



Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures. Buffers for freshwater areas are determined based on hydroBASINS to capture watershed boundaries.

TAPAJÓS-TELES PIRES ISRA

South American Inland Waters Region

SUMMARY

Tapajós-Teles Pires is located in the upper Tapajós basin, Pará and Mato Grosso states in northern Brazil. This area is characterised by clear water, and fast-flowing rivers with large numbers of rapids and waterfalls. This area partially overlaps with Parque Nacional Do Juruena. Within this area there are: **threatened species** (e.g., Tapajós Freshwater Stingray *Potamotrygon albimaculata*), and **range-restricted species** (e.g., Pearl Freshwater Stingray *Potamotrygon jabuti*).

-	-			
BRAZIL				
-	—			
0-20 metres				
-	—			
305.7 km²				
-	—			

CRITERIA

Criterion A - Vulnerability; Criterion B - Range Restricted

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DESCRIPTION OF HABITAT

Tapajós-Teles Pires is located in the upper Tapajós Basin, Pará and Mato Grosso states in northern Brazil. This area comprises the Teles Pires River, a major tributary of the Tapajós River, and the Rio São Benedito I and Rio Azul (or São Benedito II), a primary and secondary tributary of the Teles Pires River, respectively.

The Tapajós River is formed by the confluence of the Teles Pires and Juruena rivers in Barra de São Manuel, along the borders of Pará and Mato Grosso states. The Tapajós is one of the two primary rivers draining the Brazilian Shield within the Amazon Basin (Abell et al. 2008; Dagosta & de Pinna 2019). This area is characterised by clear water, fast-flowing rivers with numerous rapids and waterfalls, which may serve as isolating barriers (Goulding et al. 2003; Vari & Calegari 2014).

The Tapajós Basin experiences a tropical climate with minor variations in surface temperatures but exhibits marked seasonality in precipitation (Peel et al. 2007). In the main channel of the downstream river, water temperatures range from 28-30°C (Fricke et al. 2017). The South American Monsoon System drives rainfall in the basin, promoting a rainy season during the austral summer, with peak discharge occurring from February-May. This high discharge variation creates a pronounced flood pulse that sustains unique seasonally flooded environments in rocky channels with rapids, sediment bar islands, and extensive marginal floodplains.

This area partially overlaps with Parque Nacional Do Juruena (UNEP-WCMC 2025).

This Important Shark and Ray Area is benthic and is delineated from surface waters (O m) to 20 m based on the bathymetry of the area.

ISRA CRITERIA

CRITERION A - VULNERABILITY

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. These are the Endangered Pearl Freshwater Stingray (Araújo et al. submitted b) and the Vulnerable Tapajós Freshwater Stingray (Araújo et al. submitted a).

CRITERION B - RANGE RESTRICTED

This area holds the regular presence of Tapajós Freshwater Stingray and Pearl Freshwater Stingray as resident range-restricted species (Carvalho 2016; A Murch pers. comm. 2025).

The Tapajós Freshwater Stingray is endemic to the middle and upper Tapajós River Basin, primarily in the main channel of the Tapajós River (Carvalho 2016; Araújo et al. submitted a). It generally inhabits the deeper, fast-flowing channels of the main river, and is more abundant in central troughs (Carvalho 2016). In 2005, individuals were captured using several techniques – hand nets, hook and line, and baited longlines (Carvalho 2016). Five of six reports of Tapajós Freshwater Stingray were from this area (Carvalho 2016). The other specimen was captured in the lower section of the Tapajos River (~600 km upstream) (Carvalho 2016). Animals had a body size range of 47-79 cm disc width (DW) which included one juvenile and four adults. During a three-day expedition in September 2024, an observer snorkelled for three to four hours each day in this area (A Murch pers. comm. 2025; Shark and Rays 2025). During this period, ~5 individuals of Tapajós Freshwater Stingray were encountered daily (A Murch pers. comm. 2025).

The Pearl Freshwater Stingray is endemic to part of the mid and upper Tapajós River Basin, Brazil. This species has a patchy occurrence in the Tapajós River and is mainly present in some of its tributaries. The main occurrence area of the Pearl Freshwater Stingray comprises the Jamanxin River, part of the Teles Pires River, and the Tapajós main river (Carvalho 2016; Araújo et al. submitted b). This species is found in anabranches, creeks, and smaller streams with shallower, cooler waters over rocky, sandy, and leafy substrates (Carvalho 2016). During various surveys, 28 Pearl Freshwater Stingrays were collected using several techniques – hand nets, hook and line, and baited longlines (Carvalho 2016). Of these 15 (56%) were reported from this area (Carvalho 2016). The other specimens were collected from the lower section of the Tapajos River, Cururu River and Jamanxim River (both of which are tributaries of the Tapajos River) upstream from this area (Carvalho 2016). From this area, one individual was collected in 1979 and the other individuals between October-December 2005. These individuals measured 10.7-46.5 cm DW and included a pregnant female (determined by the presence of embryos), 12 adults, and two neonates measuring 10.7-11 cm DW (based on a size at-birth of 10-11 cm DW) (Carvalho 2016). This suggests that this area harbours animals of different life-stages. Furthermore, social media reports from citizen scientists highlight the occurrence of Pearl River Stingray in this area on five occasions between 2019-2020 (Instagram 2025). Finally, in the three-day snorkelling expedition in September 2024, ~5 individuals of Pearl Freshwater Stingray were encountered daily in addition to an aggregation of four Pearl River Stingrays recorded (A Murch pers. comm. 2025).



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QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category		ISRA Criteria/Sub-criteria Met								
			(m)	Α	В	Cı	C2	C3	C4	C5	Dı	D2
RAYS												
Potamotrygon albimaculata	Tapajós Freshwater Stingray	VU	0-20	Х	Х							
Potamotrygon jabuti	Pearl Freshwater Stingray	EN	0-20	Х	Х							



SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
Paratrygon aiereba	Discus Stingray	CR
Potamotrygon orbignyi	Reticulate Freshwater Stingray	LC

IUCN Red List of Threatened Species Categories are available by searching species names at <u>www.iucnredlist.org</u> Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.



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