (2002) on protected areas conducted by conservation ecology representatives of the ecology of conservation, wherein leisure is seen as a possibility of *good use* of nature, opposes conservationists and preservationists. On the one hand, as mentioned before, conservationists claim protection for the good use of nature assets; on the other hand, preserving implies the idea of wilderness which was in the origins of the creation of modern parks, the esthetics of the untouchable nature.

The concept of sustainability/sustainable use is one-way conservationists consider the relations between local populations and uses of available natural resources. In this case, biological diversity protection is directly related to the economic development and the good use of natural resources. Under the preservationist perspective, the criticism to the concept of sustainable use comes from the understanding of the incompatibility between social uses and the urgency to protect threatened natural processes in its dynamics, in its vital balances. These natural processes should then be saved from long and conflictive social processes, such as development models with devastating patterns for protecting nature. There is a conservationist argument, a bet, which protected areas and parks, can play an important role in the construction of a *new value* for nature as long as urban populations search nature for recreational practices, landscape viewing and wild life observation, among others. We can assume that the increase of urbanization has a direct relation with nature conservation as long as the need of escaping from the metropolis would create the conditions for nature to fill up a new gap in the value system and leisure would be a way of grasping this value. For conservationism, the protected areas could have their meaning if linking the needs of biological preservation, the idea of nature escape to the needs of social welfare with the experience of escaping from the metropolis.

The general viewpoints on this debate organize the arguments I have had with different social actors, owners of leisure establishments, NGOs, the public power, managers and environment scholars. Through material and symbolic appropriations, these actors dispute the meaning of leisure in the surrounding areas of RebioTinguá integral preservation unit. I understand that the concept of sustainability is requested by these actors' practice form a coexistence of nature economic value with ecological, recreational, esthetic and spiritual values as long as other functions associated with the uses of these spaces are added, different from the past debate wherein scientific value, biodiversity, prevailed as argument.

Nowadays the surrounding region of the protected area, Tinguá, has a considerable number of leisure sites, inns and farms working as leisure entrepreneurs.¹³ This vocation partially is supported by its decadence for decades and by the changing of old areas of agriculture activity and animal breed, cattle and poultry, into spaces for leisure, recreation and tourism. In general, we can notice the trend towards the constitution of a segment of leisure entrepreneurs for specific profile publics with specific profiles, such as: ecotourism and adventure tourism practice; nature lovers; religious communities (evangelic). The trend is motivated both by economic issues, the segmentation solves the problem of the decrease of seasonal frequency, and by the property owners' religious orientations which include these people's specific needs, conditions for performing christening ceremonies, a venue for prayers, prohibition to the use of alcoholic drinks and so on.

With the increase of these activities associated to leisure practices, other initiatives are in course providing with a diversification of entrepreneurs and generating the perception of a local development. Added to this scenario, there are the recent municipal government policies to recover the 'agricultural issue' through the strengthening of household agriculture which may reintroduce a social actor - the small agriculturist - in the guidelines of local development and the interchange with the interests of nature conservation.

A scenario of conflict is suggested in Simmel (1983) as an element which produces or changes interest groups, associations and organizations. The objective conditions for the development of competitions, as a modality of conflict between the leisure entrepreneurship groups, are posed in the different dispositions to attract segmented publics in the new modalities of entrepreneurship and projects of local development.

The current dispute for the re-categorization of Tinguá Biological Reserve to turn it into a park and, therefore, to increase the use of forest space for the visitors' leisure (paths, walking, horse riding, waterfalls, historical sites etc.) rejects the idea of nature as a value itself, somehow rigidly inserted in the category of biologic reserve, and appeals to the value of parks' "symbolic power" (BOURDIEU, 2000, p.8). Therefore, it increases the contradiction between the scientific values which support the protection to nature and the values of other sustainable uses. Leisure, as a possibility of perceiving a new nature value, will be directly related to the conservation as a target, a "supra-individual, objective and social unit" (SIMMEL, 1983, p.137) and not only the appropriation of nature and its transformation into a "picturesque park" (SCHAMA, 1996, p.513).

