

Kick-Sampling

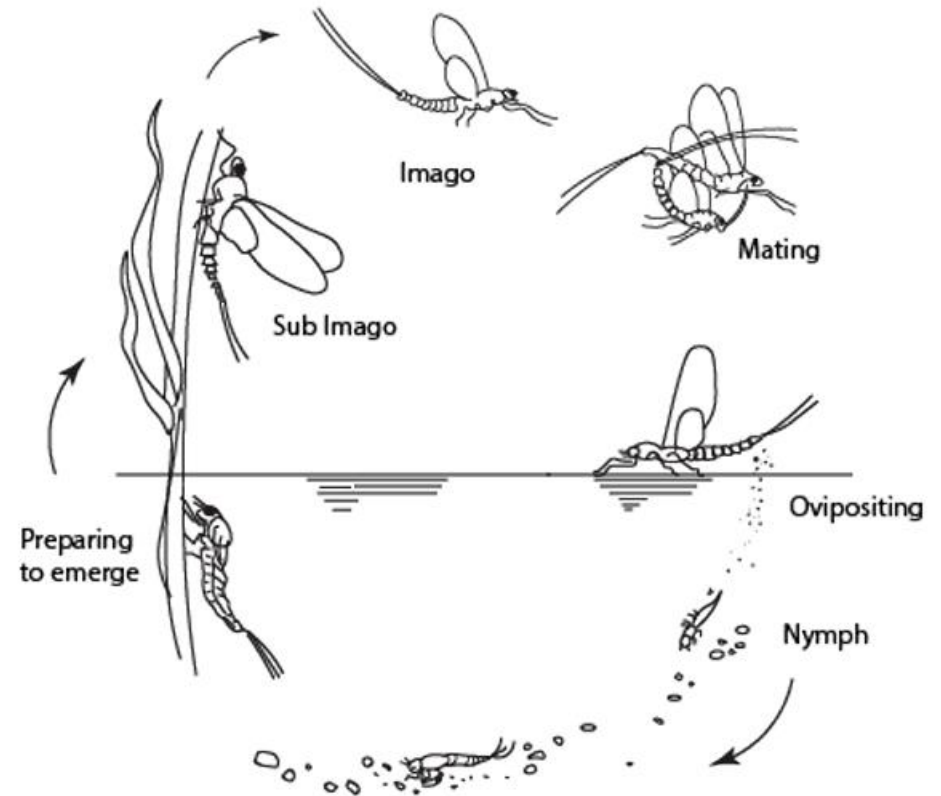
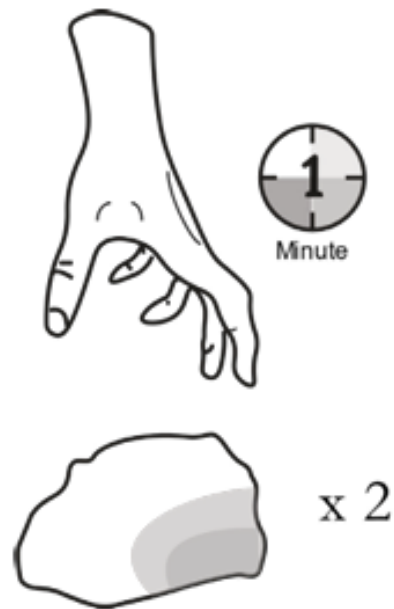
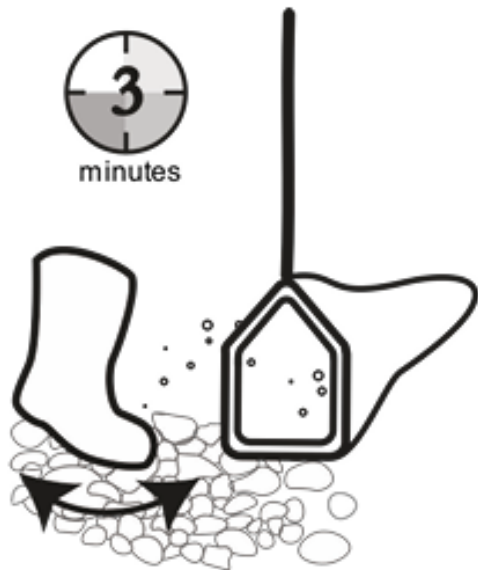
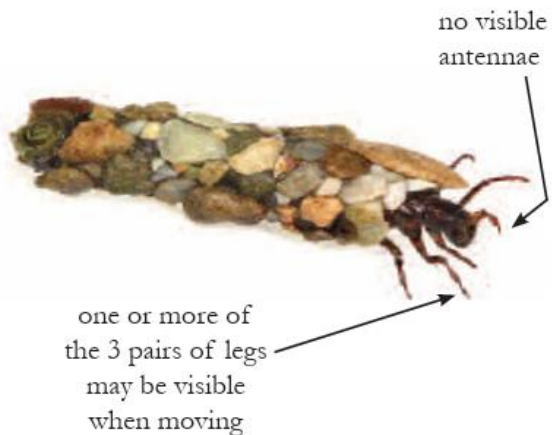


