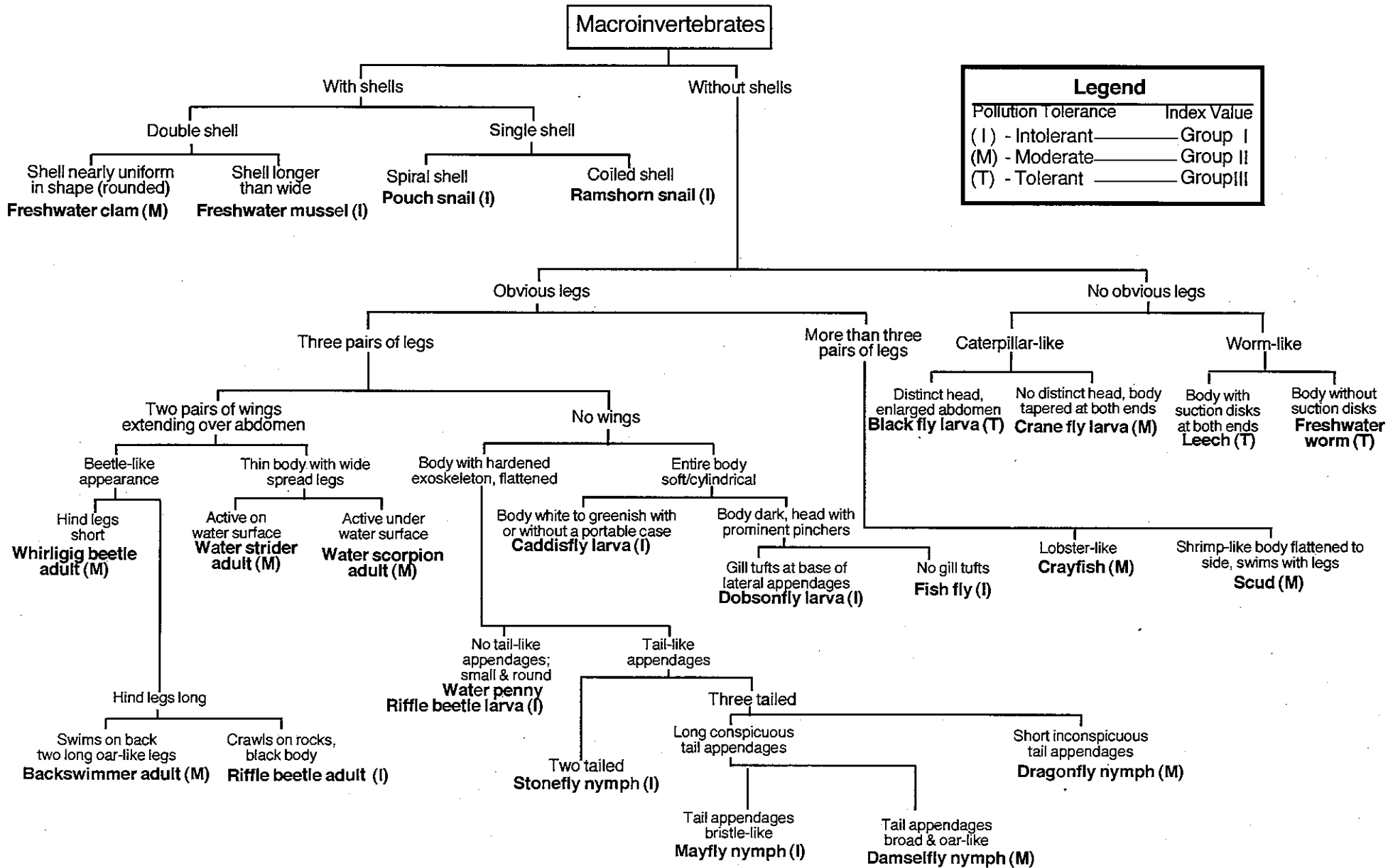


The Key to Water Quality - Key for Test



Legend	
Pollution Tolerance	Index Value
(I) - Intolerant	Group I
(M) - Moderate	Group II
(T) - Tolerant	Group III

Aquatic Sampling

Name: _____

Date: _____

Location: _____

Stream Index Value	
--------------------------	--

Temperature Air: _____

Water: _____

Methods used to sample: _____

Instructions:

Use the "Macroinvertebrates Identification Key" to identify the organisms found. Record the species of organisms found in the space below, using the chart to classify them by their tolerance levels.

Group I Do Not Tolerate Pollution		Group II Tolerate Some Pollution		Group III Tolerate Pollution	
	Stonefly nymph		Dragonfly larva		Blackfly larva
	Stonefly adult		Dragonfly nymph		Blackfly adult
	Hellgrammite		Dragonfly adult		Midge larva
	Caddisfly larva		Scud		Midge adult
	Caddisfly adult		Damselfly larva		Mosquito larva
	Freshwater mussel		Damselfly nymph		Mosquito adult
	Mayfly nymph		Damselfly adult		Flatworm
	Mayfly adult		Crayfish		Leech
	Pouch snail		Water beetle larva		Freshwater worm
	Alderfly nymph		Water beetle		Water snail
	Alderfly adult		Backswimmer		
	Ramshorn snail		Water scorpion		
	Water penny		Whirligig beetle		
	Snipe fly larva		Whirligig beetle larva		
			Waterboatman		
			Sowbug		
			Riffle beetle adult		
			Water strider		
			Crane fly larva		
			Freshwater clam		

Calculate the Stream Index Value by multiplying the number of species of organisms in each group by the index value for that group. Then, add the resulting three numbers to obtain the Stream Index Value.

