

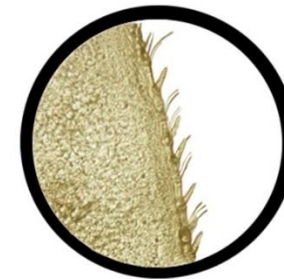
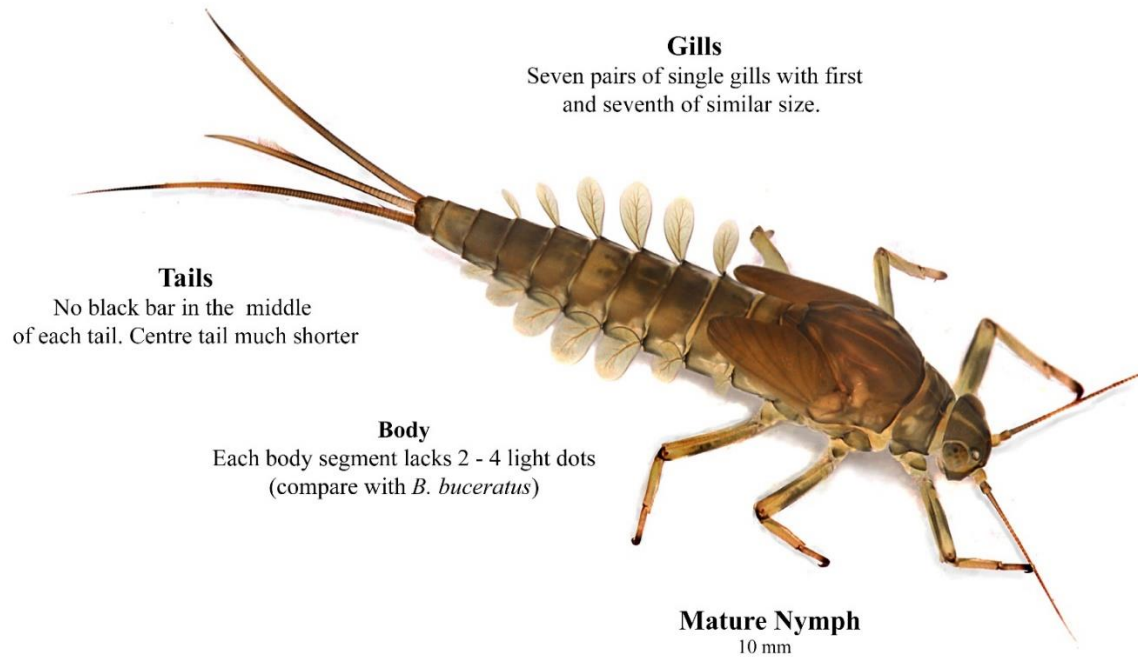


Riverfly Species – River Wey

Full records of invertebrate species are available from the WildFish library.

Mayflies – Ephemeroptera

WildFish.



Pointed spines on the straight edge of each gill (x400)

Habitat & Distribution

One of the most common and widespread species found throughout the British Isles. Nymphs are found in the gravel and in-stream vegetation of the riffle areas of rivers. With over-wintering and summer generations, both the nymphs and adults can be found throughout the year

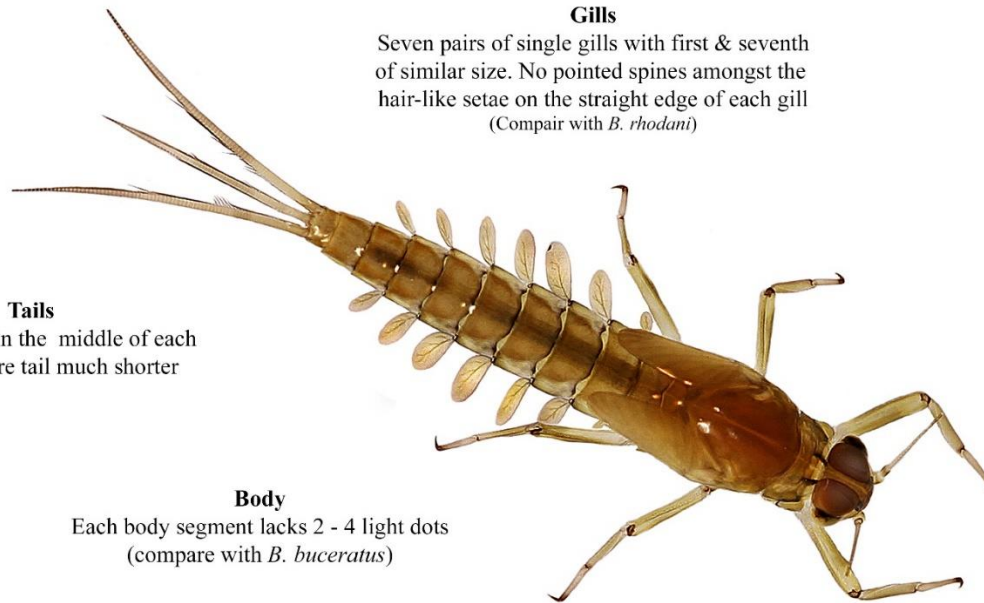
<i>Baetis rhodani</i> - Baetidae		
Sediments	A	Highly sensitive
Organic	B	Sensitive
Flow	B	Sensitive
Conservation	1	Very Common
Flight Period		
J	F	M
A	M	J
J	A	S
O	N	D

Baetis rhodani/atlanticus
Large Dark Olive

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Mayflies – **E**phemeroptera

WildFish.



