

A CALL FOR REFLECTION ON THE CATEGORY OF WILDLIFE REFUGE CONSERVATION UNIT¹

MARCIA CASARIN STRAPAZZON²
NILVÂNIA APARECIDA DE MELLO³

1. Introduction

In a time when the environmental crisis is regarded as a knowledge and civilization crisis (LEFF, 2010), the Wildlife Refuge (RVS) Conservation Unit (CU) category has the potential to reaffirm its existence.

The RVS category is a conservation unit in the full protection group, i.e., it only allows the indirect use of natural resources, and it does not involve the collection, use, damage or destruction of such resources. The peculiarity of this category, which is shared only with Natural Monuments, lies on the fact that, by being a full protection category, it does not involve land expropriation once the activities held within the properties are compatible with the Unit creation goals. Since private properties remain private, the National Conservation Unit System (SNUC - Sistema Nacional de Unidades de Conservação) Law allows certain exceptions to the category, such as the permission to breed/cultivate non-native animals/crops, etc., if so provided in its management plan.

The current study is a call for reflection and it does not intend to exhaust the debates and implementations that are essential to understand the role played by the Wildlife Refuge Conservation Unit category in Brazil. The herein proposed reflection is organized in seven sections, namely: introduction, research methodology, historical background of the Brazilian conservation unit category, analysis of the Wildlife Refuge category in relation to SNUC process preparation, preliminary debate on federal RVS management, call for reflection on the category potentials and final considerations.

The current study comes from an exploratory research (GIL, 2007) and it has the aim to deepen the knowledge about an underexplored conservation unit category, namely: the Wildlife Refuge. The study investigated the possible origins of the aforementioned

1. We appreciate the support given by different collaborators in several discussions and we thank the key-informant for his immediate and solicitous collaboration.

2. Analista Ambiental/ICMBio, Mestre em Desenvolvimento Regional pela Universidade Tecnológica Federal do Paraná – Campus Pato Branco. Email: marcia.strapazzon@icmbio.gov.br

3. Agrônoma pela Universidade Estadual de Ponta Grossa, Mestre em Agronomia pela Universidade Federal do Paraná, Doutorado em Ciência do Solo pela Universidade Federal do Rio Grande do Sul, Professora do Programa de Pós Graduação em Desenvolvimento Regional da Universidade Tecnológica Federal do Paraná – Câmpus Pato Branco. Email: nilvania@utfpr.edu.br

category in the SNUC context as well as the inspirations for its definition. It also raised hypotheses about the concepts involved in the creation federal CUs belonging to this category and about the possible meaning managers attribute to RVS.

2. Methodology

The herein presented research encompasses literature review and documentary research, as well as interviews done with a key-informant who participated in decisive moments related to the preparation of the National Conservation Unit System, which is a public policy that set the Wildlife Refuge category in 2000. It also analyzes the answers given by the managers of the seven existing federal RVS.

The literature review was conducted by using the Coordination for the Improvement of Higher Education Personnel (CAPES - Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) database and it prioritized the search for publications in scientific journals that addressed issues involving the SNUC law development history as well as the Wildlife Refuge category. On the other hand, the documentary research focused on investigating bills, minutes of meetings and public hearings, standards and relevant legislation in order to reconstruct the history of the Brazilian Conservation Units' creation and management, especially that of the RVS category.

Based on this survey, the study sought to identify the critical points in the SVR category concept within the SNUC preparation context. It is worth emphasizing that this concept did not exist at the time conservation units were being discussed and created; the term used at that time was protected areas. However, the current study is not interested in discussing this differentiation; thus, it is important to keep in mind that only the protected areas in the form of conservation units are herein analyzed.

A questionnaire comprising 12 questions was sent by email to the key-informant. The answers to the questions were sent back on May 22, 2013. Questionnaires comprising 27 questions were also sent by e-mail to the federal RVS managers. The managers responded between May and August 2013.

The bibliographic and documentary surveys allowed investigating the possible origin and the inspiration to define the category as well as its reflection in reality, based on the analysis of the existing federal RVS creation goals. Finally, the opinions of the federal RVS managers about their view on the category and on some perceptible obstacles to the management of these conservation units were analyzed.

3. Historical background of the brazilian conservation unit category

Firstly, it is worth clarifying the difference between protected areas and conservation units. Protected areas are thus defined by some legal mechanism. They include the Permanent Preservation (PPAs) and the Legal Reservation (LR) Areas created by the 1965 Forest Code (BRASIL, 1965); the Indigenous Lands instituted in 1973 by the Indigenous People Statute (BRASIL, 1973) and formalized in the 1988 Constitution (BRASIL, 1988); the Ramsar Sites (wetland areas protected according to the Convention

on Wetlands of International Importance held in 1971, in Ramsar City, Iran), which correspond to the Brazilian conservation units; the World Cultural and Natural Heritage Sites (declared as such by UNESCO after the World Heritage Convention held in 1972) which, in some cases, are also conservation units in Brazil; the Remaining Lands of Quilombo Communities, recognized by Article 68 of the 1988 Federal Constitution; and the Conservation Units (BRASIL, 2000). The term conservation unit appears for the first time in the National Environmental Policy (BRASIL, 1981) and it reappears in the 1988 Federal Constitution. The big difference lies on the purpose of the protected areas and on the fact that the exclusive prerogative of Conservation Units is conserving the nature.

The first debates held in the country aiming at creating protected areas date back to the Nineteenth Century. However, these initiatives were inspired by international experiences, especially those of the United States and Europe. The focus inherited from these experiences was related to the protection of renewable resources of recognized economic relevance (PÁDUA, 2003 *apud* MEDEIROS, 2006). According to Medeiros (2006, p. 43), "Brazil was one of the countries that later succumbed to the international wave of creating Parks, after the American initiative in 1872."

