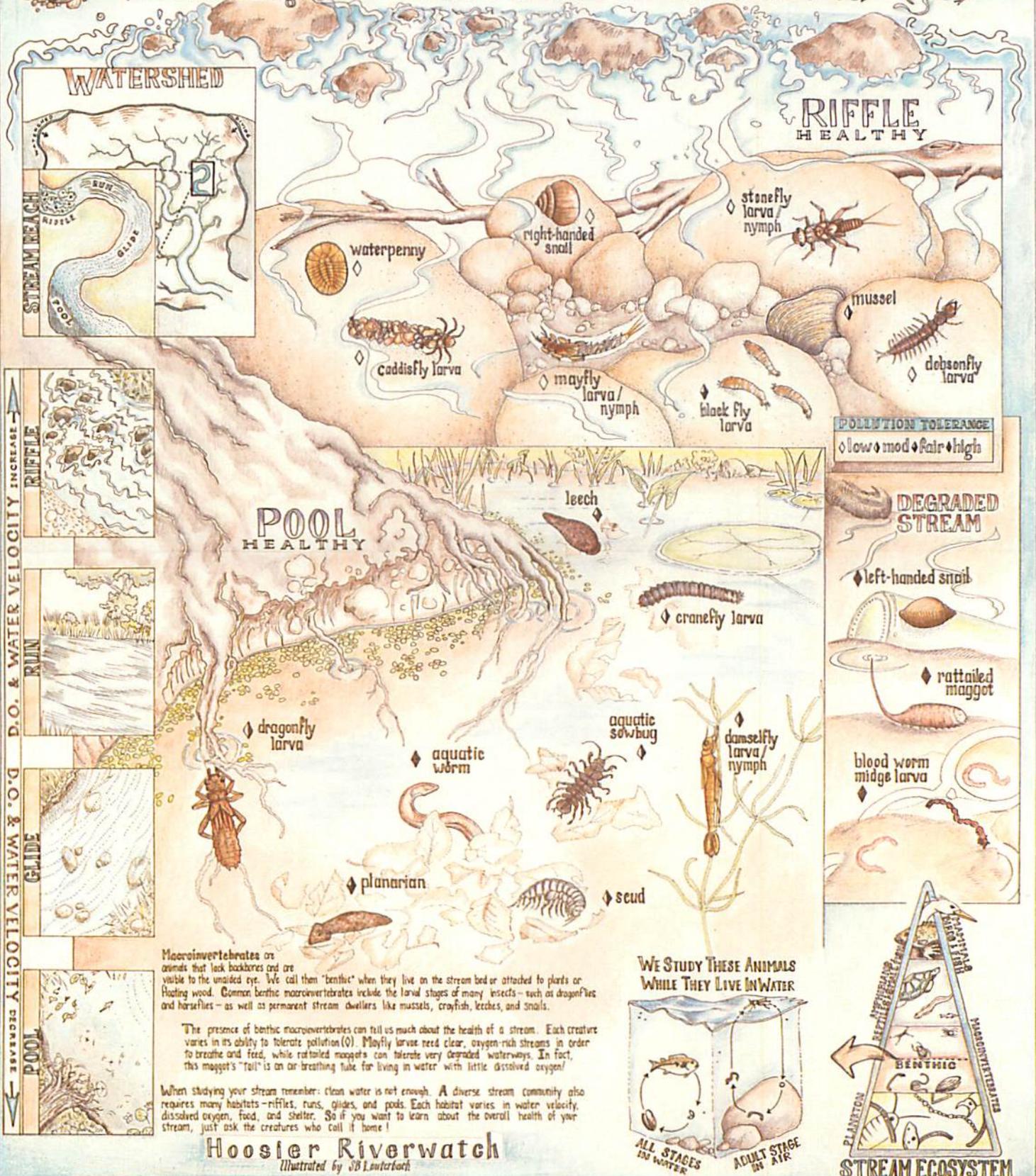


INDICATORS OF WATER QUALITY IN NORTH AMERICAN STREAMS

BENTHIC MACROINVERTEBRATES

(bottom-dwelling) (visible animals without backbones)



Macroinvertebrates are animals that lack backbones and are visible to the unaided eye. We call them "benthic" when they live on the stream bed or attached to plants or floating wood. Common benthic macroinvertebrates include the larval stages of many insects—such as dragonflies and horseflies—as well as permanent stream dwellers like mussels, crayfish, leeches, and snails.

The presence of benthic macroinvertebrates can tell us much about the health of a stream. Each creature varies in its ability to tolerate pollution (0). Mayfly larvae need clear, oxygen-rich streams in order to breathe and feed, while rattailed maggots can tolerate very degraded waterways. In fact, this maggot's "tail" is an air-breathing tube for living in water with little dissolved oxygen!

When studying your stream remember: clean water is not enough. A diverse stream community also requires many habitats—riffles, runs, glides, and pools. Each habitat varies in water velocity, dissolved oxygen, food, and shelter. So if you want to learn about the overall health of your stream, just ask the creatures who call it home!

Hoosier Riverwatch
Illustrated by JB Lauterbach