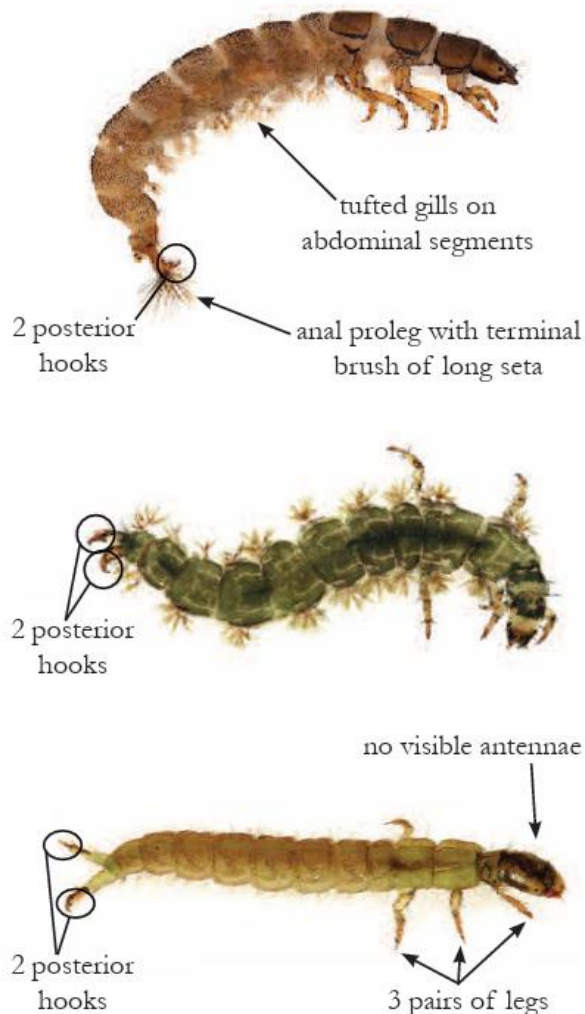
Figure 1. Mayfly life cycle. Original image: Peter Hallam.