Gills

Seven pairs of single gills with first & seventh of similar size. No pointed spines amongst the hair-like setae on the straight edge of each gill
(Compare with *B. rhodani*)



Gills (x 400)

Tails

No black bars in the middle of each tail and centre tail much shorter

Body

Each body segment lacks 2 - 4 light dots
(compare with *B. buceratus*)

Mature Nymph

8 mm

Habitat & Distribution

Found mainly in the pools and margins of rivers & streams amongst the sand and gravel or on in-stream vegetation. Common in England & Wales but local in Scotland.

<i>Baetis vernus</i> - Baetidae		
Sediments	B	Sensitive
Organic	B	Sensitive
Flow	B	Sensitive
Conservation	3	Frequent

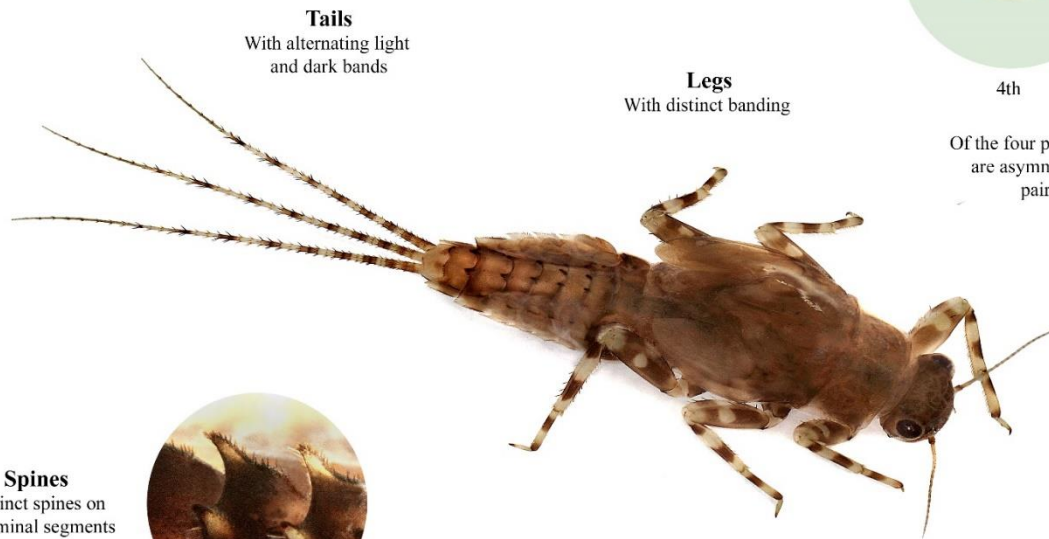
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Baetis vernus
Medium Olive

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Mayflies – **E**phemeroptera

WildFish.



Tails
With alternating light and dark bands

Legs
With distinct banding

Spines
Distinct spines on abdominal segments



4th



2nd

Gills
Of the four pairs of visible gills, the first three are asymmetrical in shape. The small 5th pair are hidden under the 4th



First three gills with inner rear margin drawn out into an extension

Mature Nymph
10mm

<i>Serratella ignita</i> - Ephemerellidae											
Sediments	A	Highly sensitive									
Organic	B	Sensitive									
Flow	B	Sensitive									
Conservation	1	Very Common									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Serratella ignita
Blue Winged Olive

Habitat & Distribution
An extremely common species found in most rivers and streams, especially where aquatic vegetation is present.

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Mayflies – **E**phemeroptera

WildFish.



Body
The pied appearance of both the abdominal segments and the gill covers give this species a distinctive appearance

Mature Nymph
5 mm

Habitat & Distribution

Found in the pools and margins of stony rivers in the silt trapped between the larger stones and gravel. This is the most common *Caenis* species and widely distributed throughout the British Isles but can be localised in the south-east of England

