

Five New Fish Species of the Genus *Alabes* (Gobiesocidae: Cheilobranchinae)

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ABSTRACT. Five new species of shore-eels in the genus *Alabes* are described from southern Australia: *A. elongata* (Western Australia); *A. gibbosa* (Western Australia); *A. occidentalis* (Western Australia); *A. obtusirostris* (Victoria and Western Australia); and *A. scotti* (New South Wales and Tasmania). The first three species inhabit shallow nearshore reef and/or weed areas, whereas the last two have been found only on soft bottoms in deeper coastal waters (24–65 m). This brings the total number of described species to nine (previously known species are *A. dorsalis* [Richardson], *A. parvula* [McCulloch], *A. brevis* Springer & Fraser, and *A. hoesei* Springer & Fraser). Two of the new species, *A. elongata* and *A. occidentalis*, appear to be western sister species of southeastern Australian forms (*A. dorsalis* and *A. parvula*, respectively), whereas one new Western Australian species, *A. gibbosa*, is similar to another western form, *A. brevis*. The apparent relationships of the remaining two new species, *A. obtusirostris* and *A. scotti*, are obscure. The former is similar to *A. dorsalis* but lacks a rudimentary pelvic fin, whereas the latter shows some similarities to *A. parvula* but possesses a more pointed head and a unique coloration. A key to *Alabes* species is provided.

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Members of the Australian endemic gobiesocid subfamily Cheilobranchinae—commonly referred to as shore-eels—are small, elongate fishes belonging to a single genus *Alabes* (Cloquet, 1816). They inhabit temperate waters, forming a unique assemblage of what was first thought to represent a variety of synbranchid eel. Springer & Fraser (1976) showed, however, that these eel-like fishes should be included with the Gobiesocidae. Their review recognized four species: *Alabes dorsalis* (Richardson, 1845), *A. parvula* (McCulloch, 1909), *A. brevis* and *A. hoesei*, the last two described as new. Springer & Fraser (1976) suggested that a single specimen of *Alabes* from Norfolk Island off eastern Australia might also represent a new species but were

unwilling to describe it based on a single specimen. All members of the genus possess a small ventral slit-like gill opening, have no pectoral fins, either have small, rudimentary pelvic fins or lack them entirely, and their dorsal and anal fins are represented by fin folds that lack fin-rays and are continuous with a small caudal fin that does have fin-rays. Unlike clingfishes, they do not possess the characteristic ventral sucking disc, although one species, *Alabes dorsalis*, was shown by Springer & Fraser (1976: fig. 11d) to have what appears to be a rudimentary disc. Nevertheless, one unique osteological character is shared between clingfishes and shore-eels: the supracleithrum bears a concave process at its outer end that articulates with a

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