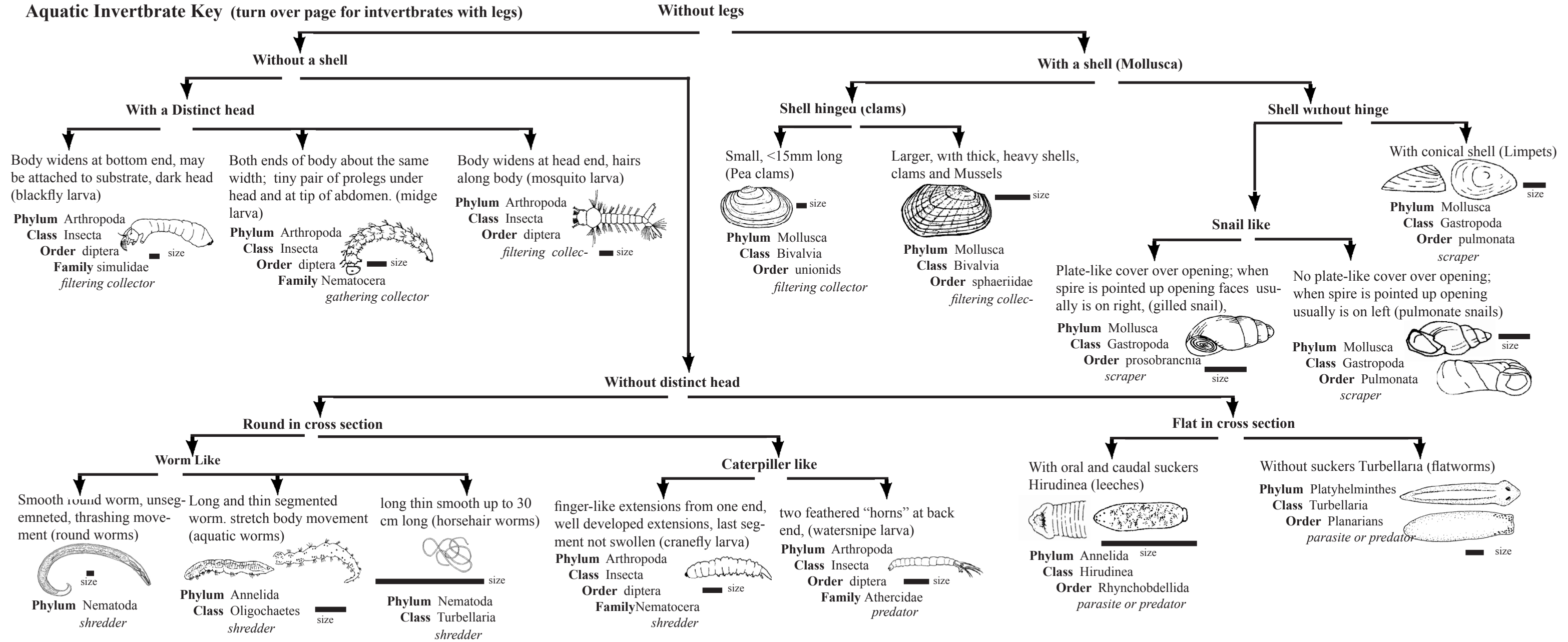


Aquatic Invertbrate Key (turn over page for invertbrates with legs)



Organisms found in good quality water, Sensitive to pollution.

Taxa (groups)	
Counts	
Order Plecoptera (Stonefly)	
Order Trichoptera (Caddisfly)	
Order Coleoptera (Water Penny)	
Order Coleoptera (Riffle Beetle)	
Order Ephemeroptera (Mayfly)	
Class Gastropoda, family Prosobranchs (Gilled Snail)	
# of Taxa (groups)	
Water Quality Index number x 3	

Organisms found in moderate quality water, Somewhat tolerant to pollution.

Taxa (groups)	
Counts	
Order Decapoda (Crayfish)	
Order Isopoda (Sowbug)	
Order Amphipoda (Scud)	
Order Megaloptera, Family Oialidae (Alderfly larva):	
Order Megaloptera, Family Corydalidae (Fishfly larva)	
Order Odonata, Suborder Zygoptera (Damselfly: larva)	
Order Diptera, Family Athercidae (Watersnipe Larva)	
Order Diptera, Suborder Nematocera (Crane Fly)	
Order Coleoptera (Beetle Larva)	
Order Odonata Suborder Anisoptera (DragonFly larva)	
# of Taxa (groups)	
Water Quality Index number x 2	

Organisms found in poor quality water, Tolerant to pollution.

Taxa (groups)	
Counts	
Class Oligochaeta (Aquatic Worm)	
Order Diptera, Suborder Nematocera (Midge Larva)	
Order Diptera, Family Simuliidae (Blackfly Larva)	
Order Hirudinea (Leech)	
Class Gastropod, Order Pulmonata (Pouch Snail and Pond Snails)	
Class Turbellaria (Planarian)	
Order Hydracarina (Water Mite)	
Order Hemiptera (True Bug Adult)	
Phylum Nematoda	
# of Taxa (groups)	
Water Quality Index number x 1	

Total Water Quality Index (sum of three categories) \_\_\_\_

Excellent (>22)  
Good (17-22)  
Fair (11-16)  
Poor (<11)

Correlating invertbrate data with sources of pollution

Study characteristics	Stream Study	Study characteristics	Stream condition	Study characteristics	Stream condition	Study characteristics	Stream condition
high diversity, high counts of pollution sensitive invertbrates	no problems, good water quality	low diversity, high counts, many scrapers and collectors	organic enrichment/pollution or lots of algal growth resulting from nutrient enrichment	high diversity and low counts, or, no insects but stream appears clean	toxic pollution (eg chlorine, acids, heavy metals, pesticides) or, another sever problem of unknown origin	low diversity and low counts of all types of invertbrates	physical problems (eg downstream of dam, sedimentation from erosion) , or, sometimes streams are unproductive for natural reasons (glacier feed streams, spring fed streams)

Aquatic Invertbrate Key (turn over page for intvertbrates without legs)