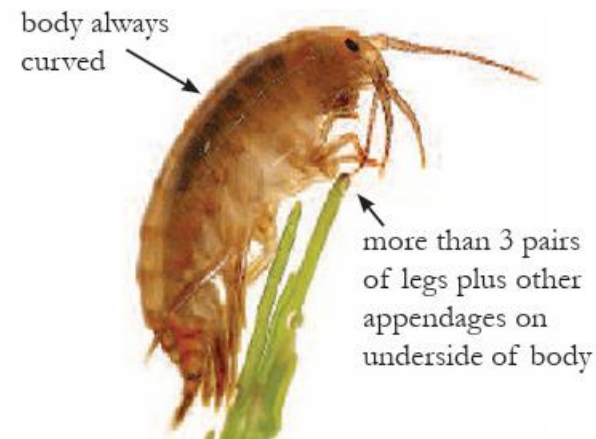
Cased caddis



Caseless caddis

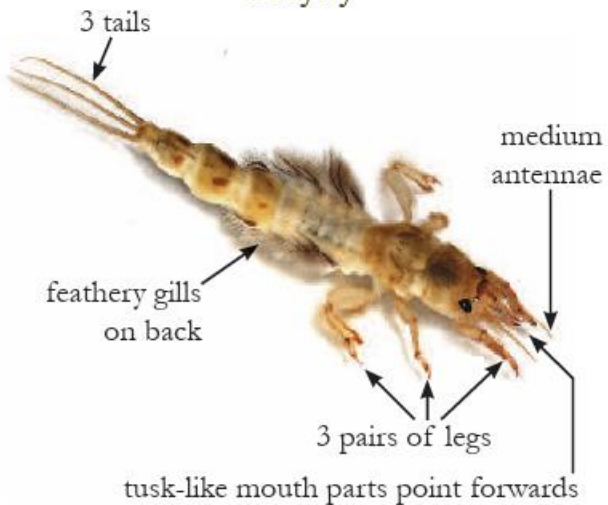


Gammarus

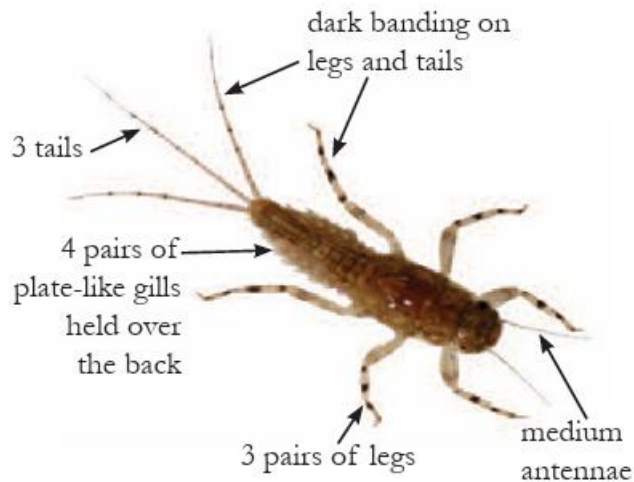




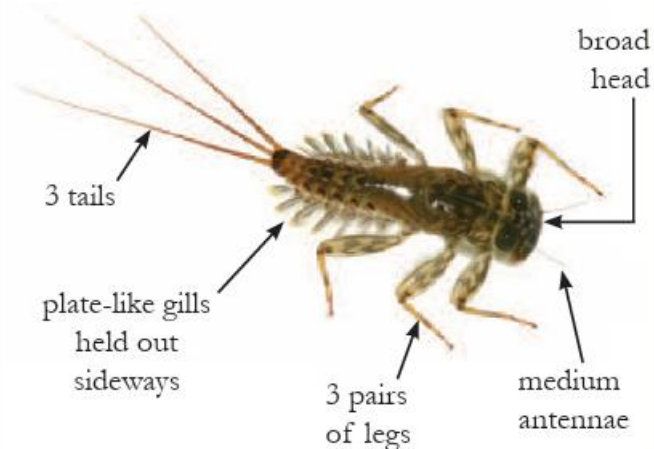
Mayfly



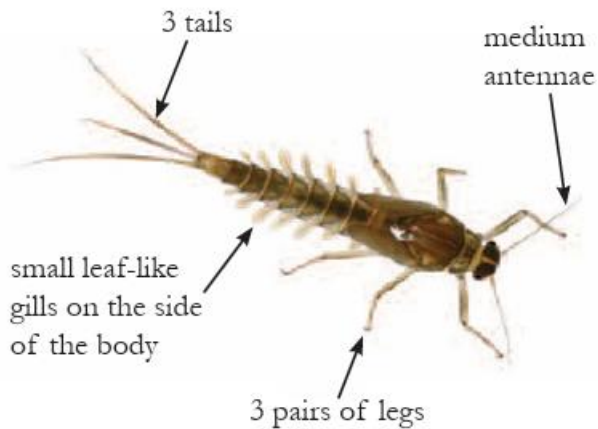
Blue-winged olive



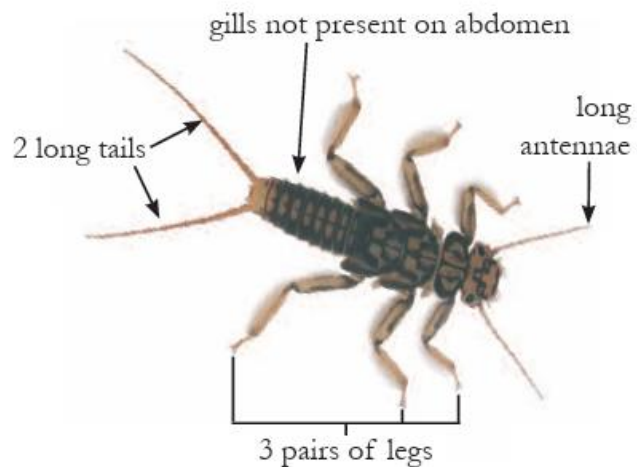
Flat-bodied up-wings



Olive



Stonefly



Abundance	Score	Estimated Number
1-9	1	Quick Count
10-99	2	Nearest 10
100-999	3	Nearest 100
Over 1000	4	Nearest 1000

The Biological Monitoring Working Party Score

The Biological Monitoring Working Party (BMWP) score system was devised in the 1970s. It was created as a standardised way to use freshwater invertebrates to assess water quality. Each type of riverfly has a score based on their sensitivity to pollution. The most sensitive riverflies have a score of 10. Less sensitive riverflies have a lower score, all the way down to 0 for those that can tolerate high levels of pollution.

