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 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

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 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