



Ramsar Information Sheet

Brazil

Viruá National Park



Designation date	22 March 2017
Site number	2295
Coordinates	01°17'28"N 61°09'07"W
Area	216 427,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

The Viruá National Park is a protected area located in a megadiverse ecological region of "Campinaranas", in the lower Branco River/Medium Negro River, south-central of the State of Roraima. It covers a mosaic of forested and non-forested humid ecosystems, representative of a unique geo-ecological system in the Amazon (Zani et al, 2012; Schaefer et al ., 2009). The Sites present exceptional levels of biodiversity (especially of fish and birds), high rates of fishing productivity and the occurrence of populations of vulnerable or endangered species. The Viruá, since 2009, has the largest number of freshwater fish species ever recorded in a Brazilian protected area (500 species, Ferreira et al, 2009; ICMBio, 2014) and supports exceptional levels of fishing productivity in the State (Lemos, 2009). It has one of the highest diversity of birds recorded in protected areas in Brazil (> 530 species), with 28 endemic species considered in the designation of the Important Bird Area RR04 - Fields and wetlands of the Branco River, of which the Viruá is part of. It maintains relevant habitats for ten species of mammals and six species of turtles under various levels of threat according to IUCN criteria (ICMBio, 2014). Achieving five criteria for the identification of wetlands of international importance, the designation of Viruá NP as a Ramsar site broadens significantly Brazil's contribution towards the conservation of global biological diversity and sustainable use of wetlands in the Brazilian Amazon.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Beatriz de Aquino Ribeiro
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Compiler 2

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Phone	95991371192.

2.1.2 - Period of collection of data and information used to compile the RIS

From year	2016
To year	2016

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Viruá National Park
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2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps	0
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Boundaries description

The Viruá National Park is endowed with legally established limits based on geographical references, represented west by the Branco River, northeast the route BR-174, east by the design of the "Estrada Perdida" (road) and south by the Anauá river (Federal Decree of 29.04.1998).

2.2.2 - General location

a) In which large administrative region does the site lie?	Iss located in the south-central region of the State of Roraima, in the Municipality of Caracarái.
b) What is the nearest town or population centre?	Boa Vista

2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes No
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):	216427
Area, in hectares (ha) as calculated from GIS boundaries	214952.53

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	Ecological Region of Campinaranas, in the Guiana Shield endemism area.

Other biogeographic regionalisation scheme

The Brazilian vegetation classification system of IBGE, 1992.
Areas of Endemism - Cracraft (1985)

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

The Viruá National Park covers a mosaic of ecosystems, including Ombrophilous forest, Campinaranas, and pioneer formations representative of the Northern Pantanal, humid area with unique geological and biogeographical characteristics in the Brazilian Amazon, and inserted in the ecological region of the Campinaranas. The Northern Pantanal plays important roles on flood control, sediments depositional processes and biogeochemical cycles of the Lower Branco River and Demini River drainage systems.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The Viruá National Park has an important role in the conservation and research of species in the Campinaranas ecosystems and Ombrophilous forests of the Northern Pantanal, in the ecological region of Campinaranas. The site has an exuberant richness of vertebrate species, > 1200 species (the largest ever recorded in a Brazilian protected areas) (ICMBio 2014), offering protection to populations of 119 species of mammals, 71 species of reptiles, 47 species of amphibians, and to exceptionally diverse groups of 531 bird species and 500 fish species. The variety of habitats allows the coexistence of different endemic species, dependent on forested or open areas physiognomies.

- Criterion 7 : Significant and representative fish

Justification

The Viruá National Park shelters an exceptional richness of freshwater fishes (500 species), equivalent to 66% of all known species for the Branco River basin (759 species) (Ferreira et al, 2007; ICMBio, 2014). This index is the highest ever recorded in Brazilian protected areas and demonstrates the important role of the Viruá National Park and Lower Branco River drainage system for the conservation of the Brazilian wetland biodiversity. At least eight species of fish recorded in Viruá NP are endemics from the Negro and Orinoco River basins which are listed in the section of criteria.