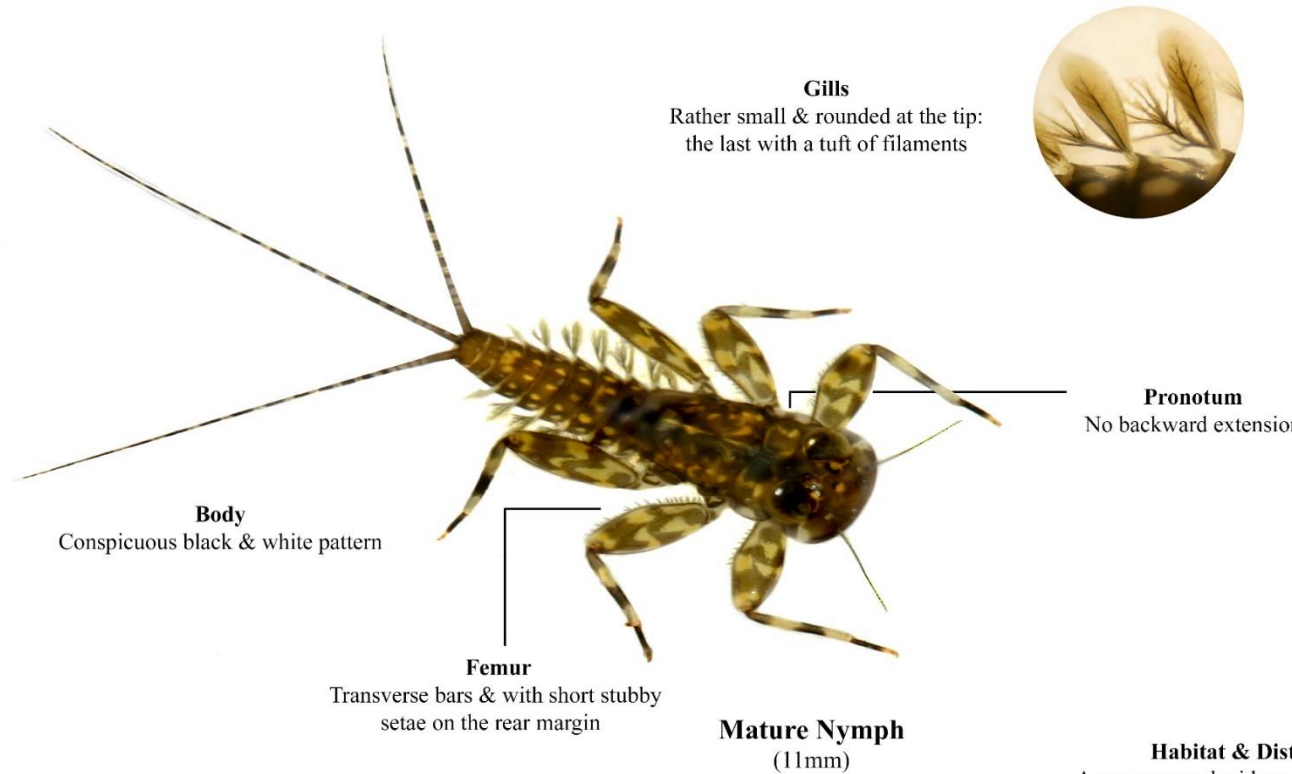
<i>Caenis rivulorum</i> - Caenidae											
Sediments	C	Mildly sensitive									
Organic	B	Sensitive									
Flow	B	Sensitive									
Conservation	5	Local									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Caenis rivulorum
Angler's Curse

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Mayflies – Ephemeroptera

WildFish.



Mature Nymph
(11mm)

Habitat & Distribution
A common and widespread species found chiefly in the riffle areas of rivers throughout the UK, except in the south east.

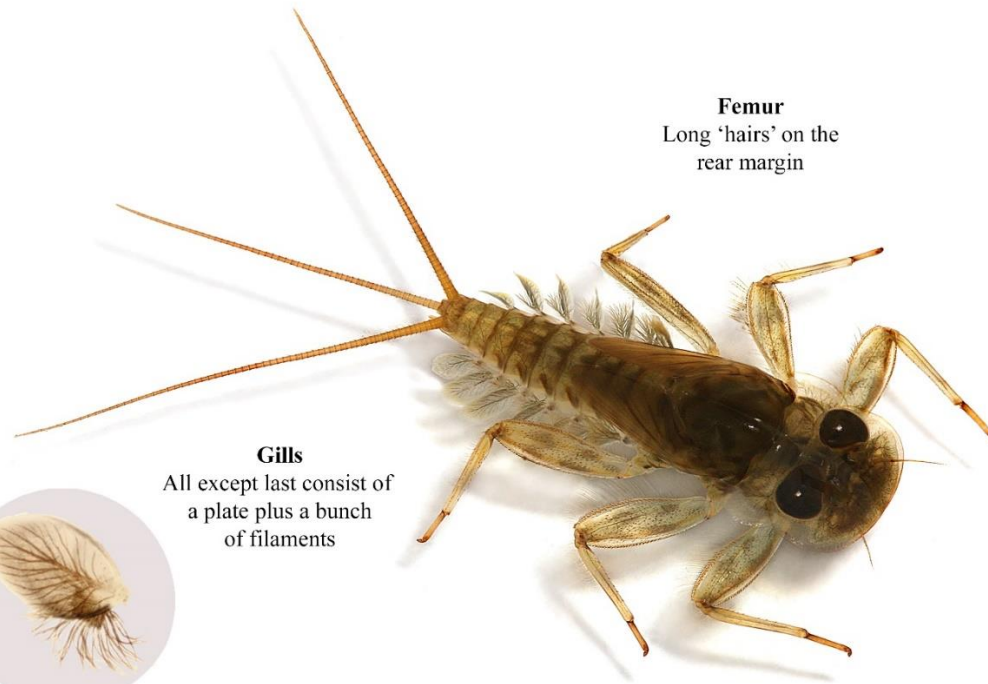
<i>Heptagenia sulphurea</i> - Heptageniidae											
Sediments	A	Highly sensitive									
Organic	B	Sensitive									
Flow	A	Highly sensitive									
Conservation	4	Occasional									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Heptagenia sulphurea
Yellow May Dun

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Mayflies – **E**phemeroptera

WildFish.



