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## INTRODUCTION

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Since the Annotated Checklist of the Coral Reef Fishes in the Capricorn-Bunker Group Great Barrier Reef Australia, was published in 1983, ongoing taxonomic studies have necessitated a number of revisions. Underwater observations, as well as collecting by trawling and other methods, have resulted in additional new records. In addition, several unpublished records of spearfished species are included.

Much of the previous collecting effort in the Capricorn-Bunker Group was directed at the reef-dwelling and reef-associated fishes. Knowledge of the vast and comparatively shallow surrounding areas, as well as the deeper shelf waters within the boundaries of the Capricornia Section is scanty. Likewise, little is known of the inshore reefs and shoals. Many of these areas, particularly in the more remote sections, remain largely uncharted and are known only to commercial anglers or to trawler operators as 'rough bottom' to be avoided. There has not been extensive sampling of fishes by trawling in the Capricornia region, and much of our previous knowledge of the fish fauna from areas between reef systems comes from collections made by the F.I.S. Endeavour in 1910.

Since the mid 1970s trawlers have seasonally worked the inter-reef and surrounding areas of the Capricorn-Bunker Group for the saucer scallop, *Amusium balloti*. In more recent years trawlers also have fished the continental shelf waters off the Bunker Group for eastern king prawns, *Peneus plebejus*, and blue-leg king prawns, *Peneus latisulcatus*. Both fishing operations produce large fish by-catches, but unfortunately, apart from a few specimens occasionally forwarded to institutions by trawler operators, little is known of the bottom fishes of the area.

Present additions of trawled fish records to the Capricornia checklist are the result mainly of commercial trawling in the area by scallop or deepwater prawn trawls. These methods yielded many previously unrecorded species. A survey carried out by the Southern Intruder (Dredge and Gardiner, 1984) of commercial prawning grounds adjacent to the Capricornia Section, between Saumarez Reefs (Lat. 22° S) and the southern end of the Bunker Group (Lat. 24° S) also included 2 trawl shots in deeper water within the marine park boundaries (10 miles N.E. of Lady Musgrave I. in 335 m; and 11.5 miles E.N.E. of Fitzroy Reef in 238 m), resulting in further new records for the area. Other trawls by the Southern Intruder, although outside the Capricornia Section, were conducted in depths similar to those within the park and yielded a total of more than 250 fish species. Undoubtedly, many of these species will eventually be recorded also from within the marine park boundaries, but are excluded from the present report.

Additions to the checklist bring the total number of species recorded from the Capricornia Section of the Great Barrier Reef Marine Park to 920. These include 60 species and 11 families not previously reported, and 3 species are new records for Australia. The remaining records are revisions of previously included species, based on re-identifications and nomenclatural changes. Four species which were previously recorded are removed from the checklist. Most of the additions to the checklist (41 species) are deepwater fishes caught between reefs. These mostly trawl-caught fishes comprise a small but distinctive component of the fish fauna (8.5% of the total species), the remainder consisting of coral reef (90%) and oceanic-pelagic species (1.5%).