According to Medeiros, Irving and Garay (2004), the 1930s were particularly relevant to the management of protected areas. The authors attribute this progress to the new development ideology in Brazil - since it enabled a political environment conducive to the modernization process that characterized the country at that time - as well as to "the influence and pressure made by organized nature-protection movements, which began to better equip themselves" (MEDEIROS, 2006, p. 46). Peccatiello (2011, p. 73), based on the periodization suggested by Monosowski (1989), features this time according to the need for "regulating the appropriation of each natural resource at national level, by focusing on the needs of the emerging industrialization and urbanization."

Also according to Medeiros (2006), the 1934 Republican Constitution attributes to natural resources the status of national heritage to be preserved, and it definitely includes the management of protected areas in the Brazilian political agenda. The 1934 Forest Code sets protected area categories such as National Park, National Forest and Reserve for Biological or Aesthetic Protection, whereas the 1934 Hunting and Fishing Code creates the Wild Animal Reserve, Refuge and Breeding Park (focused on protecting species/resources). As a result, the Itatiaia National Park was launched in 1937, and it was the first Federal Conservation Unit in Brazil.

As for the management of protected areas, the period from 1934 to 1988 was featured by inconstancy. Until the 1960s, there was no CU creation planning or policy (MERCADANTE, 2001). The units were created according to policies that encouraged environmental devastation "sometimes on behalf of the development, sometimes as a result of the abandonment of territorial planning, sometimes as a consequence of the pursuit for national integration, or as a result of the most absolute administrative negligence" (OLIVEIRA, 2005, p. 47 *apud* SILVA, 2008, p. 373).

According to Medeiros (2006), the 1967 Animal Protection Law creates CU categories such as National Biological Reserve (only indirect use) and Federal Hunting

Park (providing direct use), and it also creates spaces called refuges and reserves, which are geared to animal preservation.

According to Drummond and Barros-Platiau (2006), the 1965 Forest Code and the 1967 Wildlife Code were responsible for the future CU categories of full protection and sustainable use, since they envisioned protected areas that could not be used (national, state and local parks and biological reserves) as well as those where the direct use was allowed (national forests and hunting parks).

Since the 1970's, the focus fell on the industrial pollution control, and it was especially influenced by the United Nations Conference on Environment, held in 1972, in Stockholm (UN, 1972). At that time, development was synonymous with economic growth, and since Brazil was in full developmental race, the country's position was clearly contrary to the Conference initiatives (PECCATIELLO, 2011)

However, the international debates had some influence in Brazil, so that one of the goals of the Second National Development Plan (1975-79) was "achieving development without deteriorating the quality of life and, especially, without devastating the national heritage of natural resources" (MEDEIROS, 2006, p. 53). Regarding the Amazon, the same plan determined the immediate establishment of National Parks and Forests.

During the protected areas expansion process in Brazil, the Brazilian Institute for Forestry Development (IBDF - Instituto Brasileiro de Desenvolvimento Florestal) was launched by the Ministry of Agriculture, in 1967. It encompassed, among its goals, the management of the hitherto existing conservation units (National Parks, Biological Reserves and National Forests).

According to Medeiros (2006), the Special Secretariat for the Environment (SEMA - Secretaria Especial de Meio Ambiente) was launched in 1973, fact that resulted in an overlap of institutions. As the entire management of protected areas remained under the responsibility of the Brazilian Forest Development Institute (IBDF - Instituto Brasileiro de Desenvolvimento Florestal), SEMA suggested typologies typical of CUs, namely: Ecological Station and Environmental Protection Area (1981); Ecological Reserve and Area of Relevant Ecological Interest (1984). Decree No. 98.914 was published in 1990 and it created the Private Natural Heritage Reserves. It was repealed by Decree No. 1.922 of 1996. "The main justification for the establishment of these new typologies was filling obvious gaps in the Brazilian protected area creation model." (*Ibid*, p. 54)

However, since the mid-1970s, the need to promote greater order in the protected area creation process as well as the need for a single and integrated system has been discussed in the IBDF (MEDEIROS, 2006). According to Mercadante (2001), the book entitled "Uma Análise de Prioridades em Conservação da Natureza na Amazônia" (An Analysis on the Nature Conservation Priorities in the Amazon) was published in 1976. It became the basis for developing the "Brazilian Conservation Unit System Plan", which first stage was published in 1979, and the second one, in 1982. According to Medeiros (2006), these two proposals would be the "embryo" of the future SNUC.

The Brazilian Conservation Unit System Plan (IBDF/FBCN, 1979; 1982) suggested creating the following CU categories (besides the already existing ones): Natural Monument, Wildlife Refuge or Sanctuary, National Park, Wildlife Reserve, Indigenous

Reservation, Cultural Monument and also Biosphere Reserve and World Heritage Reserve.

Dias and Pereira (2010) describe the change that occurred in the environmental and political perspectives regarding the development and management of Conservation Units since 1980. The authors highlight that no one paid attention to the interests of traditional communities at any time during the period of developmental actions by the military government (1960-1970, especially in the second half of the 1970s). The incentives were essentially directed to the expansion of agricultural and urban borders and to the deployment of infrastructures. Thus, the delimitation of protected areas emerged as a response to international criticism, and many of these initiatives excluded (and sometimes expelled) local populations. As it was previously mentioned, the practice complied with the international hegemonic strategy (especially in the US), which, until the mid-1960s, considered that "in order to really conserve natural resources it was necessary to exclude the populations" (BRITO, 2008 p. 05).