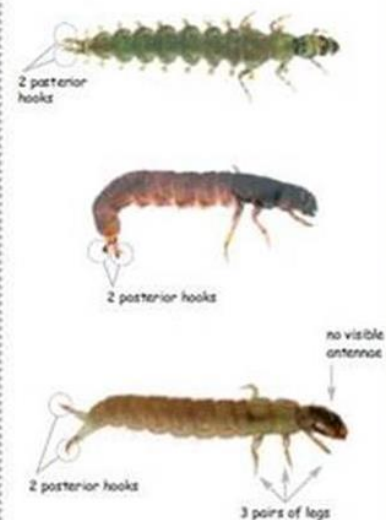


Cased caddis



- Body within case
- Case made of small stones, sand grains, plant material or shells
- Not firmly attached to a surface
- Case may be round, square or flat in cross section

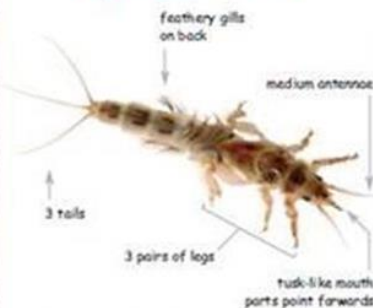
Caseless caddis



- 3 pairs of legs visible
 - May be inside web
- Avoid confusing with:**
- Chironomid midge larvae, which have no legs but walk using a soft peg near their head
 - Beetle larvae, which have no hooks on the posterior appendages

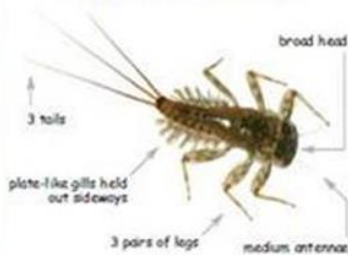
Note: caddis pupae are not recorded

Mayfly Ephemeroidea



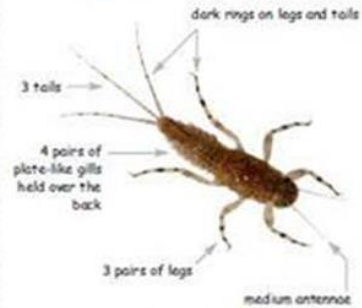
- Burrows in silt or sand or crawls

Flat-bodied Heptageniidae



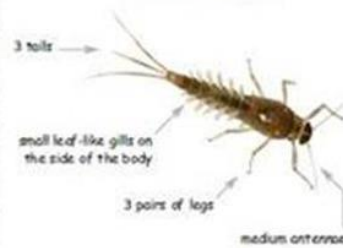
- Body flattened
- Clings to stones
- Swims slowly, flexing body up and down, more commonly seen scuttling on a surface

Blue-winged olive Ephemeroidea



- Swims slowly with a rocking motion, body flexing up and down

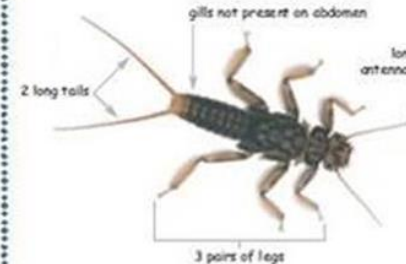
Olives Baetidae



- Fast swimmer
- Agile darters
- Body tapered

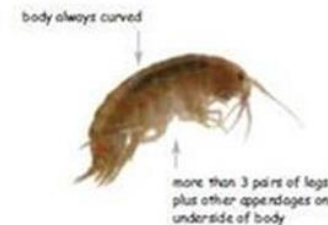
Note: not all up-wing fly families are included in the Target Group, for example Caenidae and Leptophlebiidae are not recorded.

Stoneflies



- Crawls or reluctantly swims flexing the body from side to side

Gammarus



- Body flattened side to side
- Swims on side



Riverfly Sampling

School/Group:

Date:

Location:



Order	Families	Tick if Present	Score
Ephemeroptera (Up-wing fly larvae)	Mayfly		
	Flat-bodied Up-wing		
	Blue-winged Olive		
	Olive		
Plecoptera (Stoneflies larvae)	Stonefly		
Gammaridae	Freshwater Shrimp		
Trichoptera (Caddisfly larvae)	Caseless Caddis		
	Cased Caddis		
Total - >			

Additional sightings or notes: