





# GUIDE TO SOUTHERN AFRICAN ELASMOBRANCH EGGCASES

## Table of Contents


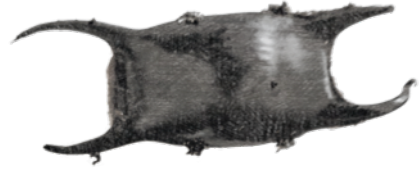

Most common shark and skate eggcases (Table).....	2
Southern African skate eggcase ID key .....	4
Skate eggcase identification features.....	5
All skate eggcases (Table).....	6

# MOST COMMON SHARK AND SKATE EGGCASES (TABLE)

Common Name	Scientific Name	Distribution	Eggcase Size	Description	IUCN Status	
Puffadder shyshark	<i>Haploblepharus edwardsii</i>	Saldanha Bay - Storms River	15-30 x 30-50 mm	dark brown with faint lateral striping and velvet-like surface	Not assessed	
Dark shyshark	<i>Haploblepharus pictus</i>	Lüderitz - Storms River	25 x 55 mm	with tendrils for attachment, amber - dark brown	Least Concern	
Leopard catshark	<i>Poroderma pantherinum</i>	Western Cape - Eastern Cape	30 x 70mm	light brown to olive in color and thinner-walled than those of the pyjama shark	Data deficient	
Pyjama shark	<i>Poroderma africanum</i>	Saldanha Bay - East London	50 x 100 mm	dark brown eggcase, tough, with tendrils for attachment	Near Threatened	

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Elephantfish / St. Joseph shark	<i>Callorhinchus capensis</i>	Namibia - Durban	200 – 230mm long	spindle-shaped with broad flat ribbed flanges around edge	Least Concern	
Twineyed skate	<i>Raja miraletus</i>	Eastern Atlantic, Mediterranean and Western Indian Ocean	<50mm (excl. Horns)	robust, even length, tapering horns, filamentous posterior tips, hooked distal tips, densely covered in fibres, beneath the surface fine striations, smooth	Least Concern	
Spear-nose skate	<i>Rostroraja alba</i>	Eastern Atlantic - Mozambique	100-138 x 125-183mm (excl. horns)	Square capsule, strong ridges, convex faces, flat and wide horns almost as long as the capsule, short pair of horns strongly hooked, lateral keels up to 20mm deep.	Endangered	

# SOUTHERN AFRICAN SKATE EGGCASE ID KEY

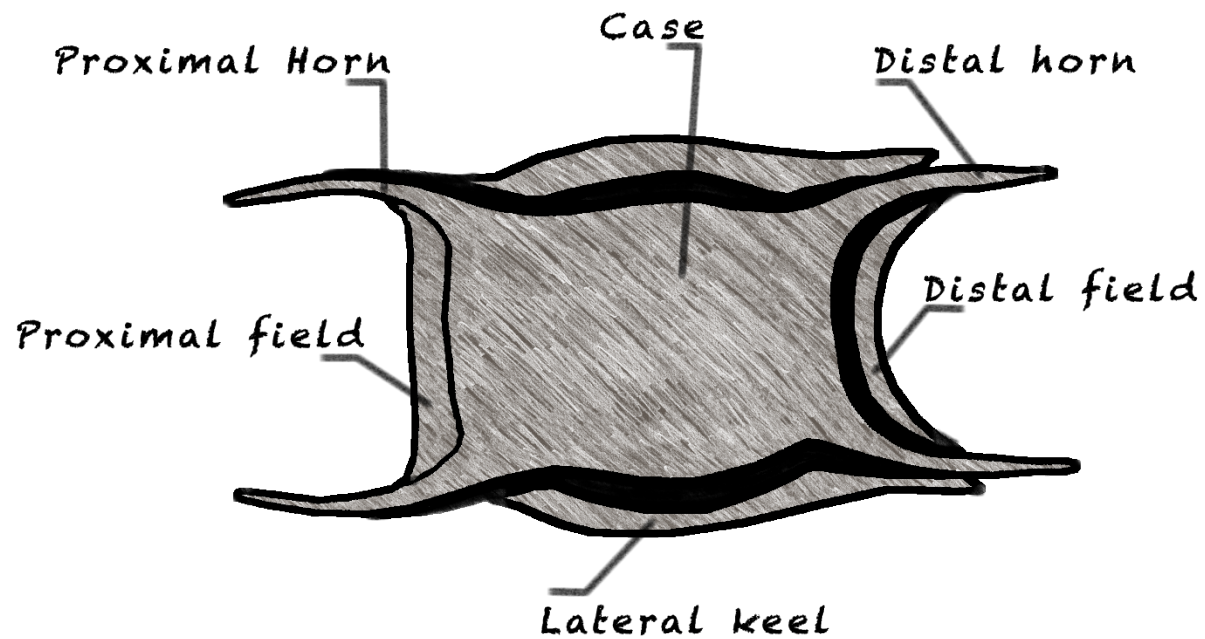
1a. Eggcase large (>100mm without horns)	2	
1b. Eggcase small (< 100mm without horns)	5	
2a. Eggcase ca. 100mm, smooth surface finely striated, broad lateral keel		<i>Malacoraja spinacidermis</i>
2b. Eggcase >130mm, striated or coarsely striated	3	
3a. Eggcase ca. 150mm, proximal horns very long, ca. 3 times the length of anterior horns, tapered and flattened towards tips, distal/anterior horns short with attachment fibres		<i>Rostroraja alba</i>
3b. Eggcase ca. 130mm, proximal horns shorter (see 3b) and without attachment fibres	4	
4a. Proximal horns 1.5 times the length of distal horns, surface not covered in fibres		<i>Amblyraja robertsi</i>
4b. Distal horns slightly longer than proximal horns, hook-like, surface covered with dense fibres		<i>Dipturus pullopunctata</i>
5a. Eggcase very small (<55mm)	6	
5b. Eggcase small (>60)	9	
6a. Very narrow or no lateral keel	7	
6b. Broad and feathery lateral keel	8	
7a. Horns of even length, smooth surface finely striated, covered in fibres, no lateral keel		<i>Raja miraletus</i>
7b. Proximal horns 45% longer than distal horns, very narrow lateral keel, coarsely striated		<i>Cruriraja parcomaculata</i>
8a. Robust, tapered horns, proximal horns ca. 1.7 time the length of distal horns, very fine striations		<i>Rajella barnardi</i>
8b. Proximal horns ca. 1.2 times the length of distal horns, smooth surface		<i>Rajella leopardus</i>
9a. Very narrow or no lateral keel	10	
9b. Broad lateral keel	12	
10a. 60mm, proximal horns tapering into acute tips		<i>Rajella caudaspinosa</i>
10b. 80mm, tips of horns tapering into filamentous tips	11	
11a. Proximal horn nearly twice as long as anterior horn, no lateral keel, very fine striations		<i>Leucoraja wallacei</i>
11b. Distal and Proximal horns same length, very narrow lateral keel, smooth surface, no striations		<i>Rajella dissimilis</i>
12a. Proximal horns narrow to acute tips, pointed inwards, smooth surface without fibres		<i>Neoraja stehmanni</i>
12b. Proximal horns filamentous at tips, smooth surface densely covered in fibres		<i>Raja straeleni</i>

