

Annelid worms

Single Phylum (Annelida) with about 15,000 species
Majority marine, but most familiar are fresh and terrestrial
First appearance of true segmentation or metamerism
Presence of setae for locomotion

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Annelid worms

Defining traits

- Segmentation or metamerism
- Coelom also segmented with septa
- Have bristle-like setae See Fig. 11.3 in text
- Advances in circulatory, excretory, and nervous systems
- Body with anterior prostomium (head) and posterior pygidium See Fig. 11.2 in text

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Annelid taxa

Class Polychaeta

- Largest class (10,000 spp)
- Mostly small, variable morphologies
- Complex head See Fig. 11.2 in text
- Paired appendages called parapodia
- Sedentary (tubicolous) or errant lifestyles

See Figs. 11.5, 11.8, 11.10, 11.11 in text for various Polychaete lifestyles

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Annelid taxa

Polychaete Form and Function

- Parapodia for locomotion and respiration, also contain cirri and setae
- Lifestyle tied to food habits
- Excretion with pair of nephridia and pores in each metamere
- Nervous system complex with well-developed sense organs
- Simple reproduction

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Annelid taxa

Class Oligochaeta

- Many terrestrial and freshwater, includes earthworms
- Most have setae, earthworms with 4 pairs per segment
- Feed on decayed organic matter using gizzard
- Circulation through aortic arches
- Gas exchange across skin, no gills

See Fig. 11.13 in text

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Annelid taxa

Class Oligochaeta

- Excretion with nephridia
- Giant axons in ventral nerve cord allow some rapid movement
- No eyes, but sense organs on body surface and near mouth
- Monoecious
- Have clitellum, used in reproduction

See Figs. 11.14 and 11.15 in text

See Fig. 11.16 in text

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Annelid taxa

Class Hirudinea

- Mostly freshwater, lack setae
- Lack compartments in coelom, space filled with tissue and lacunae **See Fig. 11.19 in text**
- Many are carnivores with a proboscis
- Fluid feeders with suckers for attachment
- True bloodsuckers with cutting jaws
- Two brains and sense organs called sensillae in epidermis

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