

PODCAST OUTLINE: ANNELID DIVERSITY

1. Introductory comments
 - A. Three classes
 - B. Grouping among the three
2. Oligochaetes
 - A. Derivation of name
 - B. Feeding strategy
 - C. How beneficial to plants
 - D. Earthworms in Pennsylvania
 1. Native vs alien earthworms
 2. Mechanism of introductions
3. Current distribution
 - a. Urban / suburban
 - b. Forests

E. How detrimental to plants

1. Impact on leaf litter
2. Resulting effects
3. Impact on nutrients
4. Impact on organisms

F. Other Oligochaetes

1. Iceworms
2. Tubificid worms

3. Hirudineans

A. General features

B. Parasitic / hemophagic behavior

C. Medicinal use of leeches in middle ages

D. Modern medicinal use of leeches

Polychaetes

A. General features

B. Significance of name

C. Feeding structures and behavior

D. Reproduction

1. Separate sexes

2. Trochophore larva

E. Interesting polychaetes

1. Osedax

2. Pompeii worms

3. Tube worms

4. Phylogeny

A. Fossil history

B. Old classification

C. Current classification

Questions

Explain the derivation and meaning of the term “oligochaete.”

Many people view earthworms as being beneficial to plant growth. Is that ever true? Is it always true?

Are earthworms native to Pennsylvania? Explain.

What is special about the tubificid worms?

Where would be the best place to find a hirudinean?

What is hemophagy, and what features of the leeches make them successful with that strategy?

How have leeches been used medicinally in the past? Do they have any current medicinal value?

Compare and contrast the general structure of the polychaetes to that of the oligochaetes.

What is so special about Pompeii worms and tube worms?

Phylogenetically, are annelids more closely related to the arthropods or the mollusks? Explain.