This situation generated a "renewal in the Brazilian environmental policy, based on movements organized by 'forest peoples' and supported by non-governmental organizations (NGOs)" (DIAS and PEREIRA, 2010, p. 77). Thus, extractive reserves were created by the 1987 Executive Ordinance No. 627 of the National Colonization and Agrarian Reform Institute (INCRA - Instituto Nacional de Colonização e Reforma Agrária), and they were recognized as Conservation Units in 1990 (DRUMMOND, FRANCO and OLIVEIRA, 2011).

In the meantime, the Ministry of Urban and Environmental Development was launched in 1985, based on SEMA's structure, which was consolidated as Ministry of Environment in 1999 (NUNES, COSTA and LUSTOSA, 2011). The new Constitution was promulgated in 1988 and it had a specific chapter on the environment. This chapter explicitly determined the creation and delimitation of protected areas and confirmed the common duty of both the society and the State in maintaining and protecting nature. In addition, according to Dias and Pereira (2010), Brazil was strongly criticized in the early 1989 due the fires in the Amazon and to Chico Mendes assassination. Then, the Federal Government created the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA - Instituto Brasileiro de Meio Ambiente e Recursos Naturais Renováveis), which merged SEMA, IBDF, Superintendence of Rubber, Superintendence of Development and Superintendence of Fishery.

Finally, According to Pádua (1997), in the 1990s, Brazil reached a plurality of protected natural area categories, within an international environment of consensus about the importance of protecting biodiversity. According to the author, the different CU types were born from multiple factors, namely: the tune of scientists and administrators with changes in the global environmental conservation frame, the expansion of social interest in the issue, the international pressures and the competition between management bodies and their different policies.

4. The national conservation unit system and the wildlife refuge category

As for the trajectory of the environmental issue discussion, protected areas proliferated worldwide since the 1970s and human presence in CUs became subject of debates. In 1972, the predecessor of the concept of sustainable development emerged in Stockholm. In that same year, Canada hosted the XI General Assembly of the International Union for the Conservation of Nature and Natural Resources (IUCN), in which human occupation and economic exploitation of national parks through zonings were taken into consideration for the first time (BRITO, 2008).

According to the same author (*op. cit.*), the International Union for Nature Protection (future - IUCN) was established in 1948 to ease the human populations versus protected areas dichotomy. IUCN is currently the leading international organization that directs global policies concerning protected areas.

The Third World Congress on National Parks was held in 1982 and it started the debate about a policy able to correlate regional, state and national development, local populations, natural resources and environment in the management of protected areas. The concept of people as users evolved into that of managers. According to Brito (2008), it was an important step for the legal establishment of Conservation Units with human presence.

At the national level, as part of the Conservation Unit System Plan process (IBDF/FCBN, 1979; 1982), IBDF asks FUNATURA (NGO) to make a critical evaluation of the existing CU categories and a draft bill for the future National Conservation Unit System.

FUNATURA delivers its proposal to IBAMA, in 1989. The proposal contained 09 conservation unit categories divided in three groups, namely: full protection, interim management and sustainable management. At that time, the Wildlife Refuge category was part of the full protection CUs and it absorbed the goals of Areas of Relevant Ecological Interest (ARIE - Área de Relevante Interesse Ecológico) established in 1984 by SEMA and extinguished by FUNATURA's proposal (MERCADANTE, 2001).

On June 5, 1992, the preliminary draft (BRASIL, 1989) becomes bill and it is forwarded to the Consumer, Environment and Minorities Rights Commission (CDCMM - Comissão de Direitos do Consumidor, Meio ambiente e Minorias), in which it is subjected to the first substantial modifications under the rapporteurship of the then Congressman Fábio Feldmann (MERCADANTE, 2001; MEDEIROS, 2006). In this context, Brazil, which has one of the greatest biodiversity rates on the planet, appears as strategic target of the Biodiversity Convention developments. It is worth highlighting that the ECO 92 (Earth Summit), in which such a report was presented, was held in 1992. However, Brazil only ratified the Biodiversity Convention in 1994. At that time, the government started the debates about the SNUC.

According to the bill (BRASIL, 1989), the RVS

must ensure conditions for the existence and reproduction of local flora species or communities as well as of resident or migratory fauna.
(...) the maintenance of private domain areas will depend on the

compatibility between the Unit goals and the land use. Whenever the owner does not give consent to the coexistence between the Wildlife Refuge and the use of the property, the land will be expropriated on behalf of the effective public interest.

In 1995, Congressman Fábio Feldman left the Congress to take São Paulo State Secretariat of Environment and Congressman Fernando Gabeira took the Rapporteur. Quite crowded public hearings were held in six cities during this period. By using Feldmann's proposal, Gabeira makes new proposals based on the results of public hearings (MERCADANTE, 2001). As for the RVS category proposal, the subtle and main change it was subjected to was the focus on protection. According to the bill and to Feldmann's clean bill, protection referred to the "conditions for the existence and reproduction of species or communities". According to Gabeira, it began to be described as the protection of "natural environments that ensure the conditions for the existence and reproduction of species or communities" (SOUZA, 2012, Annex A). This last definition was kept in the SNUC publication. In other words, the focus shifted from species and communities to the environment. This shift has important consequences, which we will discuss later.

