

ANALYZING TEMPORAL AND SPATIAL TRENDS IN MANAGEMENT PLANS OF FEDERAL PROTECTED AREAS IN BRAZIL

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Supplementary Material

Appendix 1. Brazilian federal protected areas (PAs) considered in the present study (Appendix A). For each PA, this table provides information on: (i) the year the protected area was created; (ii) the year its management plan was created; (iii) the type of protected area; (iv) its size; and (v) the biome in which it is located. AF = Atlantic Forest; AM = Amazon; CA = Caatinga; CE = Cerrado; CM = Coastal Marine; PA = Pampa; PT = Pantanal.

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
APA Carste de Lagoa Santa	292.597,12	AF	1982	1990
APA Costa dos Corais	406.085,93	CM	1997	2013
APA da Bacia do Rio Descoberto	114.803,20	CM	2010	2014
APA da Barra do Rio Mamanguape	154.866,27	CM	2000	2014
APA da Serra do Ibiapaba	1.628.450,08	CA	1996	1998

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
APA de Anhatomirim	176.322,22	CE	2001	2013
APA de Cairuçu	4.436,56	CM	1992	2005
APA de Cananéia-Iguape-Peruíbe	32.610,46	CM	1983	1984
APA de Fernando de Noronha - Rocas - São Pedro e São Paulo	202.307,82	CM	1985	2005
APA de Guapimirim	884,16	CM	1986	2004
APA de Guaraqueçaba	282.446,36	CM	1984	1985
APA de Ibirapuitã	282.444,02	CM	1985	1998
APA de Piaçabuçu	316.790,42	PA	1992	2010
APA Delta do Parnaíba	9.106,87	CM	1983	1998
APA do Igarapé Gelado	307.590,51	CM	1996	2016
APA do Planalto Central	23.284,78	AM	1989	2015
APA Morro da Pedreira	359.190,11	CE	1998	2014
APA Petrópolis	131.769,37	CE	1990	2007
APA da Bacia do Rio São João/Mico-Leão-Dourado	82.679,88	CE	1983	2008
Arie Floresta da Cicuta	125,14	AF	1985	2016
Arie Manguezais da Foz do Rio Mamanguape	5.769,54	CM	1985	2014
Arie Mata de Santa Genebra	251,70	AF	1985	2010
Arie Serra da Abelha - Rio da Prata	5.016,57	AF	1990	2016
Esec da Guanabara	1.936,23	CM	2006	2006
Esec da Terra do Meio	3.373.133,89	AM	2005	2015
Esec de Aracuri-Esmeralda	276,98	AF	1981	2008
Esec de Carijós	759,33	CM	1987	2003
Esec de Maracá	103.518,66	AM	1981	2015
Esec de Maracá-Jipioca	58.756,95	CM	1981	2017
Esec de Pirapitinga	1.384,49	CE	1987	2013
Esec de Taimã	11.554,89	PT	1981	2017

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
Esec de Tamoios	9.361,27	CM	1990	2006
Esec de Tupinambás	2.463,59	CM	1987	2017
Esec de Tupiniquins	1.727,70	CM	1986	2010
Esec do Rio Acre	79.093,73	AM	1981	2010
Esec do Seridó	1.123,59	CA	1982	2005
Esec Juami-Japurá	831.524,72	AM	1985	2000
Esec Mico-Leão-Preto	6.680,62	AF	2004	2008
Esec Niquia	306.394,55	AM	1985	2018
Esec Raso da Catarina	104.842,84	CA	2001	2008
Esec Serra das Araras	27.159,71	CE	1982	2016
Esec Serra Geral do Tocantins	707.078,75	CE	2001	2001
Flona Altamira	724.965,51	AM	1998	2012
Flona Contendas do Sincorá	11.215,78	CA	1999	2013
Flona de Brasília	9.336,14	CE	1999	2016
Flona de Capão Bonito	4.236,76	CE / AF	1968	2018
Flona de Carajás	392.725,14	AM	1998	2004
Flona de Caxiuanã	317.946,37	AM	1961	2013
Flona de Chapecó	1.604,35	AF	1968	2013
Flona de Goytacazes	1.425,64	AF	2002	2013
Flona de Humaitá	472.454,90	AM	1998	2018
Flona de Ibirama	519,35	AF	1988	2009
Flona de Ipanema	5.384,78	AF	1992	2003
Flona de Irati	3.802,48	AF	1968	2014
Flona de Itaituba 1	220.639,44	AM	1998	2014
Flona de Itaituba 2	427.366,56	AM	1998	2014
Flona de Jacundá	221.217,62	AM	2004	2011

