

Natural leaf litter “packs” in a riffle





Leaves retained in a pool due to low velocity



Greenhouse



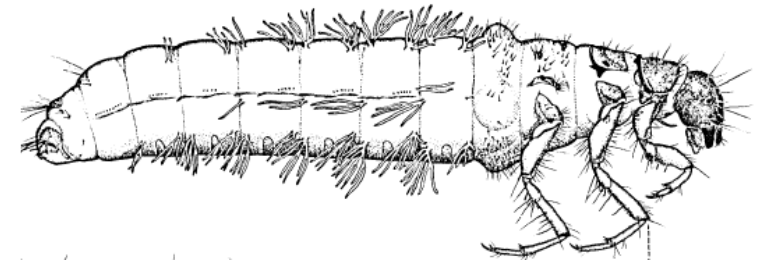
Leaf pack creation and deployment



Insects



Hesperophylax magnus



Drawing from Parker and Wiggins 1985

Community players

Collectors

Midge
Chironomidae
(2 mm)



Mayfly
Baetis sp.
(3 mm)



Torpedo shaped

Mayfly
Tricorythodes sp.
(4 mm)



Community players

Filterers

Simuliidae
(2 mm)



*Net-spinning
Caddisfly
Hydropsyche sp.*
(15 mm)

Sclerite plates on all
three thoracic
segments



Fringed gills on abdomen

Community players

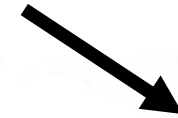
Filterers



Capture net. Genera can spin different mesh sizes to catch various particle sizes and partition niches.

*Net-spinning
Caddisfly
Hydropsyche sp.
(15 mm)*

Sclerite plates on all three thoracic segments



Fringed gills on abdomen



Community players

Scraper

Moth larva
Petrophila sp.
(15 mm)



Community players

Shredder

Micro-caddisfly

Micrasema sp.

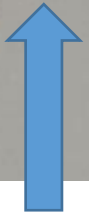
(4 mm)



Predatory caddisfly
Atopsyche sp.

(13 mm)

Only occurs in AZ in
the US!



Modified
forelimb!



Community players

Predators

Dragonfly

Oplonaeshna armata

(25 mm)

Only occurs in AZ!



Video

Oplonaeshna armata

Eating a large caddisfly



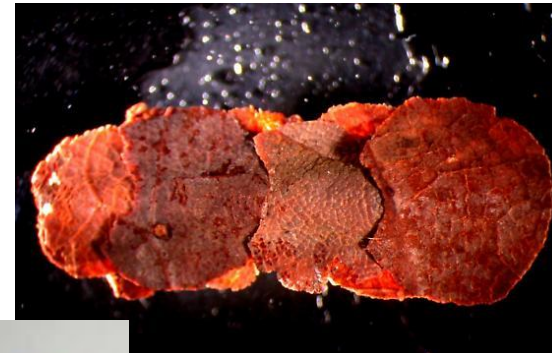
Other insects in Oak Creek

Caddisflies

Glossosomatidae – shredder
(dome-shaped case)



Phyloicus mexicana – shredder
(woody case)



Helicopsychidae – collector



BLM/USU National Aquatic Monitoring Center

Other insects in Oak Creek

Beetles

Dytiscidae – Predator



Elmidae – Collector