Re-categorization can be posed in relation to one of the arcadian myths which survived in modern memory. The imaginary about two kinds of arcadias - the idyllic and the wild one - which oppose park (wild or rural) to domestic lawn (industrially organized); civility and harmony or integrity and indiscipline - is a question which persists in the debates conducted in environmentalist movements between more or less enthusiastic groups of nature protectors (*op.cit.* p.520). In this case, the park, as a conservation symbol, arises more effectively to support economic and political interests.

As seen, in the issue at stake, there is a tension in the actors' rationality involved in the use of leisure, either conservation experts (managers, environmental educators, NGOs) or entrepreneurs. From the viewpoint of the expert actors of conservation, this kind of leisure should, together with a sense of freedom, provide with the acquisition of knowledge acquisition, the change of attitude and behaviors towards nature and increase interactions between conservation experts and the public. This experience of leisure can be transforming for the individual and for social life as long as it forms values which return to the daily routine and disseminate ideas and practices of the concept of sustainability, leisure meaning a form of socialization (SIMMEL, 1983:168) through which the individuals act increasing the interaction and 'making' more society. The relation leisure and nature protection is a bet in the values which arises out of these 'make' more society.

Final remarks

There is an understanding that the model of nature protection stated by Brazilian legislation lacks some information about the specific realities of the so-called Conservation Units which were created from the rules of the National System of Conservation Units (SNUC). The description and the analysis of the social processes which provided for the conditions for the creation of a biological research, that is, an integral protection area, more restricted to use, and the interactions among different social actors, the conflicts, the cooperation motivated or not by the nature conservation problem bring insights to the debate on models of conservation units in Brazil and populations and increase the understanding of social relations associated with protected areas, particularly in the case of Tinguá Biological Reserve where there is a relative lack of information about the local social dynamics. The forested area, focused on this study, has its meaning associated to the offer of a natural asset – water, as an attraction for the leisure of Baixada Fluminense population and its surroundings. Leisure is an expressive dynamic of local sociability in the mobilization of economic, political and conservationist interests and updates itself as a vector in the dispute for the changing of category of biologic reserve to national park.

Notes

¹This law is the result of a more than two decades' work since its first proposal dates 1979 and only in 1992 a version is sent to the National Congress. The National System of Conservation Unit (SNUC) was enacted in Brazil, on 18th July 2000, by law 9.985 and is consolidating itself so as to order the protected areas on federal, state and municipal levels. It is estimated that the total area of the Conservation Units (UCs) in Brazil is 75 million acres for the Federal UCs and 70.4 million for the state UCs. Among the Federal UCs, 36,4Macres are UCs destined to integral protection, where it is not allowed the direct use of natural resources, and 36,4 million acres for sustainable use UCs, which seek to integrate the conservation with the sustainable use of natural resources. Source: Ministry of Environmet/Secretariat of Biodiversity and Forests. Fonte: Report of Conservation Units. 2011.2

² Besides drafting the basis of the national system of conservation units which exists nowadays, the Forest Code “denied the absolute right of propriety, prohibiting, even in private properties, cutting trees along the courses of water, trees which shelter rare species or protected sources /.../” (DEAN, 1997. p. 276). In the 30’s, Brazil created its first protected areas. In the 40’s, four unities were created which double in the 50’s. From the 70’s to the 80’s, the number of decrees for the creation of conservation unit tripled. In the 80’s, one hundred and thirty-six new protected areas were created comparing to thirty-eight new units in the 70’s. From the 80’s on, we can notice that the number of protected areas increased gradually since between 1990 and 1999 more two hundred and two natural protected areas were created. And, finally, between 2000 and April 2010, two hundred and seventy conservation units were created totaling 692 units. These data come from the National Registry of Conservation Unit database, available at the Environment Ministry site and correspond to decrees for the creation of units according to the National System of Conservation Units (2000) in two management categories: integral protection units and sustainable use units (www.mma.gov.br available on 06/04/2010).