Femur
Long 'hairs' on the rear margin

Gills
All except last consist of a plate plus a bunch of filaments



White Spot Variant
Possibly due to a recessive gene



Pronotum
With backward projection

Mature Nymph
12 mm

Habitat & Distribution
Normally found in the riffle areas of rivers and larger streams throughout the UK.

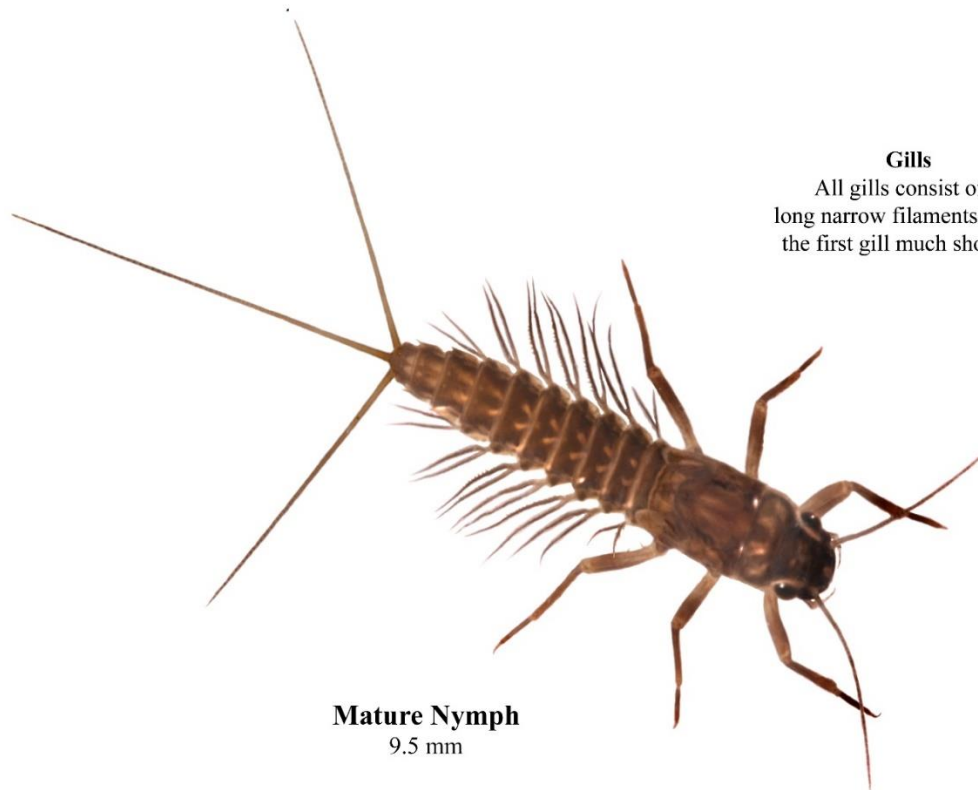
<i>Ecdyonurus dispar</i> - Heptageniidae		
Sediments	A	Highly sensitive
Organic	A	Highly sensitive
Flow	A	Highly sensitive
Conservation	2	Common
Flight Period		
J	F	M
A	M	J
J	J	A
S	O	N
D		

Ecdyonurus dispar
Autumn Dun

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Mayflies – **E**phemeroptera

WildFish.



Gills
All gills consist of long narrow filaments with the first gill much shorter

Mature Nymph
9.5 mm

Habitat & Distribution
A common species although never in large numbers. Nymphs are chiefly found in the pools and margins of rivers and streams.

<i>Paraleptophlebia submarginata</i> - Leptophlebiidae											
Sediments	A	Highly sensitive									
Organic	A	Highly sensitive									
Flow	B	Sensitive									
Conservation	2	Common									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Paraleptophlebia submarginata
Turkey Brown

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Stoneflies – Plecoptera

WildFish.



Mature Larva (14 mm)
Body with dark markings
on a pale background



Tarsus
Third segment longer
than the first two combined

<i>Isoperla grammatica</i> - Perlodidae											
Sediments	X	Highly sensitive									
Organic	X	Highly sensitive									
Flow	X	Highly sensitive									
Conservation	2	Common									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Isoperla grammatica
Yellow Sally

Habitat & Distribution
Common species found in lowland
stony rivers and streams.

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Stoneflies – **Plecoptera**

WildFish.



Mature Larva (11 mm)



Tibia
Fringe of long fine hairs on back edge



Tarsus
2nd segment shorter than 1st (Leuctridae)

Antennae
Not curved

Habitat & Distribution

Very common in all types of river with a stony bottom. Five very similar species which need closer examination to separate.

<i>Leuctra fusca</i> - Leuctridae											
Sediments	A	Highly sensitive									
Organic	B	Sensitive									
Flow	B	Sensitive									
Conservation	1	Very Common									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Leuctra fusca
Needle Fly

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Stoneflies – Plecoptera

WildFish.



Mature Larva (12.5 mm)

Antennae
Stout and curved with
'bristles' on the basal segments.

Habitat & Distribution
Fairly common in all types of river
with a stony bottom.

