

Profundal Lake Benthos

Quantitative Aspects

Benthologists have found that many lakes have a **concentration zone**. This is the depth at which the peak abundance and biomass of benthos occur. Usually the peak abundance occurs between the 2 and 4 metre depths but can go as deep as 7 metres. (Mackie, 1998)

Table II-22: Profundal macroinvertebrates with trophic status indicator value.

(Species are listed from primitive to most highly evolved forms in different phyla. The nomenclature for some phyla has been updated.)

Genus/species name	Common name	Taxon group	Function; Indicator value
<i>Manayunkia speciosa</i>	freshwater polychaete	Phylum Annelida Class Polychaeta	Filterer, gatherer; Oligotrophic indicator
<i>Limnodrilus hoffmeisteri</i>	sludge worm	Class Oligochaeta	Gatherer; Eutrophic indicator
<i>Tubifex tubifex</i>	sludge worm	Class Oligochaeta	Gatherer; Eutrophic indicator
<i>Pelosclex variegatum</i>	oligochaete	Class Oligochaeta	Gatherer; Oligotrophic indicator
<i>Tubifex kessleri</i>	oligochaete	Class Oligochaeta	Gatherer; Oligotrophic indicator
<i>Sphaerium corneum</i>	European fingernail clam	Phylum Mollusca Class Bivalvia	Filterer; Mesotrophic indicator
<i>Sphaerium nitidum</i>	Arctic-Alpine fingernail clam	Class Bivalvia	Filterer; Oligotrophic indicator
<i>Pisidium conventus</i>	Arctic-Alpine pea clam	Class Bivalvia	Filterer; Oligotrophic indicator
<i>Caecodotea (Asellus) spp.</i>	isopod	Superphylum Arthropoda Subphylum Crustacea Order Isopoda	Gatherer; Mesotrophic indicator
<i>Diporeia hoyi</i>	deep water amphipod	Order Amphipoda	Gatherer; Oligotrophic indicator
<i>Mysis relicta</i>	relict mysid	Order Mysidacea	Predator; Oligotrophic indicator
<i>Chironomus plumosus</i> (also ca. Table II-6)	blood worm	Superphylum Arthropoda Class Insecta Order Diptera Family Chironomidae	Gatherer; Eutrophic indicator
<i>Hexagenia limbata</i>	mayfly	Order Ephemeroptera	Predator; Oligotrophic indicator