Another innovation from Feldmann's clean bill in the present case is also extremely relevant for the RVS category analysis. The bill included the RVS in the list of full protection CUs, i.e., places where only the indirect use of natural resources was allowed (except for cases provided by law). However, the bill did not present the definition of 'indirect use'. This definition was included in Feldmann's clean bill as "the one that does not involve consumption, collection, damage or destruction of natural resources" (SOUZA, 2012, Annex A) and thus, it was kept in the SNUC publication.

This definition of indirect use involves serious limitations, since it is almost impossible to identify any production activity that does not imply at least consumption or collection. By making a more accurate and strict analysis, one can assume that the only human activities that could be allowed within full protection CUs would be non-productive in terms of production of goods, such as tourism, education or research.

The bill also prohibited the introduction of non-native species in the CUs, but it did not mention the exceptions related to the RVS category. On the other hand, Feldmann's clean bill stated that "the private properties held in the Wildlife Refuges may breed domestic animals compatible with the unit's purposes, according to its Management Plan" (SOUZA, 2012, Annex A). This exception was kept in SNUC publication, and the cultivation of compatible plants was also added to it (change made by Gabeira's clean bill).

As for the SNUC definition of Full Protection CUs, this was the only exception provided by law regarding indirect use in the RVS. However, the exception is limited to what is provided in the management plan - the management document based on the CU overall goals -, which establishes the unit zoning as well as the natural resources management standards. It is worth highlighting that the bill made clear that the Executive Power could limit or prohibit activities in conflict with the RVS creation purposes; however, such an item was deleted in Feldmann's clean bill and it did not appear in SNUC.

Finally, it is noteworthy that the exemption of Rural Land Tax (ITR - Imposto Territorial Rural), which was the only incentive provided in the bill for private areas inserted in RVS, was deleted in Gabeira's clean bill and it was not kept in SNUC. However, according to Law No. 9393/96, the ITR exemption applies to all lands declared as being of ecological interest by the Government, such as PPAs, legal reservation areas and areas covered by native vegetation. However, although this standard is applicable to the RVS, the SNUC Law did not contemplate such incentive; thus, it means more bureaucratic procedures for the owners whose lands are covered by a Refuge.

According to Rodrigues (2009), the Wildlife Refuge category was inspired by the American National Wildlife Refuges, which purpose is to preserve the wildlife resources in the country by focusing on endangered species, and it also provides recreation and environmental education. This link is consistent with the statements by the key-informant interviewed during the development of current research.

The first stage of the Brazilian National Conservation Unit System Plan proves that inspiration, since the plan states that the goal of the Wildlife Sanctuary or Refuge is to ensure the survival of species or populations of migratory or resident fauna, endemic and unique biotopes, with regional, national or global significance. Thus, the areas would be proportional to the habitat needs or to the specific features of the species to be protected, and they would consist of relatively small areas such as nesting areas, lakes and swamps (IBDF / FBCN, 1979).

Pureza (2014) shows another understanding of the possible inspiration for the RVS category definition. This inspiration was announced by Cláudio Maretti based on Paulo Nogueira Neto explanation. According to this understanding, this category may have been considered as a sort of Natural Monumentⁱ concept applied to the biological context. In addition, it is in a way linked to species, rather than to the overall environment, and it is also related to small areas. Thus, it would be applied to a context in which it would not be possible to protect the entire system, but only a key aspect of the process.

Three of the four other statements obtained by Pureza (2014) about the RVS concept explicitly relate the category function to wildlife protection. According to Pádua (2013), Areas of Relevant Ecological Interest (ARIE - Área de Relevante Interesse Ecológico) are similar to RVS, since they are also related to fauna protection.

As it was previously mentioned, the ARIEs goals were absorbed by the RVS in FUNATURA's preliminary draft; thus, the category was extinguished. However, since it was not possible to identify the reasons for its extinction in both SNUC preparation and approval processes, the ARIE category was resumed in the clean bill approved by the Câmara dos Deputados so that the two categories have come to coexist.

It is worth highlighting again that, according to SNUC law, the RVS category is focused on protecting "environments" rather than "endangered species", as it occurs in the American National Wildlife Refuges. This change in the RVS definition puts it away from its inspiration sources, as well as from the almost unanimous view that the category would have the primary function of protecting the fauna.

5. Federal RVS creation and management

By analyzing the decrees that created the Federal Refuges, it was possible to see that only one of the seven existing refuges has some direct relation to the protection of fauna species among its goals. It is Boa Nova RVS, which, among other goals, seeks to protect viable slender antbird (*Rhopornis ardesiacus*) populations.

The Santa Cruz RVS also relates to the initial category concept, since its main purpose is to protect sea- or riverbeds colonized by algae and by other benthic communities as well as to protect their associated fauna. Both refuges were created in 2010, the first one in Bahia State and the second one in Espírito Santo State.

The decree that created Rio dos Frades RVS refers to the concept of natural monument applied to biological aspects, since it intends to “preserve natural ecosystems of great ecological relevance and scenic beauty”. On the other hand, the decrees that created the other RVS refer to the RVS concept found in the SNUC text, which concerns the protection of “natural environments that ensure the conditions for the existence or reproduction of species or communities” in a broader way.

The intention of establishing RVS in relatively small areas did not remain, and only Rio dos Frades RVS (created in 2007) and Ilha dos Lobos RVS (originally created in 1983) have less than 1,000 hectares. All other RVS have areas between 15,000 and 128,000 hectares.

Thus, the category concept used to create Wildlife Refuges at federal level distanced itself from the goals or aspirations related to its origin in the SNUC process development. Most federal RVS have overall goals related to the protection of natural environments, but they do not mention the preservation of a specific resource, or even seek to protect relatively small areas that safeguard certain aspect or stage of a natural process.