New fish species described from surveys in Viruá NP include the red-dotted armored catfish *Ancistrus maximus* Locariidae (Oliveira et al., 2015), a new species of spiny catfish *Spinipterus* sp. Auchenipteridae, and two new species of catfish *Phreatobius* sp. *Incertae sedis* (Jansen Zuanon personal communication). In Appendix 5 of the RIS is the list of fish species recorded in the Site.

- Criterion 8 : Fish spawning grounds, etc.

Justification

The Viruá National Park provides significant habitats for feeding and reproduction of at least 500 species of fish, dozens of them with high commercial value (Cintra & Bezerra, 2002), supporting exceptionally high levels of fishing productivity for the regional standards (Lemos, 2009).

3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Clusia lopezii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Clusia nitida</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Duckeella pauciflora</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Ferdinandusa schultesii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Henriettea martusii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Hirtella dorvalii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Hirtella pimichina</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Lecythis corrugata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Licania lanceolata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Licania stewardii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Lockhartia viruensis</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Pachyloma huberioides</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Piper goeldii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Platycarpum egleri</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Platycarpum froesii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Psychotria blakei</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Retiniphyllum discolor</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Siphanthera cowanii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Utricularia chiriquetensis</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Utricularia sandwithii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Xyris cryptantha</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
<i>Xyris subglabrata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		

The diversity of flora, currently with over 1200 species recorded, is estimated at more than 4000 species of plants, with 52 plant species endemics from Guiana Shield and 26 plant species endemics from Campinaranas recorded (ICMBio, 2014) (Appendix 1).

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
Birds																		
CHORDATA/AVES	 <i>Capito niger</i>	Black-spotted Barbet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Cercomacra carbonaria</i>	Rio Branco Antbird	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Crax alector</i>	Black Curassow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Cyanocorax cayanus</i>	Cayenne Jay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Dolospingus fringilloides</i>	White-naped Seedeater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Euphonia plumbea</i>	Plumbeous Euphonia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Galbula albirostris</i>	Yellow-billed Jacamar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Gymnophithys rufigula</i>	Rufous-throated Antbird	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Harpia harpyja</i>	Harpy Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Hemitriccus inornatus</i>	Pelzel's Tody-Tyrant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Herpsilochmus dorsimaculatus</i>	Spot-backed Antwren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Heterocercus flavivertex</i>	Yellow-crested Manakin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Isleria guttata</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Microbates collaris</i>	Collared Gnatwren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Monasa atra</i>	Black Nunbird	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Morphnus guianensis</i>	Crested Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	WU	National List
CHORDATA/AVES	 <i>Myrmotherula klagesi</i>	Klages's Antwren	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	WU	National List
CHORDATA/AVES	 <i>Neopelma chrysocephalum</i>	Saffron-crested Neopelma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Pachyrhamphus surinamus</i>	Glossy-backed Becard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	 <i>Penelope marail</i>	Marail Guan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Perissocephalus tricolor</i>	Capuchinbird	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Pionites melanocephalus</i>	Black-headed Parrot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Pteroglossus viridis</i>	Green Aracari	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Thamophilus nigrocinereus</i>	Blackish-grey Antshrike	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Todirostrum pictum</i>	Painted Tody-Flycatcher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Veniliornis cassini</i>	Golden-collared Woodpecker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
Fish, Mollusc and Crustacea																		
CHORDATA/ACTINOPTERYGII	<i>Ageneiosus polystictus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Anduzedoras oxyrinchus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Arapaima gigas</i>	Giant arapaima	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Boulengerella lateristriga</i>	Striped pike-characin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Cetopsidium peron</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Cichla orinocensis</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Cichla temensis</i>	Royal pavon; Painted pavon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Hoplarchus psittacus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Hydrolycus scomberoides</i>	Payara	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Hydrolycus wallacei</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Phractocephalus hemiliopterus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Plagioscion squamosissimus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ACTINOPTERYGII	<i>Pseudoplatystoma fasciatum</i>	Barred sorubim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification	
			2	4	6	9	3	5	7									8
CHORDATA/ ACTINOPTERYGII	<i>Pseudoplatystoma tigrinum</i> 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>			
CHORDATA/ ACTINOPTERYGII	<i>Schizodon fasciatus</i> 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>			
Others																		
CHORDATA/ MAMMALIA	<i>Ateles paniscus</i> 	Red-faced Black Spider Monkey, Red-faced Spider Monkey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Inia geoffrensis</i> 	Amazon River Dolphin; Pink River Dolphin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	EN	National List	
CHORDATA/ MAMMALIA	<i>Leopardus wiedii</i> 	Margay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Myrmecophaga tridactyla</i> 	Giant Anteater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Panthera onca</i> 	Jaguar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Priodontes maximus</i> 	Giant Armadillo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Pteronura brasiliensis</i> 	Giant Otter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					EN 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Speothos venaticus</i> 	Bush Dog	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Tapirus terrestris</i> 	Brazilian Tapir; South American Tapir	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Tayassu pecari</i> 	white-lipped peccary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ MAMMALIA	<i>Trichechus inunguis</i> 	Amazonian Manatee	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					VU 	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

