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First record of the freshwater sawfish, *Pristis microdon*, from southwestern Australian waters

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Sawfishes (family Pristidae) are large (up to 7m) modified batoids with a blade-like snout edged with pairs of rostral teeth. They occur worldwide in sub-tropical and tropical shallow coastal sea, estuaries and freshwater systems (Last and Stevens 1994; Compagno and Last 1998). There are between five and seven recognised species worldwide, with five species represented in Australian waters (Last and Stevens 1994). Sawfish populations have been extirpated from many parts of their original global range by gillnetting and trawling and are easily entangled in nets by their toothed rostra (Simpfendorfer 2000). The little that is known about the biology of sawfish suggests they have low rates of reproduction (Tanaka 1991; Compagno and Last 1998; Wilson 1999; Simpfendorfer 2000; Thorburn *et al.* 2004). This combined with their susceptibility to fishing gear, make sawfish a high risk species and all have subsequently been listed globally as critically endangered under the IUCN Red List Assessment 2006 (Compagno *et al.* 2006).

Pristis microdon Latham, 1794

Pristis microdon is a medium to large sawfish that in Australia grows to at least 361cm TL (Tanaka 1991), but is reported to reach up to 700cm TL in other locations (Last and Stevens 1994). They are born at around 50cm in length after a five month gestation period, with litter sizes ranging between 1 and 12 (Wilson 1999). In the western Atlantic *P. microdon* matures at between 240cm and 300cm TL (Compagno and Last 1998). Tanaka (1991) reported two male specimens from New Guinea, one measuring 247cm that was immature and a 361cm specimen that was mature. In Australian waters, *P. microdon* feeds on fish such as catfish, small crustaceans and molluscs (Allen 1982; Cliff and Wilson 1994; Pogonoski *et al.* 2002; Thorburn *et al.* 2004).

Pristis microdon occurs inshore and in intertidal areas and is usually found in freshwater drainages, lakes and estuaries where it can penetrate as far as 400km from the coast (Morgan *et al.* 2004). In the Indo-West Pacific it ranges from New Guinea, SE Asia, northern Australia and west to South Africa (Last and Stevens 1994; Compagno and Last 1998). *Pristis microdon* may also occur in the Atlantic and eastern Pacific if *P. perotteti* Müller & Henle, 1841 and *P. zephyreus* Jordan & Starks in Jordan, 1895 are synonymised with this species (Compagno and Last 1998). In Australia, the freshwater sawfish is known to occur in the Ord, Durack and Fitzroy Rivers (Western Australia), the Adelaide, Victoria and Daly Rivers (Northern Territory), and the Gilbert, Mitchell, Norman and Leichhardt Rivers (Queensland) (Last and Stevens 1994; Pogonoski *et al.* 2002; Thorburn *et al.* 2004). Only recently has *P. microdon* been reported from marine waters (Thorburn *et al.* 2004).

Southwestern Australian *P. microdon*

A female *P. microdon* was captured by a commercial shark fisher operating demersal gillnets in southwestern Australian waters on the 5th of February 2003. The capture location was approximately six miles east of Cape Naturaliste (33°31'S, 115°07'E) in 32m of water. The sawfish was estimated to be 3.5m in length TL when landed and appeared to be healthy. The specimen was processed and the fisher retained the remaining trunk, fins and saw. I positively identified the processed sawfish as *P. microdon* using an identification key provided by Last and Stevens (1994).

The partial length (origin of the first dorsal fin to the insertion point of the second dorsal fin) was 95cm (approximate as the trunk had been cut in half). The rostral saw length was 79cm with 19 pairs of teeth that extended to the basal quarter of the saw (Figure 1). The interspace between rostral teeth at the base of the saw was 4cm, and 3cm between the teeth at the tip of the saw (Figure 1). A groove was present along the posterior margin of all rostral teeth. The origin of the first dorsal-fin was located anterior to the pelvic-fin origin and the height of the first dorsal-fin was 32cm. The second dorsal-fin height was 31cm. The ventral lobe of the caudal-fin was small, but distinct. The upper and lower postventral caudal-fin margins measured 44.5cm and 11.5cm respectively.

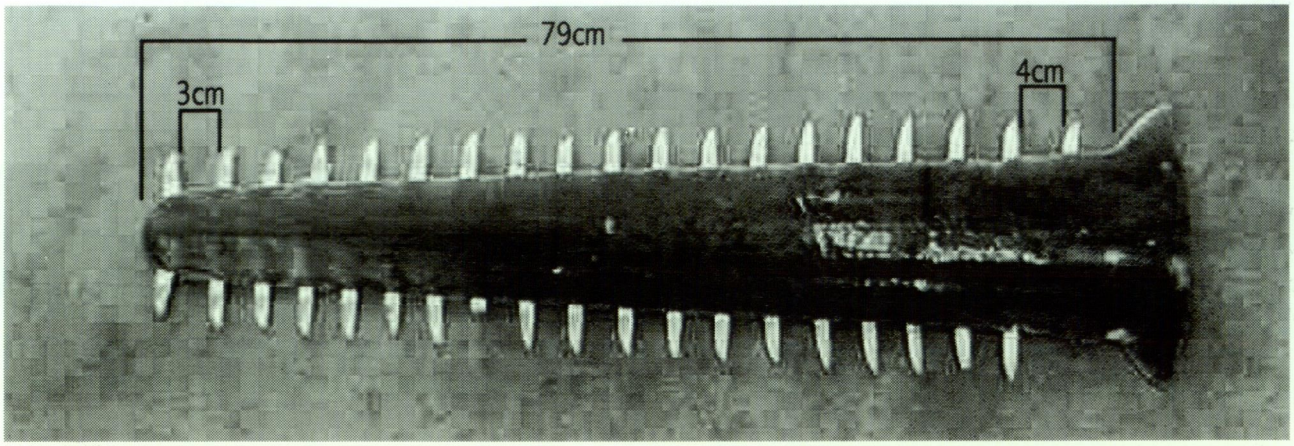

Figure 1 Rostral saw from a female *Pristis microdon*, measuring approximately 350cm in total length, captured off Cape Naturaliste, Western Australia. See text for description of measurements.

This record of *P. microdon* from southwestern Australia extends the range of the species approximately 1600 km south of its previously known southern limit, Cape Keraudren, Western Australia (Thorburn *et al.* 2004) and provides further confirmation that *P. microdon* utilizes marine waters.

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CONTENTS