Faced with the difficulties in managing CUs of a very complex, unknown and rare category, environmental analysts assigned to federal RVS started, in 2009, a movement to discuss the standards and guidelines for the management of this category. However, the CUs’ managing body (Chico Mendes Institute for Biodiversity Conservation) did not continue the negotiations because a Working Group (WG) of the National Environmental Council (CONAMA - Conselho Nacional de Meio Ambiente), whose purpose was to regulate several categories (Biological Reserve, Ecological Station, Environmental Protection Area, Area of Relevant Ecological Interest and Wildlife Refuge), would meet this demand. However, the GT creation process dates back to 2007 and it is currently listed as “inactive” on the Ministry’s website.

During the aforementioned period, CONAMA focused its attention on the discussion and elaboration of what would become the CONAMA Resolution No. 428/2010, which deals with standards for environmental licensing of projects affecting conservation units or their protective boundary zones.

This lack of regulation that ignores the importance of discussing the location of this category - which is predominantly composed of private properties - in a sort of intersection between the full protection and sustainable use groups, generates often-insurmountable

obstacles to the management process. In addition, it manifests itself when the understandings related to the RVS category are analyzed in studies involving SNUC.

Nunes, Costa and Lustosa (2011) contextualized the environmental concern according to the economic dimension, and they generalized the Full Protection CU group, including the RVS, as units where “the presence of permanent populations as well as of economic activities are prohibited” (p. 30).

Silva (2008) classifies the CU categories in three groups according to the land ownership origin and control. Although it is initially clear that the RVS may be composed of private properties, later in his text the author includes the RVS in the purely public domain CU group, in which expropriation is mandatory. Thus, only the Áreas de Proteção Ambiental (APAs) and the ARIEs are included in the mixed nature CU group (that combines land public and private regime).

On the other hand, Derani (2001) cited by Medeiros, Irving and Garay (2004), points out that the Full Protection Units should not be subjected to urbanization or to agriculture. These activities could exist in Sustainable Use CUs, but only in specific situations. In the same study, Irving (2002) cited by Medeiros, Irving and Garay (2004, p. 87) points out that the SNUC illustrates the integration between preservationist - inspired by the untouchability of renewable resources - and social-environmentalist perspectives, with the concept of social inclusion in the management of protected areas.

One can infer certain “lack of knowledge” in these readings. Some hypotheses can be raised to explain this limitation: the RVS is located in a sort of intersection between full protection and sustainable use; there are few units of this category, especially at federal level (only seven); and for both reasons, it may set itself as an exception.

However, the aforementioned studies rather demonstrate a preservationism/socio-environmentalism dichotomy reflected in the division of CU categories into full protection and sustainable use groups, than an integration, at least as regards to the Wildlife Refuge category. One can attribute this difficulty found in the analyzed articles to the SNUC concept of full protection - related to the lack of human interference - disregarding the exceptions - and, hence, to the concept of indirect use, both previously explored in the present study.

Menezes and Siena (2010) discussed the distribution of environmentalistⁱⁱ trends (preservationism, socio-environmentalism and sustainism) in the ICMBio technical framework in the Legal Amazon. They found that preservationism is still the most frequent trend; however, part of the technicians incorporate precepts from the other trends. The authors point to a “mixed” environmentalism composed of a plural environmentalist view or to the perspective of a developing environmentalism, and they cogitate the existence of a moderate preservationism or a real change of concept.

Brown (2002) states that, in the 1990s, a new scientific reference about the social function of protected areas became internationally consolidated due to ethnobiology and to projects that consider ecosystems to be dynamic. Thus, preservationism and conservationism began to share space.

Despite the concept change that may be occurring, the RVS management barriers remain, and they are often caused by the preservationist trend predominance even

at higher ICMBio levels. Menezes and Siena (2010) discuss the possibility that ICMBio might have inherited the preservationist perspective - detected by Garnelo and Sampaio (2005) - from IBAMA, since ICMBio was created from the deployment of IBAMA.

Questionnaires were applied to seven RVS managers in order to enrich the federal RVS management analysis. It was observed that three different opinions on the category origin and on its current role find place in the debate proposed in the current research.

Two of the seven managers seem to consider the RVS as a full protection CU in the classical sense. In this case, the only land use option would be ecotourism, which can be considered as being of indirect use. In addition, one of the opinions reflects the impression by the manager that the category was chosen as a strategy for the government to escape from the burden of expropriation.

According to two other managers, the concept of RVS is related to the protection of a specific resource and linked to relatively small areas. Their opinion is in accordance with the original inspiration mentioned in the current study.

Finally, there are managers who consider the category, in a way, as a forced practice of sustainable development, as it can be seen in the following statement:

(...) this category is the sustainable development put into practice. However, the system does not allow such a practice, i.e., the capitalist assumptions currently exclude any practice involving low production expansion, or respect to the natural attributes of the ecoregions, or simply strict respect to environmental laws. These practices invariably reduce the increasing gain expectations of the owners.

According to these managers, activities compatible with the RVS goals should be set in the unit's creation decree, based on studies that justify such compatibility in a full protection CU. In addition, production restrictions should be thoroughly explained to the affected population.

Finally, there is the practical difficulty of defining economic activities that could be considered as being of indirect use, so they could be practiced, or even encouraged, within full protection conservation units.

6. Asserting the RVS role

At first glance, the Wildlife Refuge can be considered as a hybrid category, i.e., nor of full protection neither of sustainable use. Souza (2012) even suggests the category extinction or its displacement to the group of sustainable use conservation units.