Cumulative Index Values	Stream Index Rating
23 and above	Excellent
17 to 22	Good
11 to 16	Fair
10 and less	Poor

$$\begin{aligned}
 & (3 \times \text{no. of species-Group I}) \\
 & (2 \times \text{no. of species-Group II}) \\
 & + (1 \times \text{no. of species-Group III}) \\
 & \text{Stream Index Value}
 \end{aligned}$$

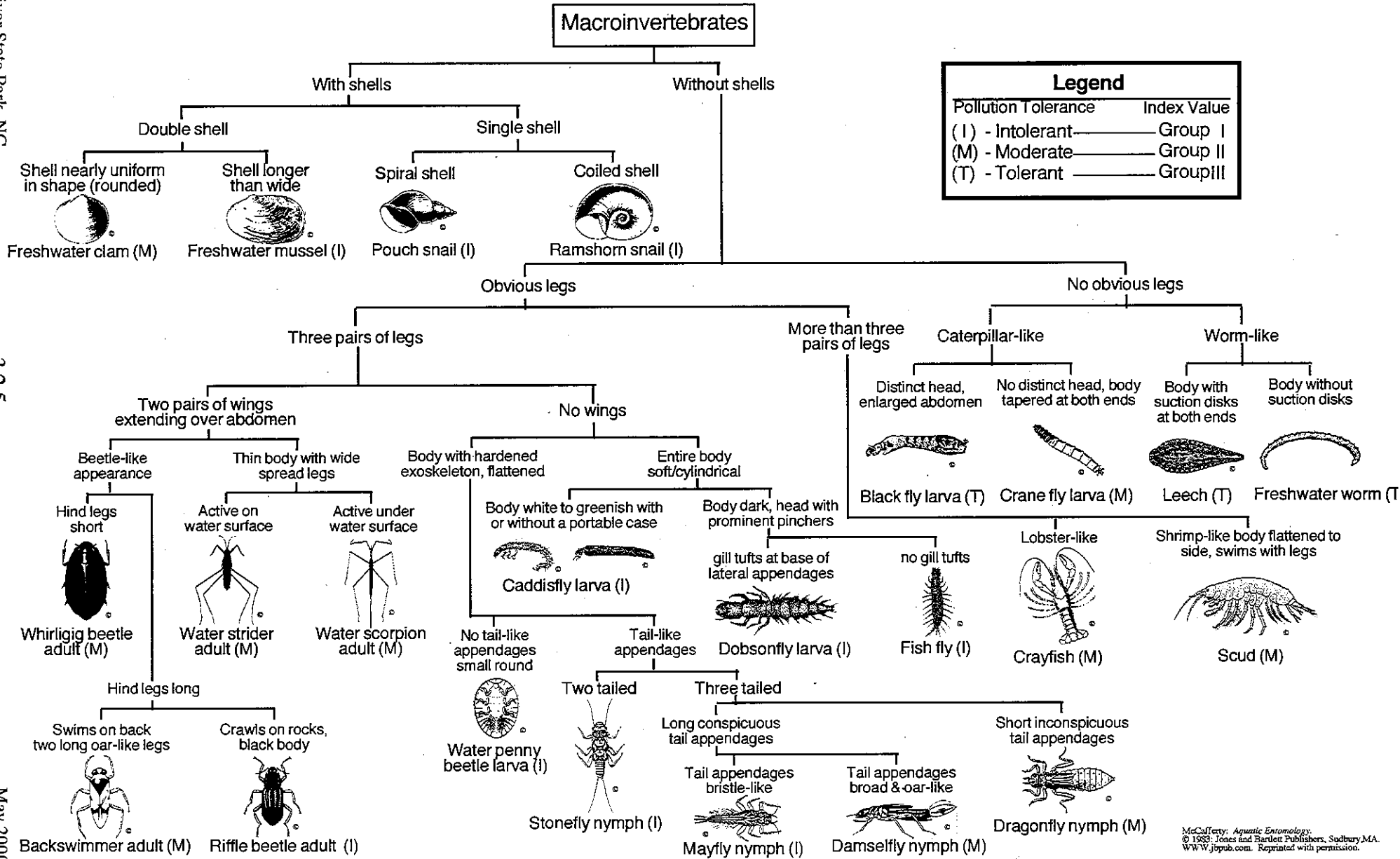
Key To Common Macroinvertebrates

Found at Fews Ford, Eno River State Park

Eno River State Park, NC

3.2.5

May 2000



Legend	
Pollution Tolerance	Index Value
(I) - Intolerant	Group I
(M) - Moderate	Group II
(T) - Tolerant	Group III

McClafferty, *Aquatic Entomology*.
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