<i>Leuctra geniculata</i> - Leuctridae	
Sediments	A Highly sensitive
Organic	A Highly sensitive
Flow	B Sensitive
Conservation	4 Occasional

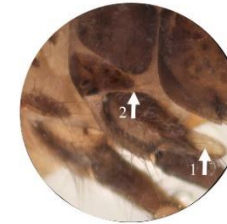
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Leuctra geniculata
Willow Fly

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Caddisflies – Trichoptera

WildFish.



Thorax
Tusk-like extensions
(arrow 1)
Mesonatal sclerite - apex pointed
(arrow 2)

Cased Larva (17 mm)
Characteristic case with larger
'ballast' stones on either side

Main ID Features

1. Distinctive case with larger 'ballast' stones on each side.
2. Thorax with 'tusk like' extensions.
3. Compare shape of lateral sclerites to separate from *Silo nigricornis*.

Common and widespread in fast flowing rivers and streams.

Goera pilosa - Goeridae		
Sediments	B	Sensitive
Organic	B	Sensitive
Flow	A	Highly sensitive
Conservation	3	Frequent
Flight Period		
J	F	M
A	M	J
J	A	S
O	N	D

Goera pilosa
Medium Sedge

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Caddisflies – Trichoptera

WildFish.



De-cased Larva (17 mm)
Body with single gills



Femur
Additional setae (arrow) on at least one of the 2nd & 3rd legs



Cased Larva (21 mm)
Large rough case made from various materials which may include a stick



Head
Mottled with a pale 'cheek' area (arrow)
Mandibles with teeth along the edges (arrow)



<i>Halesus radiatus</i> - Limnephilidae		
Sediments	B	Sensitive
Organic	A	Highly sensitive
Flow	B	Sensitive
Conservation	2	Common
Flight Period		
J	F	M
A	M	J
J	J	A
S	O	N
D		

Halesus radiatus
Caperer

Main ID Features

1. Rough case of various materials.
2. Body with single gills.
3. Head pattern.

Common & widespread in streams and rivers.

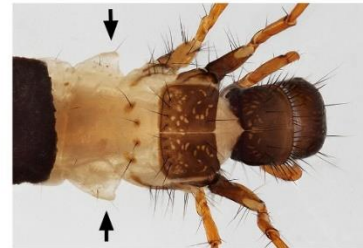
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Caddisflies – Trichoptera

WildFish.



Square case made entirely of cut plant material with a ridge at each corner

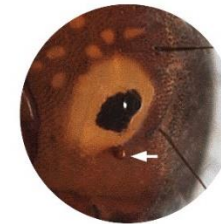


Characteristic lateral projections on the 1st abdominal segment (arrows) but no dorsal projection. 4 sclerites on the metadorsal, each with a single seta



Cased Larva (11.5 mm)

Case initially made of sand grains changing to cut plant fragments arranged to give a square cross section; proportion of each material can vary, sometimes all plant.



Antenna close to eye (Can be difficult to see)

<i>Lepidostoma hirtum</i> - Lepidostomidae		
Sediments	B	Sensitive
Organic	B	Highly sensitive
Flow	B	Sensitive
Conservation	2	Common
Flight Period		
J	F	M
A	M	J
J	A	S
O	N	D

