

# NEPHTYIDAE (POLYCHAETA : ERRANTIA) FROM AUSTRALIA

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## SUMMARY

The Australian Nephtyidae are represented by 13 species in four genera, *Aglaophamus* (4 species), *Inermonephtys* (1 sp.), *Micronephtys* (1 sp.) and *Nephtys* (7 spp.). Five new species are described, *Aglaophamus gippslandicus* n.sp., *A. profundus* n.sp., *Nephtys inornata* n.sp., *N. mesobranchia* n.sp., and *N. semiverrucosa* n.sp. *Nephtys vikingensis* Paxton, 1974 is synonymised with *N. longipes* Stimpson, 1856 and *Micronephtys sphaerocirrata* (Wesenberg-Lund, 1949) is recorded from Australia for the first time. Descriptions are provided for all species examined.

## INTRODUCTION

Nephtyids were first recorded from Australian waters by Stimpson (1856), who briefly described *Nephtys longipes* from Botany Bay, N.S.W. By 1922 the number of recorded species had grown to four: Augener (1913) described *N. gravieri* from near Fremantle, W.A. Benham (1915, 1916) found *Aglaophamus macroura* (Schmarda) from deep water east of Bass Strait, and Augener (1922) recorded *A. dibranchis* from south-east Australia, N.S.W. No new species were found until 1963, when Fauchald described *N. mirocirris* from Spencer Gulf, S.A. and the widely-distributed *N. australiensis*. *Aglaophamus verrilli* (McIntosh) was recorded from Moreton Bay by Rullier (1965) and *Nephtys picta* Ehlers from Port Phillip Bay by Knox and Cameron (1971). In 1974, Paxton reviewed a number of these species, described *Inermonephtys palpata* from Bowen, Qld, described *Nephtys picta* Knox and Cameron as a new species, *N. vikingensis*, recorded *N. paradoxa* Malm from deep water off southern New South Wales, and synonymised *N. mirocirris* with *N. gravieri*.

Our examination of material from a number of recent studies has indicated that some mistakes remained in earlier identifications and has added further new species and records. A large amount of material has become available from ecological studies, particularly those being carried out in Moreton Bay (W. Stephenson *et al.*, Univ. Queensland), Botany Bay (N.S.W. State Fisheries), Port Hacking (CSIRO Division of Fisheries and Oceanography), Western Port and Port Phillip Bay (Western Port Environmental Study, WPES, and Port Phillip Bay Environmental Study, PPBES, Fisheries and Wildlife Division, Victoria) and in many coastal and estuarine areas of New South Wales by the Australian Museum.

We have used this material and re-examined much of the previously-described material for this systematic account. Specimens were examined of all species except *Aglaophamus dibranchis* (Grube, 1878).