

Elasmobranch diversity in Barra de Guaratiba, RJ

DIVERSITY OF ELASMOBRANCHS CAUGHT IN THE SURROUNDINGS OF BARRA DE GUARATIBA, RIO DE JANEIRO, BRAZIL

Arthur Cordeiro dos Guaranys Mello^{1*}  & Karla D. A. Soares¹ 

¹ Universidade Federal do Rio de Janeiro, Instituto de Biologia, Departamento de Zoologia, Laboratório de Chondrichthyes, Av. Carlos Chagas Filho, 373, 21941-902 Rio de Janeiro, RJ, Brazil.

E-mails: artguara1403@gmail.com (*corresponding author); karlad.soares@yahoo.com.br

SUPPLEMENTARY MATERIAL

Supplementary Material S1. Voucher of elasmobranch species landed at Colônia Z-14 in Barra de Guaratiba, State of Rio de Janeiro, Brazil, from May 2024 to April 2025. The specimens are deposited at the Chondrichthyes Laboratory collection at the Universidade Federal do Rio de Janeiro (LC-UFRJ).

Species	Sample Code	Collection Day
<i>Atlantoraja castelnaui</i> (Miranda Ribeiro, 1907)	LC370	08/10/2024
	LC402	07/02/2025
<i>Carcharhinus brevipinna</i> (Valenciennes, 1839)	LC320	03/09/2024
	LC414	30/09/2024
	LC434	24/09/2024
	LC435	24/09/2024
	LC436	24/09/2024

	LC437	24/09/2024
<i>Dasyatis hypostigma</i> (Santos & Carvalho, 2004)	LC360	17/04/2025
	LC367	17/04/2025
	LC383	17/04/2025
<i>Galeocerdo cuvier</i> (Péron & Lesueur, 1822)	LC259	24/09/2024
	LC286	24/09/2024
	LC362	17/04/2025
	LC387	08/04/2025
	LC406	21/02/2025
<i>Gymnura altavela</i> (Linnaeus, 1758)	LC236	25/07/2024
	LC443	17/04/2025
<i>Hypanus guttatus</i> (Bloch & Schneider, 1801)	LC361	17/04/2025
<i>Pseudobatos percellens</i> (Walbaum, 1792)	LC356	07/02/2025
	LC357	07/02/2025
	LC358	07/02/2025
	LC441	08/10/2024
<i>Pseudobatos horkelii</i> (Müller & Henle, 1841)	LC252	01/10/2024
	LC253	01/10/2024
	LC254	01/10/2024

	LC255	01/10/2024
	LC256	01/10/2024
	LC333	30/09/2024
	LC334	30/09/2024
<i>Rhinoptera bonasus</i> (Mitchill, 1815)	LC369	29/10/2024
<i>Rhizoprionodon porosus</i> (Poey, 1861)	LC368	17/04/2025
	LC401	21/03/2025
	LC405	28/03/2025
	LC407	08/04/2025
	LC408	08/04/2025
	LC409	08/04/2025
	LC410	08/04/2025
	LC411	08/04/2025
	LC412	08/04/2025
	LC413	21/03/2025
	LC416	10/02/2025
<i>Rhizoprionodon lalandii</i> (Valenciennes, 1839)	LC187	01/08/2024
	LC188	01/08/2024
	LC189	01/08/2024
	LC225	03/09/2024
	LC226	03/09/2024
	LC228	31/08/2024
	LC229	31/08/2024
	LC331	31/08/2024
	LC332	31/08/2024

	LC371	29/10/2024
	LC396	08/10/2024
	LC415	30/09/2024
<i>Rioraja agassizii</i> (Müller & Henle, 1841)	LC319	21/06/2024
<i>Sphyrna lewini</i> (Griffith & Smith, 1834)	LC227	20/08/2024
	LC403	15/10/2024
	LC245	22/08/2024
	LC344	21/06/2024
<i>Sphyrna zygaena</i> (Linnaeus, 1758)	LC231	03/09/2024
	LC232	03/09/2024
	LC233	03/09/2024
	LC241	22/08/2024
	LC242	22/08/2024
	LC243	22/08/2024
	LC244	22/08/2024
	LC309	22/10/2024
	LC311	21/06/2024
	LC312	03/09/2024
	LC313	03/09/2024
	LC314	03/09/2024
	LC315	17/08/2024
	LC316	03/09/2024
	LC317	03/09/2024
	LC318	03/09/2024

