

NEW AUSTRALIAN FISHES. PART 7. A NEW SPECIES OF *CHOERODON* (LABRIDAE).

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Abstract

Gomon, M.F. and Alalen, G.R., 1987. New Australian fishes. Part 7. A new species of *Choerodon* Labridae). *Mem. Mus. Vict.* 48: 25-26.

A description of a new tuskfish *Choerodon cauteroma*, restricted to north-western Australia, is presented. It is distinctive in having a relatively deep body and prominent black mark on the upper portion of the side below the seventh dorsal spine.

Introduction

Recent field studies and revisionary treatments of Australian taxa have differentiated a number of undescribed labrid fishes. Separate concurrent studies by the two authors identified the species of *Choerodon* treated below as new. Methods for this description follow Gomon (1974).

Labridae *Choerodon*

Choerodon Bleeker, 1847: 10.

Type species. Labrus macrodontus Lacepède (= *C. anchorago* Bloch) by monotypy.

Discussion. *Choerodon* is a large, morphologically diverse genus with general body configurations varying from slender and streamlined to quite deep-bodied. An unpublished study of this genus and related genera undertaken by the first author has revealed the presence of two undescribed species of *Choerodon* that appear to be restricted to northern Australian waters. Both have been cited in recent works treating, at least in part, Australia's North-west Shelf. A description of one of these species is presented below.

Choerodon cauteroma sp. nov.

Choerodon sp. 1 Gloerfelt-Tarp & Kailola, 1983: 235, colour figure on opposing page.

Choerodon sp. 1 Sainsbury et al., 1984: 260, colour figure on opposing page.

Choerodon sp. Allen, 1985: 2406, figs. 330, 331.

Material examined. Holotype: Western Australia, Exmouth Gulf, collected by J.B. Hutchins, 6 Dec 1975, WAM P25508-042 (terminal phase adult, 203 mm SL).

Paratypes: Western Australia, Dampier Archipelago (20°28.5'S, 116°32'E), J.B. Hutchins, 24 Nov 1974, WAM P24259 (initial phase, 195 mm SL). North-west Shelf (20°46'-48'S, 115°59'-116°00'E), 19-22 m, FRV "Soela", collected by CSIRO, 1 Dec 1979, CSIRO H659-01 (initial phase, 176 mm SL). Exmouth Gulf, M. Lane, Oct 1974, WAM P25095-038 (initial phase, 6 specs., 98.3-144 mm SL). Off Exmouth Yacht Club, 4-5 m, spear, G.R. Allen, 1 Jul 1975, WAM P25372-001 (initial phase, 3 specs., 90.2-104 mm SL). Shark Bay, R.J. McKay, 8 Jul 1962, AMS I.26373-001 (initial phase and terminal phase, 2 specs., 130-205 mm SL), NMV A3819 (initial phase and terminal phase, 4 specs., 114-208 mm SL), USNM 280629 (initial phase and terminal phase, 2 specs., 115-158 mm SL). Same area, Poole Bros., May 1964, BPBM 30944 (initial phase, 110 mm SL).

Other material: Western Australia, Elphicks Knob (20°28' S, 116°37' E), collected by R.J. McKay, 26 Nov. 1971, WAMP 23092-4 (3 juveniles, 20.5-40.2 mm SL).

Description. Dorsal-fin rays XIII, 7; anal-fin rays III, 10; pectoral-fin rays ii, 15-16 (ii, 15 in holotype; ii, 15 in 37 of 40 fins counted); lateral-line scales 27 + 2; predorsal scales 5-8 (5 in holotype; modally 6); scales above lateral line 4-4 1/2 (4 in holotype). Body and head deep, body depth 36.3-43.0 (37.3 in holotype). Eye large. Predorsal scales reaching forward to above hind edge of preopercle. Cheek scales reaching forward to

below anterior extent of orbit; broad naked margin along free edge of preopercle; subopercle with 1-5 scales in a mostly uniserial patch dorsally. Lateral-line scales with several anastomosing branches associated with sensory pores. Upper jaw with two pairs of prominent ventrally directed canines anteriorly, anteriormost much larger than second; small recurved canine sometimes present (present in holotype) at corner of mouth. Lower jaw with two pairs of prominent anterior canines, anteriormost much smaller than second and directed anterodorsally; second pair strongly curved laterally. Caudal fin mostly truncate with upper and lower corners produced into short lobe. Dorsoposterior corner of pectoral fin distinctly pointed, fin broadly rounded below. Reaches a length of at least 280 mm TL.

Juveniles (based on three specimens, WAM P.23092-4, tentatively identified as this species) pale with four faint dusky bands or vertically elongate blotches on sides; darker spot about half diameter of eye on lateral line below seventh dorsal-fin spine; fins pale, dusky blotches in dorsal and anal fins opposite ends of bands crossing sides and dark spot in dorsal fin above third band in very small individuals.

Initial phase pale with faint dusky stripes posteriorly on sides following horizontal scale rows; broad dark slash on side between base of seventh dorsal-fin spine and lateral line; head with pair of narrow dusky lines crossing snout in front of eyes, similar pair of dusky lines directed posteriorly from each eye, third pair curved posteroventrally from eye across operculum, fourth pair curved anteroventrally from eye to mouth, pair of short dusky marks directed ventrally from mouth on each side and hazy dusky streak angled posteroventrally from cheek; dorsal fin with broad horizontal dark streak distally between first three spines; dorsal and anal fins with two horizontal series of dusky spots, inner series in each fin conjoined to form stripe anteriorly; caudal fin occasionally with one or two vertical series of dusky spots.

Terminal phase similar to primary phase but with dark mark dorsally on side reduced to spot of pupil size; lines on head, except for those across snout, those directed postero-ventrally

from eye, and streak across cheek, less prominent; spot anteriorly on dorsal fin intense.

Life colours of initial and terminal phase adults olivaceous above, yellow to white below with above-mentioned lines and spots, except for blue-edged black spot on side, black spot anteriorly in dorsal fin and brownish streak across cheek, bright blue; centres of scales anteriorly on sides bright blue; space between pair of blue lines directed posteroventrally from eye brownish; base colour of fins bright yellow; broad blue stripe along basal edge of pectoral fin rays; pelvic fin with one or more longitudinal blue stripes.

Distribution. North-western Australia, extending at least from the Dampier Archipelago to Shark Bay.

Etymology. From the Latin *cauteroma* (brand), in reference to the characteristic brand-like mark dorsally on the sides of the body in this species.

Remarks. This is a distinctive species of tuskfish which most closely resembles its deep-bodied congeners that have thirteen spines and subopercular scales restricted to the dorsoposterior corner of the exposed subopercular surface. The prominent black mark on the upper portion of the side below the seventh dorsal-fin spine, the black mark at the leading end of the dorsal fin and 15 (rarely 16) segmented pectoral-fin rays easily distinguish it from these relatives.

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