The current study sought to demonstrate that the Cartesian formations and concepts inherent to the contemporary society tend not to allow one to see the possibility of coexistence between the goal of natural resources full protection and the presence of productive human activities. They seem contradictory, exclusive to each other.

However, the current research proposes a reflection on the possibility of looking to other directions by focusing not only on dualistic antagonisms, but also on comple-

mentarity terms without conflict denial (LIMA, 2005), since, according to Leff (2010, p. 206), “environmental policy is conviviality in dissention.”

The environmental crisis may be interpreted as a reflection of the instrumental rationality limits. Instrumental rationality may be defined as the economic and technological rationality (system of beliefs, values, actions and production standards) that sustains the modern capitalist and, therefore, dominant society (LEFF, 2010).

Based on the works by Max Weber, Leff (2010) shows possible ways to analyze environmental issues and indicates the concept of rationality as being of great value to it. The current study is especially interested in the concept of substantive rationality, which emerges from Weber’s frank criticism to hegemonic rationalities. These rationalities would be those that coexist with the instrumental rationalities without necessarily submitting to them.

Thus, the current study proposes to broaden our perspective regarding the Wildlife Refuge category, not only regarding what appears to be its main aspect, namely: the apparent contradiction concerning the fact that it belongs to the full protection group, but it presents uses that, in some cases, are considered to be direct. It suggests that there might be marginal rationalities, in an open pursuit of Enrique Leff’s environmental rationality, i.e., the alternative productive rationality that can be seen in the social actors involved in the RVS.

Therefore, the RVS category may be asserted. There are no guarantees that this is the right way, but there is not always necessarily only one way. In a world of complex social and environmental societies, the ways of understanding the changes must evolve accordingly. Although the SNUC elaboration process took a decade to be developed, the RVS category definition, specifically, has undergone drafting changes that distanced it from the allegedly followed model (the American Wildlife Refuges). These changes led to an innovative configuration within the group of full protection conservation unit, in which some direct uses were suggested. These uses are still very unclear – since there is no regulation to the category - but it does not mean that they are not viable.

Efforts to diagnose the productive rationality of landowners inserted in RVS as well as to properly manage - through the expropriations provided by law - the lands where this rationality is not compatible with the CU may constitute the first steps towards the RVS effectiveness.

7. Fial Considerations

The Wildlife Refuge category was created from assumptions related to the protection of specific resources of restricted spatial or even seasonal occurrence, especially those concerning the fauna. However, throughout the long SNUC development process, the category definition has undergone changes that led it to be differently applied in practice. It was possible to identify the shift in the category focus from specific resources to a broader concept of natural environment as a whole, fact that put it very close to the other full protection categories.

This concept change applied to the federal RVS creation goals, due to the SNUC publication, does not affect the RVS relevance. However, its differential - and source of dissension - lies on the possibility of co-existence between the private properties, which are allowed to make indirect use of natural resources, and the full protection of the covered environment.

This context - starting from the category origin, passing through the concepts expressed in the creation of federal RVS, and coming to the everyday management of these CUs - generates difficulties due to the lack of regulation to the category. This lack of debate and regulation may also be seen in the plurality of opinions formed by the environmental analysts directly involved in the daily Wildlife Refuge management.

SNUC, in its broad range of CU categories, meets preservationist and socio-environmentalist goals, and it also allows certain flexibility in categories such as RVS. This variety of categories would also represent the environmental diversity presented by a mega-diverse country of continental proportions such as Brazil.

When it comes to conservation units, it is imperative to consider the existence of permanently protected territories. The greening of thought drives the time horizon expansion necessary for the understanding the environmental issue requires. The goal of protecting natural spaces as well as their attributes serves the current and future generations. Thus, the difficulty to accept and live with constraints and determinations based on intangible needs, which are often specially geared to the common good and contrary to the hegemonic rationality, is somewhat understandable. However, the recent events, as well as the increasing awareness about the complexity, will gradually give meaning to the actions taken in this direction nowadays. It is just a matter of time. The current major difficulty lies on the fact that the RVS problem, as well as the CU management problem in general, is not just about concept, it is a political issue. The management of conservation units is not on the agenda, and it probably never was.

Notes

- i The category was regulated by SNUC Law aiming to preserve rare natural sites, unique sites, or sites of great scenic beauty.
- ii Preservationism is herein understood as a perspective inspired by the untouchability of natural resources without a social dimension directly incorporated to it. Socio-environmentalism is understood as a perspective that considers social inclusion in the management of protected areas; it comprises Social Ecology, Political Ecology and Environmental Justice, and it advocates for a paradigm shift in the environmental knowledge and in the policies directed to the area, by valuing the local communities' culture, participation and self-determination (Menezes and Siena, 2010, p.485). Sustainism is based on concepts such as eco-efficiency, ecological modernization and green economy and it values the positive relationship between economic development and environmental preservation.

References

BRASIL. Lei n° 4.471/1965. Código Florestal. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 16 set. 1965. Disponível em: http://www.planalto.gov.br/ccivil_03/leis/14771.htm. Acesso em: 22 jun. 2013.

BRASIL. Lei nº 6.001/1973. Estatuto do Índio. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 21 dez. 1973. Disponível em: http://www.planalto.gov.br/ccivil_03/LEIS/L6001.htm. Acesso em 25 jun. 2013.

BRASIL. **II PND – Plano Nacional de Desenvolvimento (1975-79)**. Brasília: SEPLAN, 1975.

BRASIL. Lei nº 6.938/1981. Política Nacional do Meio Ambiente. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 31 ago. 1981. Disponível em: http://www.planalto.gov.br/ccivil_03/leis/l6938.htm. Acesso em 25 jun. 2013.

