MACROINVERTEBRATES

Functional Feeding Groups

Shredders – Break down CPOM

Collectors – Capture FPOM

Grazers (Scrapers) – Consume microbes/algae/fungi

Predators – Predates on group members

CPOM – Course Particulate Organic Material

FPOM – Fine Particulate Organic Material

Functional Feeding Groups

Shredders

(Feed on dead course particulate organic material)

- Stonefly Larvae
- Scuds
- Sowbugs

(Feed on live course particulate organic material)

- Cranefly Larvae
- Beetles
- Free-swimming Caddisfly Larvae

Functional Feeding Groups

Collectors

(Filter fine particulate organic material in the current)

- Blackflies
- Net-spinner Caddisflies
- Clams/Mussels

(Collect fine particulate organic material on the bottom of the river)

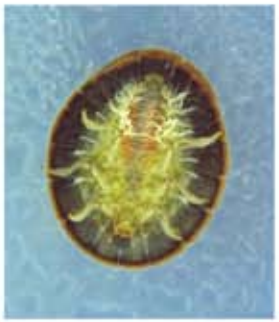
- Case-maker Caddisfly Larvae
- Mayfly Larvae
- Riffle Beetles
- Crayfish

Functional Feeding Groups

Grazers

(Feed on plants/algae growing in the river)

Mayfly Larvae
Free-swimming Caddisfly Larvae
Water Pennies
Riffle Beetles
Snails

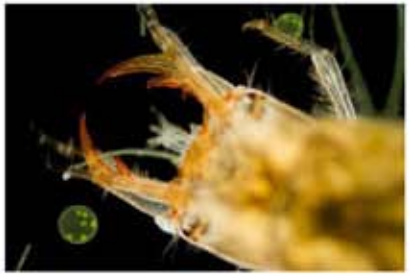


Functional Feeding Groups

Predators

(Catch and eat live prey)

Dragonfly Larvae
Damselfly Larvae
Dobsonfly Larvae
Water Striders
Giant Water Bugs
Water Scorpions
Water Mites
Predacious Diving Beetles



The Upper Reach

The river is narrow, shallow, and faster

Input from riparian is extensive in system (CPOM)

Sunlight influence is minimal in system

Fast water allows FPOM drift to begin moving downstream

Shredders and Collectors dominate

The Middle Reach

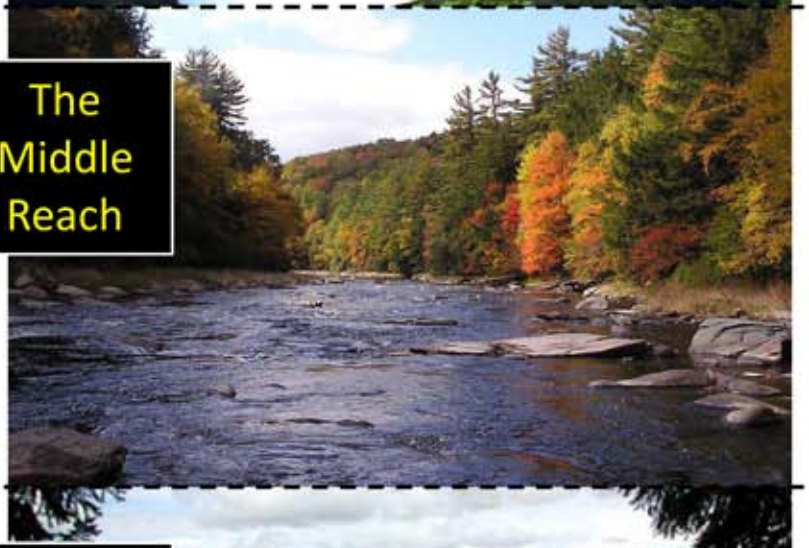
Open canopy allowing sunlight on stream bed