1) Percentage of the total biogeographic population at the site

The Viruá National Park shelters populations of ten species of mammals, six species of turtles and five species of birds under various levels of threat, according to IUCN criteria (ICMbio, 2014).

The park is fully inserted into the Important Bird Area (IBA) RR04 - Fields and wetlands of the Branco River, having records of 28 endemics, or that have restricted distribution, species of birds associated with Campinaranas habitats and floodplain forests (De Luca et al, 2009).

A new genus and two new species of rodents (*Zygodontomys* sp. and *Oecomys* sp. Cricetidae) are being described from surveys in the Viruá National Park, and the Red Brocket *Mazama* cf. *americana* registered in Viruá Mammals' species recorded in Viruá National Park may also corresponds to a new taxon (ICMbio, 2014).

In Appendix II of the RIS are listed the Mammals' species recorded in Viruá National Park and in Appendix III the bird species and Amphibian and reptile species in Appendix 4 .

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Campinaranas	<input type="checkbox"/>	open vegetation on soggy sandy soils	
Ombrophylous forests	<input type="checkbox"/>	alluvial dense vegetation	

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The Viruá National Park covers a broad marshy system dominated by sand, subjected to a seasonal flooding regime caused by the flooding large rivers (flood plains and flooded forest) and the upwelling of groundwater ("chavascals" and flooded fields). The landscape is marked by an environmental heterogeneity, with a variety of vegetation types associated with different conditions of landscape, hydrology, soils and topography. The Campinaranas (open vegetation on soggy sandy soils) and alluvial dense Ombrophylous forests, represent 45 % and 47 % respectively of the vegetation cover, having an abrupt contact with Pioneer Formations ("buritizais", marshy field) and open lowland rainforests. Open sub-mountain rainforests are present as small enclaves associated with residual hills. The floristic richness is quite high, due to the variation in species composition between different habitats in the protected area (diversity \square) (ICMBio, 2014).

The Campinarana physiognomies are mainly found in sandy deposits of the "Viruá megafan", and have a gradation in the size and density of species according to the level of water in the soils. Four main features are identified in the Viruá National Park: Forested Campinarana, scrubby Campinarana, Campinarana Park ("Parque") and grassy-woody Campinarana. The association between shrubby and termites species observed in Campinarana Park resembles the pattern described in savanna areas in the Pantanal of Mato Grosso, influencing the relatively regular spatial distribution of woody plants in the herbaceous matrix. The high frequency of representatives of the Vochysiaceae family in forested and shrub places is another feature that demonstrates ecological similarities between open systems of the Viruá National Park and Pantanal of Mato Grosso (ICMBio, 2014). The participation of these ecosystems in carbon sequestration is significant, through the storage of large amounts of organic carbon in soils (Spodosols "Humilúvicos") (Mendonça, 2011) and the expansion of forested and woody physiognomies, through a succession process (Gribel et al., 2009)

Ecological processes in the Viruá National Park are closely associated with large flood pulses of the Branco River and tributaries, which ensure moisture conditions and the supply of nutrients for the maintenance of forest and non-forest systems in almost 90% of the protected area. The seasonal flooding of forests and Campinaranas provide habitats and resources needed for feeding and reproduction of a large number of species, including 500 species of fish, nine species of aquatic turtles, five species of aquatic mammals, dozens of species of aquatic migratory birds, among others, ensuring the continuity of the life cycles of animals and plants in this wetland system (ICMBio, 2014).