BRASIL. **CONSTITUIÇÃO DA REPÚBLICA FEDERATIVA DO BRASIL**. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 05 out. 1988. Disponível em: http://www.planalto.gov.br/ccivil_03/constituicao/constituicaocompilado.htm. Acesso em 23 jun. 2013.

BRASIL. **Anteprojeto de Lei do Sistema Nacional de Unidades de Conservação**. Brasília: IBAMA. 8p, 1989.

BRASIL. Lei Nº 9.985/2000. Regulamenta o artigo 225, § 1º, incisos I, II, III e VII da Constituição Federal, institui o Sistema Nacional de Unidades de Conservação da Natureza e dá outras providências. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 19 jul. 2000. Disponível em: https://www.planalto.gov.br/ccivil_03/leis/19985.htm> Acesso em: 22 set. 2012.

BRASIL. Lei Nº 11.428/2006. Dispõe sobre a utilização e proteção da vegetação nativa do Bioma Mata Atlântica, e dá outras providências. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 26 dez. 2006. Disponível em: <http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/lei/11428.htm> Acesso em: 22 mai. 2013.

BRASIL. Decreto Nº 6.660/2008. Regulamenta dispositivos da Lei no 11.428, de 22 de dezembro de 2006, que dispõe sobre a utilização e proteção da vegetação nativa do Bioma Mata Atlântica. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 21 nov. 2008. Disponível em: <http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2008/decreto/d6660.htm> Acesso em 18 mai. 2013.

BRASIL. Resolução CONAMA 428/2010. Dispõe, no âmbito do licenciamento ambiental sobre a autorização do órgão responsável pela administração da Unidade de Conservação (UC), de que trata o § 3º do artigo 36 da Lei nº 9.985 de 18 de julho de 2000, bem como sobre a ciência do órgão responsável pela administração da UC no caso de licenciamento ambiental de empreendimentos não sujeitos a EIA-RIMA e dá outras providências. **Diário Oficial da União República Federativa do Brasil**, Brasília, DF, 20 dez. 2010. Disponível em: < <http://www.mma.gov.br/port/conama/legiabre.cfm?codlegi=641> > Acesso em: 20 mai. 2013.

BRITO, D. M. C. Conflitos em Unidades de Conservação. **PRACS: Revista de Humanidades do Curso de Ciências Sociais UNIFAP**. Macapá, n. 1, p. 1-12, dez. 2008.

BROWN, K. Innovations for conservation and development. **The Geographical Journal**, v. 168, n. 1, p. 6-17, 2002.

DIAS, J. PEREIRA, N. Considerações sobre a evolução do Sistema Nacional de Unidades de Conservação e o ordenamento territorial da Amazônia: interações entre o Estado e a Ciência. **Desenvolvimento e Meio Ambiente**. Curitiba, n. 21, p. 69-88, jan./jun. 2010. Disponível em: <http://ojs.c3sl.ufpr.br/ojs2/index.php/made/article/view/15933/13426>. Acesso em: 07 Jul. 2013.

DRUMMOND, J. A.; FRANCO, J. L. de A.; OLIVEIRA, D. de. **Uma análise sobre a história e a situação das unidades de conservação no Brasil** in Conservação da biodiversidade: legislação e políticas públicas. GANEM, R. (org.). Câmara dos Deputados, Edições Câmara. Série Memória e Análise de Leis, n. 2, 437p.

DRUMMOND, J. A.; BARROS-PLATIAU, A. F. Brazilian environmental laws and policies: 1934-2002: a critical overview. **Law & Policy**, v. 28, n. 1, p. 83-108, jan. 2006.

GIL, A.C. **Como elaborar projetos de pesquisa**. 4. ed. São Paulo: Atlas, 2007.

IBDF/FBCN. **Plano do sistema de unidades de conservação do Brasil**. Brasília: Min. da Agricultura. 1979, 107p.

IBDF/FBCN. **Plano do sistema de unidades de conservação do Brasil: II Etapa**. Brasília: Min. da Agricultura. 1982, 173p.

LEFF, E. **Epistemologia Ambiental**. 5^a Ed. São Paulo, Cortez Editora, 2010, 240p.

LIMA, J. E. de S. **As racionalidades substantivas no debate socioambiental e na gestão das águas: indagações epistemológicas**. 2005. Tese. (Doutorado em Meio Ambiente e Desenvolvimento) - Programa de Doutorado em Meio Ambiente e Desenvolvimento, Universidade Federal do Paraná, UFPR. 2005. 204f.

MEDEIROS, R. Evolução das tipologias e categorias de áreas protegidas no Brasil. **Ambiente & Sociedade**. Campinas, vol. IX, n. 1, p. 41-64, jan./jun. 2006.

MEDEIROS, R.; IRVING, M.; GARAY, I. A proteção da natureza no Brasil: evolução e conflitos de um modelo em construção. **RDE – Revista de Desenvolvimento Econômico**. Salvador, ano VI, n. 9, p. 83-93, jan. 2004.

MENEZES, D. S.; SIENA, O. Ambientalismo no Instituto Chico Mendes de Conservação da Biodiversidade (ICMBIO) na Amazônia Legal. **O&S**. Salvador, v.17, n.54, p. 479-498, jul/set., 2010. Disponível em www.revistaoes.ufba.br. Acessado em 20 de junho de 2013.

MERCADANTE, M. **Uma década de debate e negociação: a história da elaboração da Lei do SNUC**. In: BENJAMIN, A.H. (org.) **Direito Ambiental das Áreas Protegidas**. Rio de Janeiro: Ed. Forense Universitária, 2001, p. 190-231.