Main ID Features

1. Distinctive case.
2. Distinguive lateral projection.
3. Sclerites on the metadorsal.

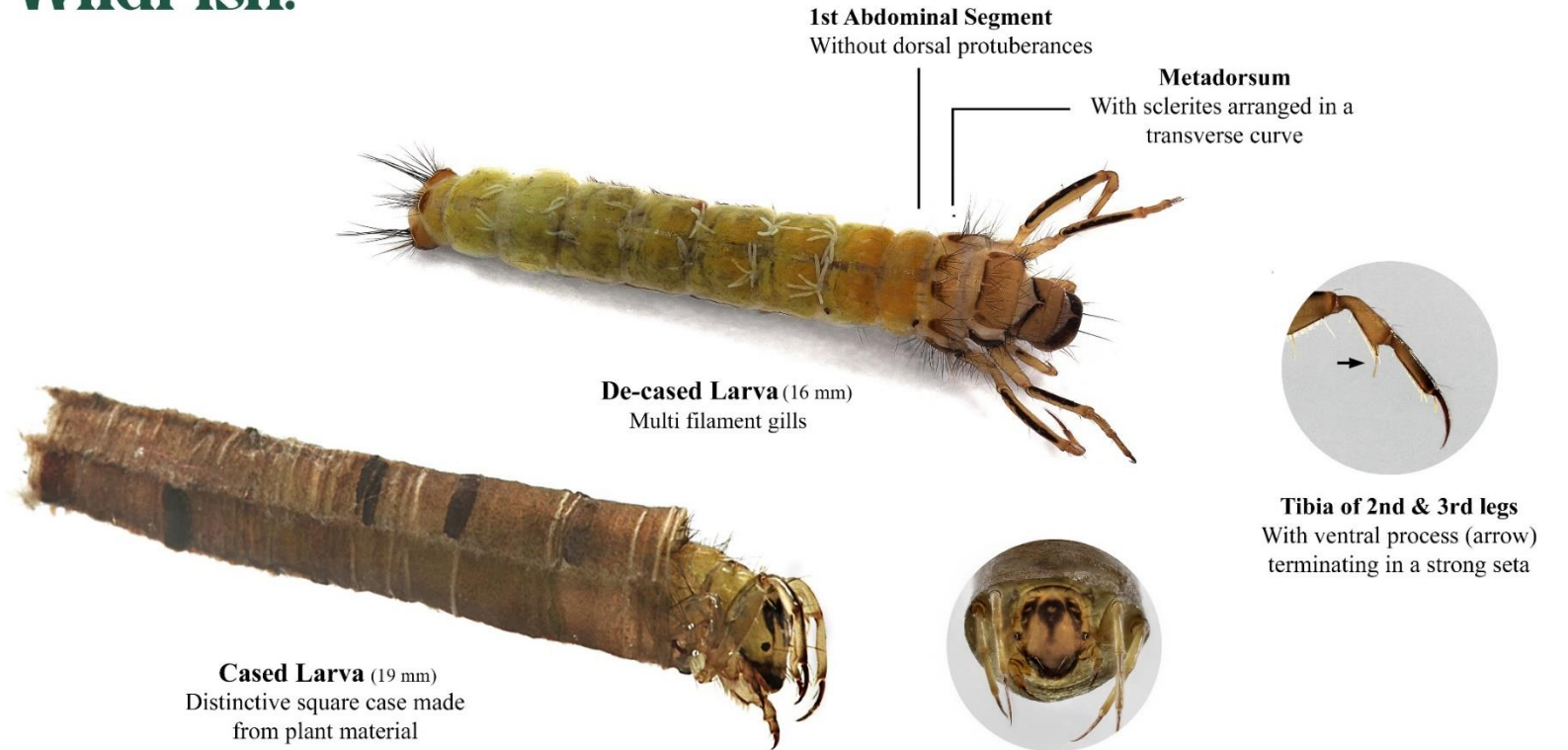
Common rivers throughout the UK

Lepidostoma hirtum
Small Silver Sedge

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Caddisflies – Trichoptera

WildFish.



- Main ID Features**
1. Distinctive square case.
 2. Long hind legs.
 3. Multi filament gills.
 4. No dorsal protuberances.
 5. Distinctive head pattern.

<i>Brachycentrus subnubilus</i> - Brachycentridae											
Sediments	A Highly sensitive										
Organic	B Sensitive										
Flow	B Sensitive										
Conservation	6 Regionally Notable										
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Brachycentrus subnubilus
Grannom

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Caddisflies – Trichoptera

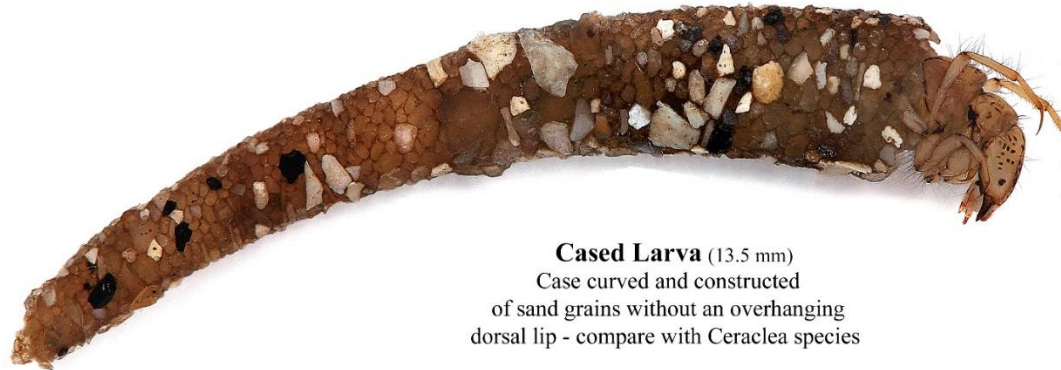
WildFish.



De-cased Larva (12 mm)
Slender larva with long hind legs. Dark post- lateral projections (arrow) on the mesonotum



Head
Mandibles with two cutting edges (arrows) - this separates from *Oecetis* sp. Head with distinct dark spots



Cased Larva (13.5 mm)
Case curved and constructed of sand grains without an overhanging dorsal lip - compare with *Ceraclea* species

Main ID Features

1. Small larva with curved case.
2. Long hind legs.
3. Head pattern separates from other species

Widespread and common in rivers with a stony and sandy substrata.

<i>Athripsodes cinereus</i> - Leptoceridae		
Sediments	B	Sensitive
Organic	B	Sensitive
Flow	B	Sensitive
Conservation	1	Very Common
Flight Period		
J	F	M
A	M	J
J	A	S
O	N	D

Athripsodes cinereus
Brown Silverhorn

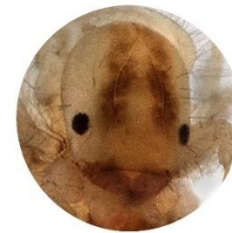
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Caddisflies – Trichoptera

WildFish.



Cased Larva (7 mm)
Case curved & constructed of sand grains.
Slender larva with long hind legs.



Head Pattern

Main ID Features

1. Small larvae with curved case of sand grains.
2. Long Hind legs.
3. Head pattern separates from other species

Widespread and common in rivers with a stony substratum.

