A REVISION OF THE DAMSELFISH GENUS *DASCYLLUS* (POMACENTRIDAE) WITH THE DESCRIPTION OF A NEW SPECIES

R١

HELEN A. RANDALL
Fish Division, Bernice P. Bishop Museum, Honolulu, Hawaii 96818 USA

AND

GERALD R. ALLEN
Department of Fishes, Western Australian Museum, Perth

SUMMARY

The damselfish genus *Dascyllus* (family Pomacentridae) is reviewed. The group contains the following nine species which are primarily inhabitants of tropical reefs: *albisella* (Hawaiian Islands), *aruanus* (widespread Indo-Pacific), *carneus* (Indian Ocean), *marginatus* (Red Sea), *melanurus* (Indo-Australian Archipelago), *reticulatus* (E. Indian Ocean and W. Pacific), *strasburgi* (Marquesas Islands), *trimaculatus* (widespread Indo-Pacific), and *flavicaudus* n.sp. (southeastern Oceania) which is described in detail and compared with its nearest relative, *D. reticulatus*. A brief diagnosis, illustration, and notes on the general biology of each species is provided. In addition, a key to the species of *Dascyllus* and tables of meristic and morphometric data are included.

INTRODUCTION

The present paper is part of a series of generic revisions of the Pomacentridae currently in progress by the junior author; either alone or in conjunction with various colleagues. The need for revision of certain problem genera in this speciose family of tropical reef fishes was discussed previously by Allen and Robertson (1974), Allen (1975), and Allen and Lubbock (1976).

The genus Dascyllus Cuvier (1829) contains nine species which inhabit the vast tropical region of the Indo-West Pacific. The genus has not been reviewed previously on a comprehensive basis although it has been treated by authors of large monographic works and regional faunal volumes or reports. Cuvier (1830) recognized three species: aruanus (Linnaeus), marginatus (Rüppell), and trimaculatus (Rüppell). Günther (1862) also placed these three species in the genus along with five others: albisella Gill, melanurus Bleeker, xanthosoma Bleeker, polyacanthus Bleeker, and cyranurus (Rüppell). However, the latter two do not belong in Dascyllus as presently defined and are allocated as follows: cyranurus = Chromis caerulea (Cuvier); polyacanthus = Acanthochromis polyacanthus. Furthermore, Bleeker's xanthosoma is a synonym of D. reticulatus described by Richardson in 1846. Bleeker's (1877) review of the pomacentrids of the East Indies included four species: arcuatum (= aruanus), melanurus, reticulatum, and trimaculatum; these have been considered as valid entities by most subsequent authors, in addition to D. marginatus from the Red Sea and D. albisella from the Hawaiian Islands. All of these except marginatus were included in Allen's (1975) synopsis of western Pacific pomacentrids. In addition, he recognized D. strasburgi Klausewitz, a species described relatively recently from the Marquesas Islands. Smith (1960) in his review of the pomacentrid fishes of the western Indian Ocean placed D. carneus Fischer in the synonymy of D. reticulatus, but the present study indicates that the former species is valid. D. flavicaudus n.sp., the final member of the group, is described below from a series of specimens obtained mainly by Dr. J. E. Randall during a cruise to southeast Oceania abord the sailing ship "Westward" during 1970-71.

Records of The Australian Museum, 1977, Vol. 31, No. 9, 349-385, Figures 1-11.