NUNES, M. C. de L.; COSTA, M. J. P.; LUSTOSA, M. C. J. A conservação da biodiversidade no Brasil: uma visão a partir de áreas protegidas. **Economia política do desenvolvimento**. Maceió, vol. 4, n. 11, p. 21-42, mai./ago., 2011.

ONU. **Declaração de Estocolmo de 1972**. Disponível em: <www.mma.gov.br/estruturas/agenda21/_arquivos/estocolmo.doc>. Acesso em: 22 mai 2013.

PÁDUA, M. T. J. Sistema brasileiro de unidades de conservação: de onde viemos e para onde vamos? In: **Congresso Brasileiro de Unidades de Conservação. Anais...** Curitiba: IAP; Unilivre; Rede Nacional Pró Unidades de Conservação, 1997. v. 1.

PECCATIELLO, A. Políticas públicas ambientais no Brasil: da administração dos recursos naturais (1930) à criação do Sistema Nacional de Unidades de Conservação (2000). **Desenvolvimento e Meio Ambiente**. Curitiba, n. 24, p. 71-82, jul./dez. 2011. Disponível em: <http://ojs.c3sl.ufpr.br/ojs2/index.php/made/article/view/21542/17081>. Acesso em: 07 Jul. 2013.

PUREZA, F. **Histórico de criação das categorias de unidades de conservação**. 2014. Dissertação. (Mestrado Profissional em Conservação da Biodiversidade e Desenvolvimento Sustentável). Instituto de Pesquisas Ecológicas, IPE. 2014. 247f.

RODRIGUES, J. E. R. **Sistema Nacional de Unidades de Conservação**. São Paulo: Revista dos Tribunais, 2005, 143p.

SILVA, J. I. A. O. As Unidades de Conservação conforme a Lei Nº 9.985/2000: suas características e regime jurídico-ambientais. **Revista de Direito e Liberdade**. Natal, v. 8, p. 371-400, 2008.

SOUZA, M. F. R. **Política pública para unidades de conservação no Brasil: diagnóstico e propostas para uma revisão**. Curitiba. Tese. (Doutorado em Ciências Florestais) - Programa de Doutorado em Ciências Florestais, Universidade Federal do Paraná, UFPR. 2012. 345 f.

Submitted on: 04/04/2014

Accepted on: 03/08/2015

<http://dx.doi.org/10.1590/1809-4422ASOC1001V1842015>

A CALL FOR REFLECTION ON THE CATEGORY OF WILDLIFE REFUGE CONSERVATION UNIT

MARCIA CASARIN STRAPAZZON
NILVÂNIA APARECIDA DE MELLO

Resumo: Os Refúgios de Vida Silvestre (RVS) são unidades de conservação (UCs) do grupo de proteção integral e permitem apenas o uso indireto dos atributos naturais. Entretanto, não implicam em desapropriação das terras, desde que haja compatibilidade das atividades das propriedades com os objetivos de criação da unidade. Através de uma pesquisa exploratória, buscou-se aprofundar os conhecimentos sobre os Refúgios de Vida Silvestre investigando-se as possíveis origens da categoria no âmbito da elaboração da Lei do Sistema Nacional de Unidades de Conservação, levantando-se hipóteses acerca das concepções envolvidas na criação de UCs federais desta categoria e das possíveis atribuições de sentidos à mesma pelos seus gestores. Pôde-se concluir que as dificuldades geradas pela localização da categoria numa intersecção entre proteção integral e uso sustentável, aliada à sua falta de regulamentação, é expressa nos mais diferentes níveis de relação com os RVS, não sendo pressuposto, no entanto, para considerar a categoria inviável.

Palavras-chave: Refúgio de Vida Silvestre, gestão de Unidade de Conservação, racionalidade.

Abstract: Wildlife Refuge (RVS - Refúgio de Vida Silvestre) is a conservation unit geared to full protection, and it only allows the indirect use of natural resources. However, it does not incur in land expropriation as long as the activities conducted within the property are in compliance with the goals of the protected area. The current study consists of an exploratory research that sought to deepen the knowledge about the RVS by investigating the possible sources of the category within the context of the National Protected Areas System Law. It raises hypotheses about the concepts involved in the creation of federal RVS and about the possible meaning managers attribute to this category. It could be concluded that the difficulties generated by the category location in an intersection between full protection and sustainable use, combined with the lack of regulation, are expressed in many different levels of relationship with the RVS. However, these difficulties are not strong enough to consider it as an unviable category.

Keywords: Wildlife Refuge, management of protected areas, rationality.

Resumen: Refugios de Vida Silvestre (RVS) son unidades de conservación (UCs) de protección integral y es permitido sólo el uso indirecto de atributos naturales. Sin embargo, no implican la expropiación de tierras, siempre que exista compatibilidad de las actividades de las propiedades con los objetivos de la unidad. A través de un estudio exploratorio, hemos tratado de profundizar en el conocimiento del RVS, investigando las posibles fuentes de la categoría en la preparación de la Ley del Sistema Nacional de Áreas Protegidas, hipótesis acerca de los conceptos involucrados en la creación de RVS y las posibles concepciones de sus directivos acerca de la categoría. Se podría concluir que las dificultades generadas por la ubicación de la categoría en una intersección entre la protección integral y el uso sostenible, combinado con su falta de regulación, se expresa en muchos diferentes niveles, no siendo suposición, sin embargo, considerarla una categoría inviable.

Palabras-Clave: Refugio de Vida Silvestre, Unidad de Conservación, racionalidad.