Algae growth increases and vascular plants can grow in stream

FPOM drift from upper reach input significant

CPOM from riparian input still significant

Collectors and Grazers dominate



The Lower Reach

The river is now wider, deeper, and slower

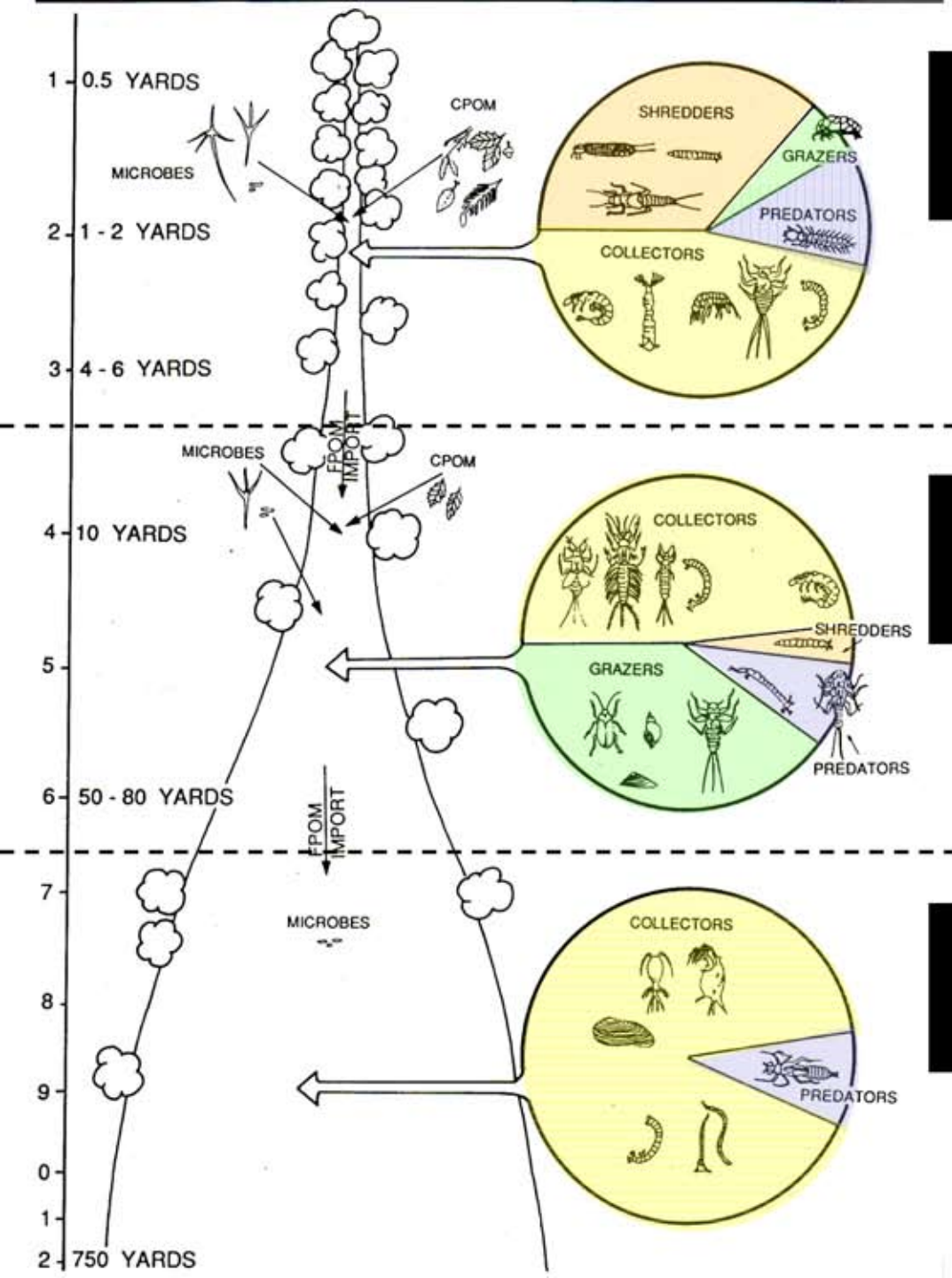
Input from riparian is lessened in system

Sunlight influence is greater in system, but…

Water depth limits bed from receiving it

Slow water allows FPOM to settle to the bottom

Collectors and Predators dominate



The Upper Reach

The Middle Reach

The Lower Reach