Occasionally Thornback Ray (*Raja clavata*) egg cases can be found.

## References:

Ebert, D. A., Compagno, L. J., & Cowley, P. D. (2008). Aspects of the reproductive biology of skates (Chondrichthyes: Rajiformes: Rajoidei) from southern Africa. ICES Journal of Marine Science: Journal du Conseil, 65(1), 81-1.

# SKATE EGGCASE IDENTIFICATION FEATURES



# ALL SKATE EGGCASES (TABLE)

Common Name	Scientific Name	Length	Distal/ Anterior Horns	Proximal/Posterior Horns	Proximal/Posterior Field/Apron	Lateral Keel	Surface	Description
Bigmouth skate	<i>Amblyraja robertsi</i>	>130mm	taper towards tips	1.5 x the length of the anterior horns, taper towards tips	same as distal field	broad, ca. 12% of maximum egg case width	striated	small external yolk sac, very large
Roughnose skate	<i>Cruriraja parcomaculata</i>	<50mm	hook-shaped, with accute tips	45% longer than anterior horns, tapering to thin tips, curving inwards with fine attachment fibres		very narrow, <1% of maximum egg case width	coarsely striated	small, vase-like
Slime skate	<i>Dipturus pullopunctata</i>	>130mm	taper, hook-like, slightly longer than posterior horns	taper, curve inwards, not hook-like.		broad, ca. 19% of maximum width	striated, covered with dense fibres	
Yellowspot skate	<i>Leucoraja wallacei</i>	80-83mm	taper into filamentous tip	taper to filamentous tip, length nearly twice that of the anterior horns	ca. 50% wider than the anterior field/apron	none	very fine striations, smooth, no fibres	
Roughskin skate	<i>Malacoraja spinacidermis</i>	<100mm	tapering to tips	tapering to tips		broad, ca. 11.6% of maximum width	very fine striations, smooth	
African dwarf skate	<i>Neoraja stehmanni</i>			narrow to acute tips, pointed inwards towards each other		broad	smooth, without fibres	very small

Twineyed skate	<i>Raja miraletus</i>	<50mm	robust, even length, tapering and hook-like, acute tips	robust, even length, tapering to filamentous tips	1.3 times that of the anterior field/apron	none	densely covered in fibres, beneath the surface fine striations, smooth	very small
Biscuit skate	<i>Raja straeleni</i>	75mm	tapered, filamentous at tips	tapered, filamentous at tips, ca. 1.2 times the length of anterior horns	1.3 times the length of anterior/distal apon/field	broad, ca. 8% of maximum egg case width	densely covered in fibres, beneath smooth surface	<b>medium-sized</b>
Bigthorn skate	<i>Rajella barnardi</i>	55mm	robust, tapered, attachment fibres near the tips of the horns	robust, tapered, ca. 1.7 times the length of anterior horns	1.5 times that of anterior apron width	broad and feathery, ca. 18.6% of maximum eggcase width, extending over entire egg case length incl. Horns	smooth surface, very fine striations	<b>rather small</b>
Munchkin skate	<i>Rajella caudaspinosa</i>	60mm		tapering into acute tip		narrow, ca. 6.3% of maximum egg case width	finely striated, smooth, fibrous covering	
Ghost skate	<i>Rajella dissimilis</i>	80mm	same as posterior, tapered, becoming filamentous	same as anterior, tapered, becoming filamentous, nearly twice the length of anterior horns		very narrow	smooth, no striations	

Leopard skate	<i>Rajella leopardus</i>	55mm	fibrous tendril attachment	ca. 1.2 times the length of anterior horns		broad, feathery, extending the length of the entire egg case from horn tip to tip	smooth	
Smoothback skate	<i>Rajella ravidula</i>	90mm		More than twice the length of the anterior horns	Width similar to distal/anterior apron/field	Broad, ca. 13% of the maximum length of egg case	Finely striated, rough to the touch	Moderately large
Spearnose skate	<i>Rostroraja alba</i>	150mm	short, tapered and with attachment fibres	very long, three times the length of anterior horns, tapered and flattened towards their tips		broad, ca. 11.5% of maximum egg case width	coarsly striated, rough to the touch	