



Review of records of sawfishes (Chondrichthyes: Pristidae) from Fiji, with deletion of *Pristis zijsron* Bleeker, 1851 and *Pristis* sp. from the fauna

CLINTON DUFFY^{1,4}, JOHNSON SEETO² & TOM TRNSKI³

¹Department of Conservation Te Papa Atawhai, Private Bag 68908, Newton, Auckland 1145, New Zealand

²School of Marine Studies, The University of the South Pacific, Private Mail Bag, Suva, Fiji

³Auckland Museum Tamaki Paenga Hira, Private Bag 92018, Auckland 1142, New Zealand

⁴Corresponding author. E-mail: cduffy@doc.govt.nz

Sawfishes (Pristidae) are large shark-like batoids with a distinctive flattened, greatly elongated rostrum armed on each side with a row of large transverse teeth. Two genera and at least four species occur in the Indo-West Pacific, of which *Anoxypristis cuspidata* (Latham, 1794), *Pristis microdon* Latham, 1794 and *P. zijsron* Bleeker, 1851 have widespread distributions and *P. clavata* Garman, 1906 appears to be restricted to northern Australia (Compagno & Last, 1999; Last & Stevens, 2009; Phillips *et al.*, 2011). All sawfishes are threatened by over fishing and habitat loss, with range reductions and local extinctions reported for several species (Simpfendorfer, 2000; Monte-Luna *et al.*, 2007; Last & Stevens, 2009; Wueringer, *et al.* 2009; Phillips *et al.*, 2011). All Indo-Pacific sawfishes are assessed by the IUCN as Critically Endangered with decreasing population trends (IUCN Red List of Threatened Species, <http://www.iucnredlist.org/>, 10 Sep. 2011).

Sawfishes generally inhabit shallow inner shelf and coastal waters, as well as estuarine and freshwater habitats (Last & Stevens, 2009; Wueringer *et al.*, 2009). The eastern distributional limit of sawfishes in the tropical Western Central Pacific is generally considered to encompass the Philippine Islands, Papua New Guinea, Bougainville and the northeast coast of Australia (Compagno & Last, 1999; Powell & Powell, 1999; Last & Stevens, 2009). However, Seeto & Baldwin (2010) reported *P. zijsron* and *Pristis* sp. from Fiji based upon the provenance of specimens held in the ichthyology collections of the Australian Museum Sydney (AMS) and Melbourne Museum, Museum Victoria (NMV) respectively. This represents a 3000 km eastwards range extension for the family. Given their conservation status and lack of contemporary records of sawfishes from Fiji or elsewhere in Oceania (Ryan 1980; Boseto 2006; Rasalato *et al.* 2010; Polidoro *et al.* 2011; B. Carlson, R Thaman, J. Brunnschweiler, M. Neumann pers. comm.; J.S. pers. obs.) it is important to confirm the identity and provenance of these specimens. We report that information herein.

All Fijian sawfish material held by the AMS and NMV proved to be dried rostra. These were identified to species using diagnostic morphological characters described by Compagno & Last (1999), Thorburn *et al.* (2007) and Last & Stevens (2009). The authors' identifications of the NMV material were independently checked by N. Phillips, Murdoch University. Photographs and detailed measurements of this material are available from the senior author upon request. The AMS material was not measured in detail as it was only possible to examine photographs of the rostra. The measurements of rostral length and width reported here were made directly from a ruler included in the photographs for scale.

Material examined: *Pristis zijsron*: AMS IB.2315, photographs of two dried rostra, Fiji or New Guinea, coll. Gaze or Geach, 1949; (1) rostrum length (RL) c. 284 mm, width at last tooth (WB) c. 34 mm (8.35 in length), sides of rostrum almost parallel, spacing between posterior teeth noticeably wider than anterior teeth, posterior teeth conspicuously shorter than anterior teeth, tooth count 27/25; (2) RL 262 mm, WB 32 mm (8.19 in length), sides of rostrum almost parallel, spacing between posterior most teeth noticeably wider than anterior teeth, posterior teeth conspicuously shorter than anterior teeth, tooth count 26/27. *Pristis microdon*: NMV A15774, with native implements from Fiji I., coll. Mrs J. G. Howden, 24.8.1929: RL 381 mm, WB 68.7 mm (5.54 times in length), rostrum tapering noticeably towards tip, width at tip (WT) 29.83 mm (0.43 WB), tooth count 21/22, length of largest intact tooth 23.03 mm, groove on posterior edge of tooth extending into the rostrum. *Pristis clavata*: NMV A15810, three rostra, with native implements from Fiji I., Mrs J. G. Howden, 24.8.1929: (1) RL 165.3, WB 30.8 mm (5.37 in length), WT 17.6 mm (0.57 WB), tooth count 20/21, length of largest intact tooth 11.9 mm, posterior edge of teeth convex; (2) RL 223, WB 37.94 mm (5.88 in length), WT 20.95 mm (0.55 WB), tooth count 21/22, length of largest intact tooth 20.09 mm, shallow groove on posterior edge of tooth; (3)