<i>Atripodes albifrons</i> - Leptoceridae											
Sediments	S Highly sensitive										
Organic	B Sensitive										
Flow	B Sensitive										
Conservation	4 Occasional										
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Atripodes albifrons
Brown Silverhorn

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Caddisflies – Trichoptera

WildFish.



Hydroptila tinoides
Flat case of sand grains
curved at the top.
(Widespread & common)



Adult



Agraylea sp.
Flat case of algal filaments
mixed with translucent material.
(Widespread & common)



Ithytrichia lamellaris
Transparent oval case made of secretion
and with a narrow anterior opening. Common
in streams and rivers.



Oxyethira sp.
Transparent case with
narrow neck



Allotrichia pallicornis
Case of loosely attached algal
filaments. Widespread but not common

Main ID Features

Very small and & in various shaped cases.
Found in most types of water bodies.

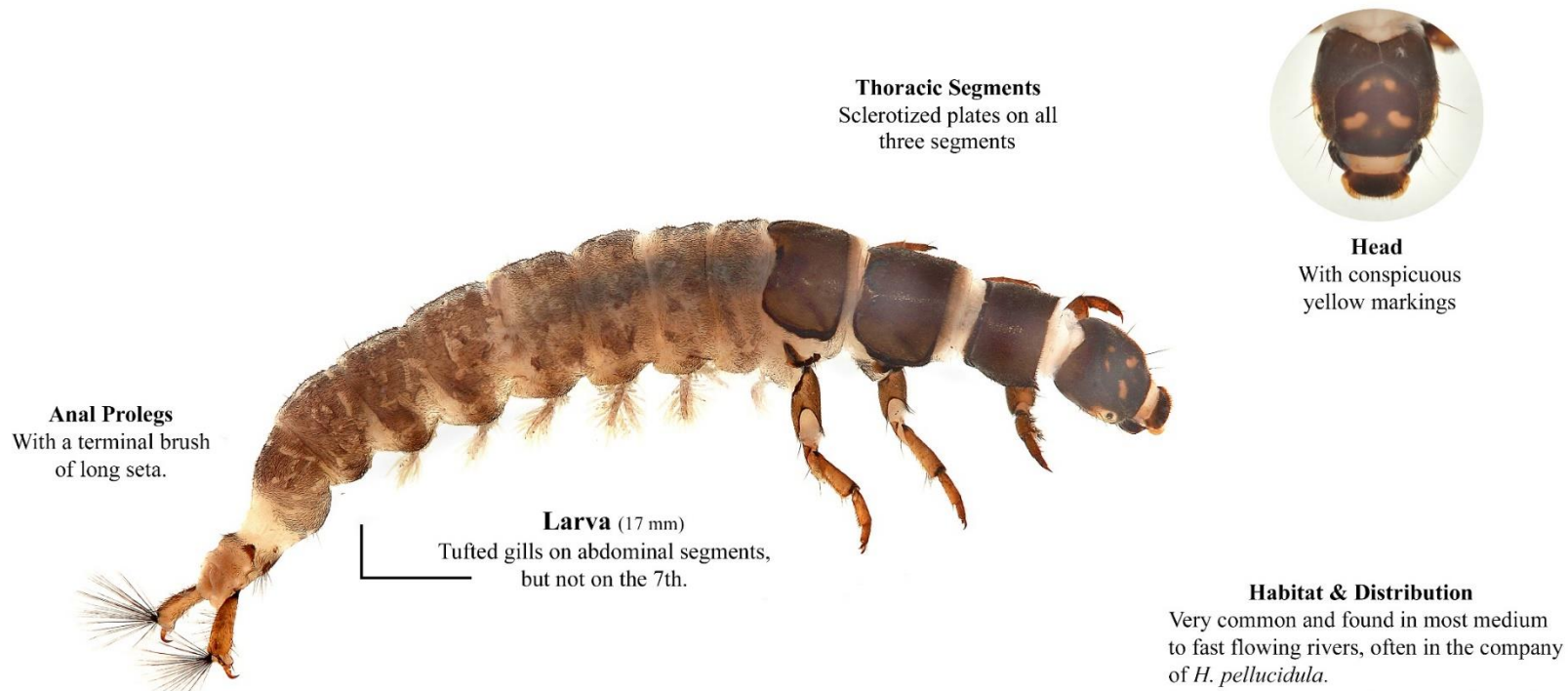
Hydroptilidae											
Sediments	E	Highly tolerant									
Organic	O	Taxon not used									
Flow	D	Tolerant									
Conservation											
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Hydroptilidae (4.5 mm)
Micro Caddis

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Caddisflies – Trichoptera

WildFish.



Thoracic Segments
Sclerotized plates on all three segments



Head
With conspicuous yellow markings

Anal Prolegs
With a terminal brush of long seta.

Larva (17 mm)
Tufted gills on abdominal segments, but not on the 7th.

Habitat & Distribution

Very common and found in most medium to fast flowing rivers, often in the company of *H. pellucidula*. Same as *H. pellucidula* but no tufted gills on 7th abdominal segment which separates it from other *Hydropsyche* species.

