14 PANRAYS

Family Zanobatidae

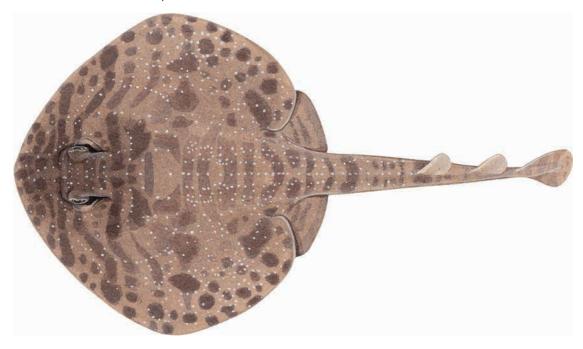
B. Séret

Small to moderate-sized batoids (to ~60 cm TL) with large pectoral fins forming a heart-shaped or subcircular, flattened disc. Snout short and bluntly angled, and tail slender, depressed and demarcated from disc. Eyes on top of head, just in front of large spiracles. Mouth small, straight and transverse. Numerous small oral teeth, rounded to oval, without cusps on their crowns. Nostrils well developed, just forward of mouth, and connected to it by a groove; nasal flaps (anterior nasal valves) extending onto internasal area and only separated from each other by a short space; nasal lobes (posterior nasal valves) enlarged and cornet-shaped. Body densely covered with tiny dermal denticles giving skin a silky feel, and with clusters of thorns and thornlets on snout, around orbits, on nape and shoulder area, in concentric rows on pectoral fins and in mid-dorsal row on trunk and tail. Pelvic fins are developed and exposed in dorsal view (pectoral posterior margin covering only pelvic-fin origins). Two small, equal-sized dorsal fins on posterior tail, each with rounded apex and convex posterior margin. First dorsal-fin origin well behind free rear tip of pelvic fins. Caudal fin elongate and rounded, without a distinct lower lobe. Dorsal surface brownish or greenish with variegated pattern of dark brown transverse bars and/or blotches, sometimes with some white or black spots. Ventral surface pale, with or without dark posterior pectoral and pelvic-fin margins; sometimes a few dark blotches scattered on belly, and oronasal and gill areas sometimes darker. Panrays are coastal batoids found on the continental shelf off Western Africa (Eastern Atlantic) from shallow waters inshore to ~100 m depth. They are bottom-dwellers, feeding on small invertebrates including crustaceans, worms and molluscs. Ovoviviparous with only the right oviduct functional, they produce litters of 1-4 pups after gestation periods of about 5 months. Caught as bycatch, mainly in bottom trawls and gillnets. Their meat is not utilised because they are extremely difficult to skin, and therefore discarded by fishermen.

MACULATE PANRAY

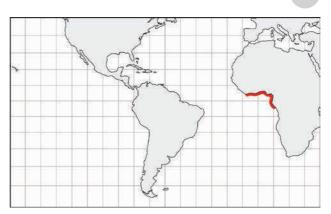
14.1

Zanobatus maculatus Séret, 2016



IDENTIFICATION. Small panray with a broadly subcircular disc, snout profile broadly rounded, several concentric series of thorns on pectoral fins, dorsal denticles with arrowhead-shaped crowns, and upper surface with dense pattern of dark blotches and small white spots. Nostrils large and connected to mouth by a groove; anterior nasal lobes extending into internasal space, only slightly separated from each other; posterior nasal lobes enlarged and horn-shaped. Mouth small, straight and transverse with thick lips; fleshy knob on upper jaw symphysis. Skin densely and entirely covered with tiny denticles; denticles with arrowhead-shaped crown above, those on ventral surface with flat crowns. Thorns and thornlets numerous on disc, arranged in parallel rows on trunk and in concentric arched rows on pectoral fins; mid-dorsal row of 22-32 thorns from nape to first dorsal fin, 1–4 between dorsal fins and some on caudal peduncle; additional rows of small thornlets may occur on outer pectoral fins. Tail thickened and demarcated from disc; semicircular above in crosssection with ventral surface flat.

COLOUR. Dorsal surface brownish to greenish brown with dense pattern of dark blotches and small white spots; dark blotches numerous, of various sizes, smaller towards disc margins; white spots mostly surrounding blotches. Ventral surface variable, beige, orange or reddish brown with broad dark posterior pectoral- and pelvic-fin margins; oronasal



and gill regions often dark, and generally a pair of symmetrical blotches on pelvis; tail beige or orange with some dark blotches on margins.

SIZE. Attains ~36 cm TL.

HABITAT AND BIOLOGY. Eastern Atlantic; Gulf of Guinea, from Ivory Coast to Gabon. Coastal benthic. Biology unknown.

SIMILAR SPECIES. This newly described species was once confused with the other member of the family, the larger Striped Panray (14.2), which has smaller thorns on the upper disc and a characteristic pattern of transverse stripes.

NE

STRIPED PANRAY

14.2

Zanobatus schoenleinii (Müller & Henle, 1841)



IDENTIFICATION. Large panray with a flat subcircular disc, snout somewhat angular and obtuse, few series of thorns on pectoral fins, dorsal denticles with ovoid and flattened crowns, and colour pattern on central upper disc dominated by transverse bars. Nostrils large and connected to mouth by a groove; anterior nasal lobes extending onto internasal area and only separated from each other by a short space; posterior nasal lobes enlarged and hornshaped. Mouth small, straight and transverse with thick lips; fleshy knob on upper jaw symphysis. Skin densely and entirely covered with tiny denticles (feeling silky), their crowns ovoid and flat, without cusps or ornamentations. Thorns and thornlets on disc arranged in series or rows, on snout, around orbits, in arched rows above main cartilages supporting pectoral fin; 1 or 2 concentric arched rows on centre of pectoral fins; a mid-dorsal row from nape to first dorsal fin, some between dorsal fins and on caudal peduncle; additional rows of small thornlets may occur on outer pectoral fins. Tail thickened and demarcated from disc; semicircular above in cross-section with ventral surface flat.

COLOUR. Dorsal surface variable, greyish brown, brownish to greenish with a typical pattern of dark brown blotches and prominent transverse bars on disc; dark cross bars may occur on tail, most evident below dorsal fins; sometimes black spots pepper disc; tips of thorns brown. Ventral surface variable, creamy white to yellowish, with or without dark posterior pectoral- and pelvic-fin margins; sometimes with a



few brown blotches scattered on belly; oronasal and gill areas may be darker, orange to reddish brown.

SIZE. Attains \sim 60 cm TL, commonly 40–50 cm TL; a female of 54 cm TL from Senegal weighed 1.4 kg. Females mature at 37–40 cm TL, males at \sim 30 cm TL; born at \sim 19 cm TL.

HABITAT AND BIOLOGY. Eastern Central Atlantic; Morocco to Angola. Demersal over sandy bottoms in shallow coastal waters of the inner continental shelf to at least 40 m depth, but mainly 10–15 m. Produces litters of 1–4 pups after short gestation. Feeds on benthic invertebrates, mainly shrimps.

SIMILAR SPECIES. Resembles the Maculate Panray (14.1), a smaller species from the Gulf of Guinea with a rougher and more heavily spotted disc.

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Séret Bernard.

Panrays: family Zanobatidae.

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