³The “new ways” were the new routes between Rio de Janeiro, through Baixada Fluminense, and the Gerais region which were open in the 18th century for the transportation of gold, troops and troopers and travelers. These historical sites were obligatory paths of naturalists such as Saint-Hilaire and foreign travelers, such the English Charles James Fox Bunbury and Ribeyrolles. Among others, in the period which includes the frequent trips of foreign naturalists in the first three decades of the 1880s. These naturalist travelers made botanical collections in Inguá-Açu region which are nowadays in European herb gardens. (CUSTÓDIO, 2007).

⁴The Southeast region is comprised of the following states: Rio de Janeiro, São Paulo, Minas Gerais and Espírito Santo. The region has high levels of urbanization, industrialization and biome threats, particularly the Atlantic Forest biome.

⁵Baixada Fluminense includes 14 municipalities and has an estimated population of 3, 725, 208 inhabitants. (Sources: Fundação CIDE/IBGE). The region presents historically high rates of violence and poverty.

⁶The Brazilian Institute of Forest Development (IBDF, in Portuguese) was a Brazilian federal company created in 1967, linked to the Agriculture Ministry in charge of subjects related to forests and AFINS. It was closed in 1989 and replaced by Brazilian Institute of Environment and Renewable Natural Resources (IBAMA, in Portuguese).

⁷*Jornal Última Hora* 26/7/1988; 8/11/1988; 15/11/1988; *O Dia* 2/2/1992; 2 9/07/1990; 21/06/1992; *O Globo* 2/2/1992; 19/4/1992

⁸The conflicts resulted from violent acts such as environmentalist Dionísio Júlio Ribeiro Filho’s murder attributed to a resident involved in hunt activities in 2005. The environmentalist was one of the creators of the Nature Defense Group (GDN, in Portuguese), the first environmentalist NGO in the region that played an active role in the mobilizations for the creation of the biological reserve decree, in denouncing environmental crimes and death threats to environmentalist supporters and IBAMA employees.

⁹Created in 2007, the ICM-Bio is a company linked to the Environment Ministry responsible for the management of the national conservation units replacing the former IBAMA legal competence which current work is environmental licensing. The ICM-Bio represents, in my viewpoint, a new moment of policies for Environment Ministry protected areas. The central issue defined by the new body is protection from an integrated view of nature and society, that is, the relation between landscape, ecological processes and the relations with society. This orientation results from the participation of Brazil as a signee of the International Convention on

Biological Diversity (CDB, in Portuguese) and the goals of its Work Program about Protected Areas is under orientation of the International Union of Nature Conservation (UICN, in Portuguese), an international regulation instrument, which states goals for a new paradigm for protected areas assuming an integrated view of society and nature relation.

¹⁰The reserve is a federal conservation unit (ICM-Bio), the water impounding in the interior of the reserve is a state body's responsibility (CEDAE) and the environmental protection areas in the surrounds of the reserve, where the local population lives, is the municipal jurisdiction's responsibility.

¹¹According to the IBGE Demographic Census- Government Regional Units/Special Tabulation Metropolis Observatory 2000, the surroundings of the Conservation Unit has a population of 13,328 inhabitants and, in the area concerned for the study, Tinguá region, the population is 3,803 with 1,629 domiciles. (SAMPAIO, 2008).

¹²A 1967 presidential decree introduced hunting prohibition in Brazil.

¹³ *“Nowadays, Tinguá region has 53 sites and farms, working as leisure and recreational entrepreneurs. The visitors' flow in these farms is quite high and some of them have received three thousand people in holidays and weekends and up to 20 thousand people in events. These visitors come either from the region or get to Tinguá in excursion groups and, in general, rend places for recreation and leisure...”* (SILVA; MARTINS, 2010)

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Ana Lucia Lucas Martins. Universidade Federal Rural do Rio de Janeiro. Instituto Multidisciplinar, Rio de Janeiro, Brasil.

Email: martins.allu@gmail.com

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