	LC326	03/09/2024
	LC327	03/09/2024
	LC417	10/02/2025
<i>Squatina guggenheim</i> (Marini, 1936)	LC234	03/09/2024
	LC235	03/09/2024
	LC398	17/04/2025
	LC400	08/04/2025

Supplementary Material S2 V2. Number of individuals (N) in each month for each elasmobranch species, genders and families captured and identified in Barra de Guaratiba, state of Rio de Janeiro, Brazil, from May 2024 to April 2025.

Taxon	May N	June N	July N	August N	September N	October N	November N	December N	January N	February N	March N	April N
<i>Atlantoraja castelnaui</i>	-	-	-	-	-	2	-	-	1	2	-	-
<i>Carcharhinus brevipinna</i>	-	-	-	2	9	-	-	-	-	-	-	-
<i>Carcharhinus limbatus</i>	-	-	1	2	-	-	-	-	-	-	-	-
<i>Dasyatis hypostigma</i>	-	-	-	-	-	2	-	-	1	-	-	3
<i>Galeocerdo cuvier</i>	-	-	-	1	4	1	-	-	1	1	2	2
<i>Gymnura altavela</i>	-	-	3	-	-	-	-	-	-	-	-	1
<i>Hypanus guttatus</i>	-	-	1	-	-	-	-	-	-	-	-	1
<i>Rhinoptera bonasus</i>	-	-	-	-	-	1	-	-	-	-	-	-
<i>Rhizoprionodon lalandii</i>	-	-	5	18	4	24	-	-	-	-	-	6
<i>Rhizoprionodon porosus</i>	-	-	3	-	-	14	-	-	-	3	4	17
<i>Rioraja agassizi</i>	-	1	-	-	-	-	-	-	-	-	-	-
<i>Sphyrna lewini</i>	-	2	-	2	2	3	-	-	-	-	-	1
<i>Sphyrna zygaena</i>	-	-	-	7	9	1	-	1	-	1	-	-
<i>Squatina guggenheim</i>	-	-	-	-	2	19	2	-	4	1	-	4
<i>Squatina occulta</i>	-	-	-	1	-	-	1	-	-	-	-	-

<i>Pseudobatos horkelii</i>	-	-	-	-	6	6	-	-	-	3	9	-
<i>Pseudobatos percellens</i>	-	-	-	-	-	-	-	3	-	9	3	-
Total	2	3	13	33	36	72	3	4	7	20	18	35

Supplementary Material S3. Number of individuals (N) for each elasmobranch species captured and identified in Barra de Guaratiba, state of Rio de Janeiro, Brazil, from May 2024 to April 2025 (present study) and from March 1982 to May 1985 (previous study). Data from the previous study were collected from Tomás *et al* (2010).

Species	Number of individuals from present study	Number of individuals from previous study
<i>Atlantoraja castelnaui</i>	5	2
<i>Carcharhinus brevipinna</i>	17	4
<i>Carcharhinus limbatus</i>	3	4
<i>Carcharhinus plumbeus</i>	-	1
<i>Carcharias taurus</i>	-	1
<i>Cetorhinus maximus</i>	-	2
<i>Dasyatis hypostigma</i>	6	294
<i>Galeocerdo cuvier</i>	12	1
<i>Gymnura altavela</i>	4	2
<i>Hypanus guttatus</i>	2	14
<i>Isurus oxyrinchus</i>	-	1
<i>Mustelus canis</i>	-	2
<i>Mustelus schmitti</i>	-	5
<i>Myliobatis</i> sp.	-	1
<i>Rhinoptera bonasus</i>	1	-
<i>Rhizoprionodon lalandii</i>	57	225
<i>Rhizoprionodon porosus</i>	42	136
<i>Rioraja agassizii</i>	1	13
<i>Sphyrna lewini</i>	10	220
<i>Sphyrna zygaena</i>	19	13

<i>Squalus</i> sp.	-	1
<i>Squatina guggenheim</i>	31	49
<i>Squatina occulta</i>	2	2
<i>Pseudobatos horkelii</i>	24	42
<i>Pseudobatos percellens</i>	15	-