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		4	4459.51	Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		3	9709.64	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		2	88317.57	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		1	102030	Representative

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Attalea maripa</i>	inajá	
<i>Bactris campestris</i>		
<i>Barcella odora</i>		
<i>Bertholletia excelsa</i>		
<i>Calophyllum brasiliense</i>		
<i>Calyptanthes cuspidata</i>		
<i>Caraipea llanorum</i>		
<i>Carapa guianensis</i>		
<i>Chaunochiton angustifolium</i>		
<i>Couma utilis</i>		
<i>Duguetia uniflora</i>		
<i>Duroia saccifera</i>		
<i>Evasia calophyllea</i>		
<i>Eschweilera atropetalata</i>		
<i>Euphronia guianensis</i>		
<i>Euterpe precatoria</i>	açaí-jussara	
<i>Ferdinandusa rudgeoides</i>		
<i>Guatteria discolor</i>		
<i>Heisteria laxiflora</i>		
<i>Humiria balsamifera</i>		
<i>Ilex divaricata</i>		
<i>Licania heteromorpha</i>		
<i>Licania micrantha</i>		
<i>Mezilaurus itauba</i>		
<i>Micropholis venulosa</i>		
<i>Mouriri acutiflora</i>		
<i>Mouriri guianensis</i>		
<i>Naucleopsis caloneura</i>		
<i>Ocotea cinerea</i>		
<i>Oenocarpus bacaba</i>	Bacaba	
<i>Ouratea spruceana</i>		
<i>Pagamea coriacea</i>		
<i>Parahancornia amara</i>		
<i>Pouteria elegans</i>		
<i>Protium apiculatum</i>		
<i>Pseudolmedia laevis</i>		
<i>Pterocarpus rohrii</i>		
<i>Qualea paraensis</i>		
<i>Sacoglottis guianensis</i>		
<i>Schizaea elegans</i>		
<i>Sclerolobium chrysophyllum</i>		
<i>Swartzia schomburgkii guayanensis</i>		
<i>Trattinnickia burserifolia</i>		
<i>Zygia juruana</i>		

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/REPTILIA	Anolis auratus					
CHORDATA/REPTILIA	Cercosaura ocellata					
CHORDATA/REPTILIA	Chelonoidis denticulata					
CHORDATA/REPTILIA	Cnemidophorus lemniscatus					
CHORDATA/AMPHIBIA	Hypsiboas crepitans					
CHORDATA/REPTILIA	Kentropyx striata					
CHORDATA/REPTILIA	Melanosuchus niger					
CHORDATA/REPTILIA	Peltocephalus dumerilianus					
CHORDATA/AMPHIBIA	Phyllomedusa bicolor					
CHORDATA/REPTILIA	Podocnemis erythrocephala					
CHORDATA/REPTILIA	Podocnemis expansa					
CHORDATA/REPTILIA	Podocnemis sextuberculata					
CHORDATA/REPTILIA	Podocnemis unifilis					
CHORDATA/AMPHIBIA	Rhinella granulosa					
CHORDATA/AMPHIBIA	Scinax fuscomarginatus					

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
A: Tropical humid climate	Am: Tropical monsoonal (Short dry season; heavy monsoonal rains in other months)

The Viruá National Park is inserted into the climate type Am (Tropical Monsoon) in the Köppen classification. The average annual temperature is 26 °C, with maximum monthly temperature range of 5 °C (Brasil, 1975; Barbosa, 1997). Precipitation levels vary from 1700 to 2000 mm/year, with a well-marked dry season. The rainiest months are May, June and July, which concentrate on the average 51% of total precipitated rainfall per year. In the driest months (December, January and February), the amount of rainfall is significantly reduced, corresponding, on the average, to 8% of the total annual rain (ICMBio, 2014).