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
Flona de Lorena	281,41	AF	2001	2016
Flona de Macauã	176.349,02	AM	1998	2016
Flona de Nísia Floresta	168,84	AF	2001	2001
Flona de Pacotuba	449,44	AF	2002	2011
Flona de Passa Quatro	335,37	AF	1968	2009
Flona de Passo Fundo	1.333,61	AF	1968	1968
Flona de Piraí do Sul	150,61	AF	2004	2016
Flona de Ritópolis	89,19	AF	1999	2005
Flona de São Francisco	21.147,67	AM	2001	2016
Flona de São Francisco de Paula	1.615,59	AF	1968	2015
Flona de Saracá-Taquera	441.282,63	AM	1989	2002
Flona de Silvânia	486,37	CE	2001	2015
Flona de Tefé	865.126,62	AM	1989	2016
Flona de Três Barras	4.385,33	AF	1968	2016
Flona do Amanã	682.561,02	AM	2006	2010
Flona Do Amapá	460.359,14	AM	1989	2014
Flona do Araripe-Apodi	38.919,47	CA	2012	2005
Flona do Crepori	739.805,00	AM	2006	2006
Flona do Ibura	144,14	AF	2005	2016
Flona do Jamanxim	1.301.683,04	AM	2006	2006
Flona do Jamari	222.114,24	AM	1984	2005
Flona do Purus	256.121,13	AM	1988	2009
Flona do Rio Preto	2.817,40	AF	1990	1999
Flona do Tapajós	549.066,87	AM	1974	2005
Flona do Tapirape-aquiri	196.503,94	AM	1989	2006
Flona do Trairão	257.526,32	AM	2006	2011

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
Flona Mapiá-Inauini	368.947,86	AM	1986	2009
Parna Cabo Orange	657.318,06	CM	1980	2011
Parna Campos Amazônicos	961.317,77	AM	2006	2011
Parna Cavernas do Peruaçu	56.448,32	CE	1999	2005
Parna da Amazônia	1.084.895,62	AM	1974	1978
Parna da Chapada da Diamantina	152.141,87	CA	1985	2007
Parna da Chapada dos Guimarães	32.769,55	CE	1989	2009
Parna da Chapada dos Veadeiros	64.726,86	CE	1961	1998
Parna da Restinga de Jurubatiba	14.867,28	CM	1998	2008
Parna da Serra da Bocaina	104.044,89	AF	1971	2002
Parna da Serra da Bodoquena	77.021,58	CE	2000	2013
Parna da Serra da Canastra	197.971,96	CE	1972	1981
Parna da Serra das Confusões	823.843,08	CA	1998	2004
Parna da Serra do Cipó	31.639,18	CE	1984	2009
Parna da Serra do Divisor	837.555,19	AM	1989	1989
Parna da Serra do Itajaí	56.918,11	AF	2004	2009
Parna da Serra do Pardo	445.407,99	AM	2005	2015
Parna da Serra dos Órgãos	20.020,54	AF	1939	2008
Parna da Serra Geral	17.301,89	AF	1992	2004
Parna da Tijuca	3.958,47	AF	1961	2008
Parna das Araucárias	12.841,00	AF	2005	2010
Parna das Emas	132.642,07	CE	1961	2005
Parna das Sempre-Vivas	124.154,47	CE	2002	2016
Parna das Sete Cidades	6.303,64	CA	1961	1978
Parna de Anavilhanas	350.469,80	AM	1981	2017
Parna de Aparados da Serra	13.141,05	AF	1959	2004