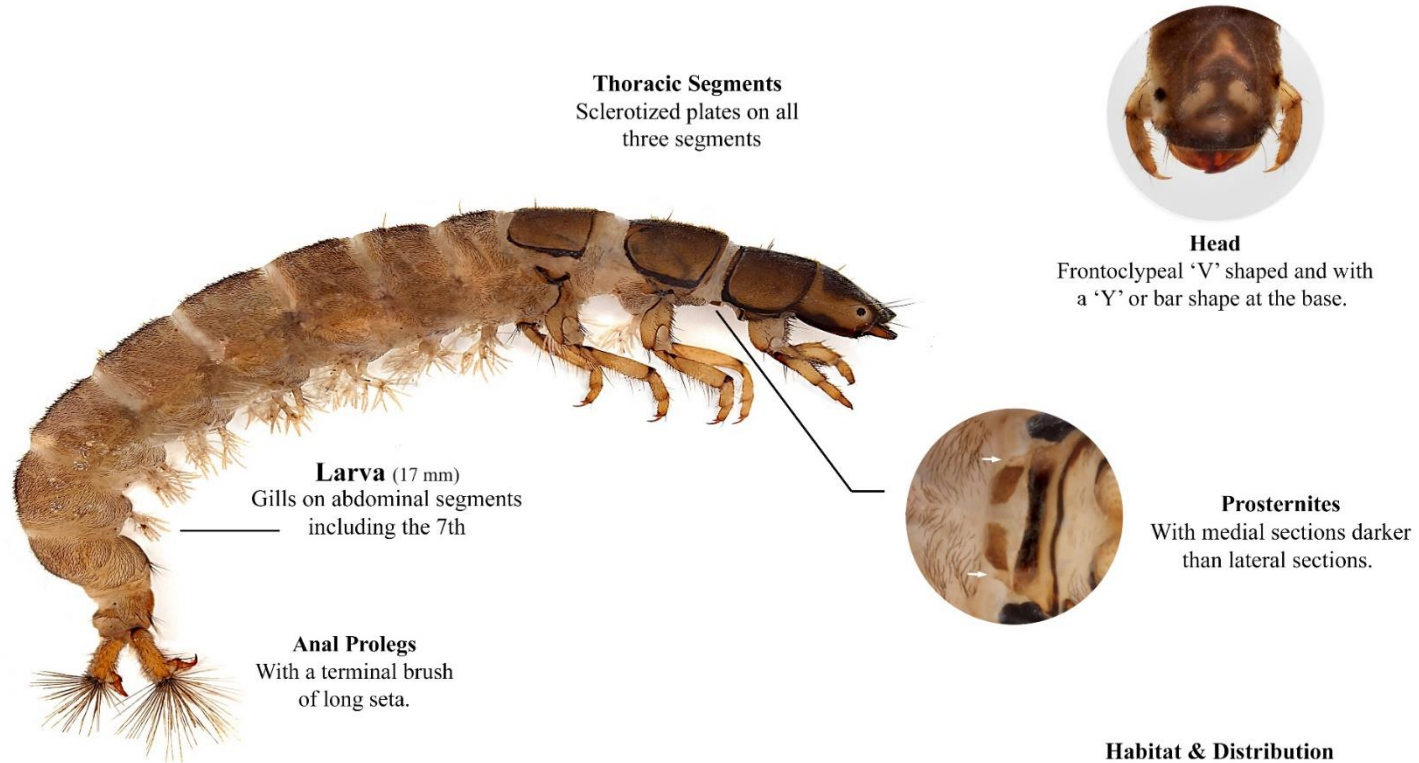
<i>Hydropsyche siltalai</i> - Hydropsychidae											
Sediments	S	Highly sensitive									
Organic	B	Sensitive									
Flow	B	Sensitive									
Conservation	1	Very Common									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Hydropsyche siltalai
Grey Flag

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Caddisflies – Trichoptera

WildFish.



<i>Hydropsyche pellucidula</i> - Hydropsychidae											
Sediments	A	Highly sensitive									
Organic	B	Sensitive									
Flow	B	Sensitive									
Conservation	2	Common									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

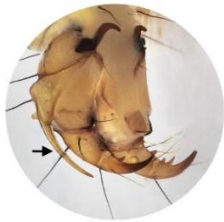
Hydropsyche pellucidula
Grey Flag

Habitat & Distribution
Very common and found in most medium to fast flowing rivers, often in the company of *H. siltalai*.

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Caddisflies – Trichoptera

WildFish.



Anal Prolegs
Long auxiliary spine (arrow). Much shorter in *R. munda*.



Live specimen
Colour fades in preserved specimens



Larva (17.5 mm)
Gills on both thoracic & abdominal segments; each consisting of numerous filaments

Head
With characteristic black transverse band

Habitat & Distribution
A common species found on most rivers but not normally in large numbers. Very similar to *R. septentrionis* - compare head and pronotum features. The distinctive gills on the side of the body easily separates this species from other caseless caddis species.

<i>Rhyacophila dorsalis</i> - Rhyacophilidae											
Sediments	A	Highly sensitive									
Organic	B	Sensitive									
Flow	A	Highly sensitive									
Conservation	1	Very Common									
Flight Period											
J	F	M	A	M	J	J	A	S	O	N	D

Rhyacophila dorsalis
Sand Fly

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