This region is under moderate influence from the Equatorial continental air mass (mEc) and the Intertropical Convergence Zone (ZCIT), the main atmospheric agents that promote rainfall in the Amazon region (Nimer, 1989; Barbosa, 1997). Continental climatic anomalies, such as displacement of the ZCIT, and global climatic anomalies (El Niño and La Niña) have strong influence on rain

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The Viruá National Park is situated on the northern edge of the Northern Pantanal, a large marshy system dominated by sands in the extensive depression of the Lower Branco River/medium Negro River.

4.4.3 - Soil

- Mineral
- Organic
- No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

Please provide further information on the soil (optional)

Predominate in the Viruá National Park the Hydromorphic Quartzarenic Neosols and Hydromorphic Humilúvicos Spodosols, poorly drained sandy soils developed under a large sedimentary plain, from quartz sands originated from the Içá Formation or in situ weathering of other substrates. The sandy texture restricts the storage capacity of water in these soils, causing water deficits during the dry season, with the interruption of the flow of rivers in the Park (Schaefer et al., 2009; Mendonça, 2011).

In addition to the physical constraints imposed by the seasonal cycle of shortage and excess of moisture, the soils are extremely poor chemically, acidic, dystrophic and have low fertility, fitting in class VIIIa, for the capability of use, i.e. soils are unsuitable for crop, pasture or reforestation, only serving for the preservation of fauna, flora and water resources (Vale-Júnior, 2008).

4.4.4 - Water regime

Water permanence

Presence?
Usually permanent water present

Source of water that maintains character of the site

Presence?	Predominant water source
Water inputs from surface water	<input type="checkbox"/>
Water inputs from rainfall	<input type="checkbox"/>

Water destination

Presence?
To downstream catchment

Stability of water regime

Presence?
Water levels fluctuating (including tidal)

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

The seasonal flooding regime of the Viruá National Park is controlled by the hydrologic regime of the Branco River (Zani et al., 2012, Schaefer et al., 2009).

Endowed with a catchment area of approximately 181,000 km², with approximately 152,300 km² upstream from the Viruá National Park, the Branco River controls the regional base level, imposing a flux barrier for its tributaries (ICMBio, 2014, Schaefer et al. 2009).

The end of the full flood recession occurs around October, beginning of ebb period. The average peak flow is approximately 7000 ± 2000 m³/s, and remains for about 20% of the year, between the months of June and August. In this period, the waterways and water bodies of Viruá reach the maximum quota, causing the flooding of large areas (Trancoso, 2006).

4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site
- Significant accretion or deposition of sediments occurs on the site
- Significant transportation of sediments occurs on or through the site
- Sediment regime is highly variable, either seasonally or inter-annually
- Sediment regime unknown

4.4.6 - Water pH

- Acid (pH<5.5)
- Circumneutral (pH: 5.5-7.4)
- Alkaline (pH>7.4)
- Unknown

4.4.7 - Water salinity

- Fresh (<0.5 g/l)
- Mixohaline (brackish)/Mixosaline (0.5-30 g/l)
- Euhaline/Eusaline (30-40 g/l)
- Hyperhaline/Hypersaline (>40 g/l)
- Unknown

4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar ii) significantly different site itself.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	not relevant for site

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climatic processes	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Water sports and activities	Medium
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Long-term monitoring site	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High

Within the site:

Outside the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

Description if applicable

Cultural values are represented by the memory records of ancient extractive practices and terminologies used to describe places and landscapes on the National Park in the period in which riverine populations inhabited the region (from the XIX century until the mid-80's). The vast knowledge produced on biodiversity and ecosystems is an asset of enormous value to the promotion of human development and sustainable use of natural resources, and the benefits go beyond the boundaries of the region.