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
Parna de Brasília	42.355,54	CE	1961	1998
Parna de Caparaó	31.762,93	AF	1961	2015
Parna de Ilha Grande	76.033,12	AF	1997	2008
Parna de Itabaiana	8.024,79	AF	2005	2016
Parna de Itatiaia	28.084,10	AF	1937	2014
Parna de Jericoacoara	8.862,89	CM	2002	2002
Parna de Pacaás Novos	708.664,30	AM	1979	1984
Parna de Ubajara	6.269,51	CA	1959	2002
Parna do Araguaia	555.517,83	CE	1959	2004
Parna do Descobrimento	22.693,97	AF	2012	2014
Parna do Iguaçu	185.262,00	AF	1939	1981
Parna do Jaú	2.367.333,44	AM	1980	1997
Parna do Juruena	1.958.203,56	AM	2006	2011
Parna do Monte Roraima	116.747,80	AM	1989	2000
Parna do Pantanal Mato-grossense	135.606,47	PT	1981	2004
Parna do Pau Brasil	19.027,22	AF	1999	2016
Parna do Viruá	241.948,07	AM	1998	2014
Parna dos Lençóis Maranhenses	156.605,72	CM	1981	2003
Parna Grande Sertão Veredas	230.853,42	CE	1989	2003
Parna Histórico do Monte Pascoal	22.331,91	AF	1961	1979
Parna Lagoa do Peixe	36.721,71	CM	1986	2004
Parna Marinho de Fernando de Noronha	10.927,64	CM	1988	1990
Parna Marinho dos Abrolhos	87.942,03	CM	1983	1991
Parna Montanhas do Tumucumaque	3.865.188,53	AM	2002	2010
Parna Nascentes do Lago Jari	812.745,18	AM	2008	2018
Parna Serra da Cutia	283.501,38	AM	2001	2008

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
Parna Serra da Mocidade	376.812,61	AM	1998	2018
RDS Itatupã-Braquiá	64.441,29	AM	2005	2016
Rebio Atol das Rocas	35.186,41	CM	1979	2009
Rebio das Perobas	8.716,13	AF	2006	2012
Rebio de Abufari	233.866,74	AM	1982	2018
Rebio de Augusto Ruschi	3.562,28	AF	1986	1997
Rebio de Comboios	784,63	CM	1984	1997
Rebio de Poço das Antas	5.052,48	AF	1974	1981
Rebio de Serra Negra	624,85	CA	1982	1982
Rebio de Sooretama	27.858,68	AF	1982	1981
Rebio de Uma	8.715,06	AF	1980	2002
Rebio do Córrego do Veado	2.357,73	AF	1982	2000
Rebio do Córrego Grande	1.503,75	AF	1980	2000
Rebio do Guaporé	615.771,56	AM	1982	1984
Rebio do Gurupi	271.197,51	AM	1988	2002
Rebio do Jaru	346.861,17	AM	1979	1984
Rebio do Rio Trombetas	407.754,23	AM	1979	1982
Rebio do Tapirapé	99.271,75	AM	1989	1989
Rebio do Tinguá	26.260,00	AF	1989	2006
Rebio Marinha do Arvoredo	17.104,47	CM	1990	2004
Rebio Nascentes da Serra do Cachimbo	342.192,00	AM	2005	2009
Rebio Saltinho	562,57	AF	1983	2018
Rebio Uatumã	938.720,95	AM	2002	2002
Rebio União	2.547,95	AF	1998	2008
Rebio Guaribas	4.051,62	AF	1990	2003
Resex Arapixi	133.710,57	AM	2006	2010

Protected Area	Area size (ha)	Biome	Creation date of the PA	Elaboration date of the management plan
Resex Auati-Paraná	146.948,05	AM	2001	2011
Resex Barreiro das Antas	106.197,74	AM	2001	2015
Resex Chico Mendes	931.537,14	AM	1990	2008
Resex do Baixo Juruá	187.980,70	AM	2001	2009
Resex do Cazumbá-Iracema	750.917,74	AM	2002	2008
Resex do Lago do Capanã Grande	304.310,54	AM	2004	2013
Resex Mandira	1.177,80	AF	2002	2011
Resex Marinha de Caeté-Taperaçu	42.489,17	CM	2005	2013
Resex Médio Juruá	251.577,13	AM	1997	1997
Resex Ouro Preto	204.631,55	AM	1990	2013
Resex Rio Iriri	398.992,78	AM	2006	2011
Resex Rio Jutai	275.513,52	AM	2002	2002
Resex Rio Unini	849.684,79	AM	2006	2014
Resex Rio Xingu	303.000,92	AM	2008	2008
Resex Riozinho do Anfrísio	736.135,28	AM	2004	2011
Revis Arquipelago de Alcatrazes	67.479,29	CM	2016	2017
Revis dos Campos de Palmas	16.594,17	AF	2006	2016