Annelida*

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Abstract

The first annelids were formally described by Linnaeus (1758) and we here briefly review the history and composition of the group. The traditionally recognized classes were Polychaeta, Oligochaeta and Hirudinea. The latter two are now viewed as the taxon Clitellata, since recognizing Hirudinea with class rank renders Oligochaeta paraphyletic. Polychaeta appears to contain Clitellata, and so may be synonymous with Annelida. Current consensus would place previously recognized phyla such as Echiura, Pogonophora, Sipuncula and Vestimentifera as annelids, though relationships among these and the various other annelid lineages are still unresolved.

Key words: Polychaeta, Oligochaeta, Clitellata, Echiura, Pogonophora, Sipuncula, Vestimentifera, annelid, phylogeny, review

Introduction

Annelida is a group commonly referred to as segmented worms, found worldwide in terrestrial, freshwater and marine habitats. The first annelids were formally named by Linnaeus (1758) and include well-known forms such as the earthworm Lumbricus terrestris Linnaeus, 1758, the medicinal leech Hirudo medicinalis Linnaeus, 1758, and the sea-mouse Aphrodite aculeata Linnaeus, 1758. Today we estimate that the current number of accepted species level taxa is around 14 000 (Rouse & Pleijel 2006), though several thousand more have been named and are considered invalid. Lamarck (1802) first used the term ‘Annelides’ when naming a group of organisms taken from the broad taxon Vermes erected by Linnaeus. The name Annélides was based on the Latin word anellus, meaning a little ring, in reference to the presence of ring-like segments that characterize the group. Earthworms are the most familiar annelids to people, but the bulk of the annelid diversity lies among the marine representatives, which are found in nearly every marine habitat, from beach sands and