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

in the surrounding area:

Neighboring the protected area there are 22 rural properties of a Colonization Project located along the BR-174 federal highway, two definitive land titles and about 14 occupations, with no overlap between the limits of the Park and other areas of public or private domain

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Instituto Chico Mendes de Conservação da Biodiversidade
Parque Nacional do Viruá
Rua Alfredo Cruz, 283, Centro
CEP 69.301-140 Boa Vista - RR

Provide the name and title of the person or people with responsibility for the wetland:

Antonio Lisboa Chief Manager of Viruá National Park. ICMBio +55 (95) 99137-1192. Beatriz de Aquino Ribeiro Manager of Viruá National Park / ICMBio +55 (95) 99136-0940

Postal address:

Rua Alfredo Cruz, 283, Centro
CEP 69.301-140 Boa Vista - RR

E-mail address:

antonio.lisboa@icmbio.gov.br

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Canalisation and river regulation	unknown impact	High impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Hunting and collecting terrestrial animals	unknown impact		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fire and fire suppression	High impact		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dams and water management/use		High impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Park	Viruá National Park	Law 9985/2000	whole

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve

Ib Wilderness Area: protected area managed mainly for wilderness protection

II National Park: protected area managed mainly for ecosystem protection and recreation

III Natural Monument: protected area managed mainly for conservation of specific natural features

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented
Research	Implemented

Other:

Fire management practices are implemented in the neighbouring of Viruá NP for preventing forest fires on the borders and inside the PA. Eighteen to twenty one firefighters living in the villages around the Park are annually contracted to undertake fire control actions for five to six months, along the dry season. Vehicles, water pumps and specialized firefighting tools belonging to Viruá NP are mobilized for fire spots control. Satellite imaging and helicopters help in monitoring and firefighting on remote areas. Notifying landowners for taking preventive actions against forest fires is also a relevant strategy adopted by the federal environmental agency.

Community-based ecotourism development

Local community involvement in ecotourism activities is being stimulated by many projects of Viruá NP, focused on social organization and capabilities development. Ecotourism facilities made with local materials is being installed in relevant areas for birdwatching and other activities, as part of the management plan implementation.

Amazon River Turtle hunting control

Viruá NP is one of the major partner on a multiagencies initiative for the Amazon River Turtle hunting control, which takes place in Roraima State since 2005. Monitoring of Amazon River Turtle breeding areas in the Branco River and its tributaries reduce the impact of hunting for illegal trade (Lisboa & Ribeiro 2014). In 2015, more than one thousand of adult individuals of Amazon River Turtle were rescued by monitoring activities supported by Viruá NP.

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

Communication actions are a strategic component in the management of the Viruá National Park. Initiated in 2005, these actions have enabled the dissemination of values and potentialities of the Park, for the local and national public, mainly through the partnerships with news teams from the press and TV. The ease of access, the richness of wildlife and the potential for research and ecotourism activities, make the Viruá National Park a special place for the dissemination of the Amazonian wetlands biodiversity information, and the role of the Park as a space for knowledge production, human development and conservation, core subjects of the articles being published (ICMBio, 2014).

One of the most striking features of the Viruá National Park is its potential for environmental integration, due to the proximity of several settlements, the terrestrial access; the facilities provided for educational and research activities, and the objectives of recreation and ecotourism.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant species	Implemented
Animal species (please specify)	Implemented

Monitoring of target species of flora and fauna is being implemented in Viruá NP since 2006. More than 20.000 thousand tree species individuals were identified, and have their growth rate monitored by a long term research on carbon cycle in Brazilian Amazon forest ecosystems (Porter et al. 2015). Monitoring of mammals, birds and butterflies are being conducted as part of a national effort of ICMBio in detecting climatic change impacts on the Brazilian biodiversity (Costa-Pereira et al. 2013).

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

All bibliographical references are in the RIS of the Site in 6.vi

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<1 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Virua (Miguel Clavero, 26-03-2009)



Virua (Antonio Iacovazzo, 24-05-2006)



Caracarai, Virua (Marcos Amend, 06-07-2013)



Virua (Edson Endrigo, 15-04-2006)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2017-03-22