Cressbrook & Litton Flyfishers Club upwing and stonefly project 2015

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Since 2008 I have been identifying and recording the adult caddisflies (orderTrichoptera) found on the Derbyshire River Wye that is controlled by the Cressbrook and Litton Flyfishers Club. This has given a nice list of species and provided data on the emergence periods of the different species present.

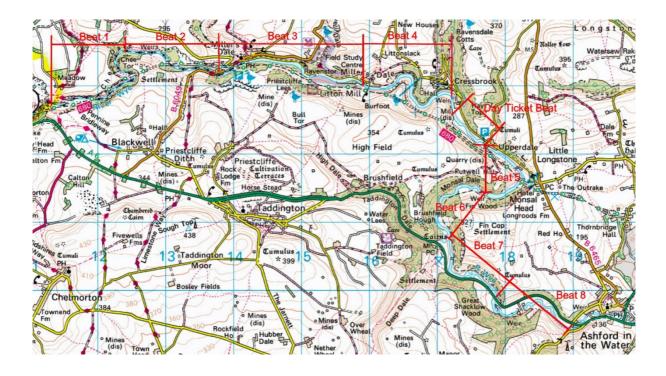
With this in mind I thought it was time to take a closer look at the upwing flies and stoneflies that are also common, and important to fly-fishermen. The term "upwing flies" relates to the insects in the order Ephemeroptera, this includes some very familiar insects as far as anglers are concerned such as the blue winged olives, mayflies and iron blues. The name "stoneflies" relates to the insects in the order Plecoptera, these are less well known and like caddisflies tend to be overlooked by the anglers yet they are often taken eagerly by the fish the anglers are trying to catch.

To get material for the study I needed help from the members. The idea was to have "sample packs" available in the fishing huts for members to pick up. The sample packs were simply a small zip-lock bag inside of which was a screw top sample tube and an information slip. Members were invited to take along a sample pack when they went fishing and if they came across any upwing flies, or stoneflies, they could be caught and put into the sample tube. On returning to the fishing huts they just needed to fill the tubes with some preserving alcohol. Additionally, and very importantly, they also needed to complete the information slip with their name, date and the beat number where the sample was caught. The tube and the information slip were put back in the zip-lock bag and placed in a box where I could pick them up for analysis.

I only required the adult stages of these insects (obviously for the flight period data). And, as anglers will be aware, the upwings are peculiar in that all our UK species have two adult stages. Anglers know these as *duns* and *spinners*. It did not matter which were collected, in fact getting samples of both was very useful as some species are easier for me to identify (to species level) as duns while others can only be positively identified at the spinner stage.

Around a dozen club members collected samples over the fishing season along with both river keepers. A visitor to the day ticket section also helped and I carried out a good amount of sampling too. The results of all these efforts were that I ended up having to check 610 specimens, rather more than I had bargained for! Of these 494 were upwings and 116 were stoneflies. I have summarised the results for both groups of insects on the pages following. However, if you a want a copy of the full report with all the sample details then please just drop me an email at: pennine@troutbum.freeserve.co.uk

Cressbrook & Litton Flyfishers Club Fishery Beat Locations



The Cressbrook & Litton Flyfishers Club has fishing rights on the Derbyshire River Wye. The club has divided the fishing for its members into eight beats with an additional section for day ticket anglers in the middle. The map above shows the general locations of these beats and below are the locations using Ordnance Survey grid references. For the purpose of this study the beat numbers have been used as the reference to where the insect samples were collected.

Beat 1: SK112727 downstream to SK123734

Beat 2: SK123734 downstream to SK137731

Beat 3: SK137731 downstream to SK158730

Beat 4: SK158730 downstream to SK172728

Day Ticket: SK172725 downstream to SK177721

Beat 5: SK177721 downstream to SK176714

Beat 6: SK176714 downstream to SK171706

Beat 7: SK171706 downstream to SK178698

Beat 8: SK178698 downstream to SK189694

Summary of Upwing Results and Comments

Below is a table showing all the species of adult upwings that were recorded in 2015 on the Cressbrook and Litton fishing beats on the River Wye. On the same table the common or "anglers" name are also given for each species.

On the page following you will find two more tables with the same list of species; one table shows the months of the year that the different species were recorded in 2015 and the other table shows the beats where they were recorded.

There are no adult records for January and February in 2015 as these months were before this project started. You will also note that there were no records during the month of December but I know for a fact there were upwings around then as not only did I see odd ones myself but so did both the river keepers, John Smith and David Marriott but none of us managed to bag one! With the upwings some species have short hatch periods, *Paraleptophelbia submarginata* is one example and some have long hatch periods such as *Baetis rhodani*. But, please don't read too much into this data here as with only one season of data obviously under-recording is bound to be a huge factor.

Furthermore, it is important to realise, that even though there is no single species that has been recorded on every beat in 2015 this will be influenced by under-recording too and I suspect that most of these species will be present (to some degree) on all beats. Perhaps some exceptions could be *Baetis niger, Centroptilum luteolum* and *Procloeon Pennulatum* that are possibly better suited to the lower beats. But, I have no evidence whatsoever for this, it is no more than conjecture which insects have a nasty habit of ignoring! Lastly, I would also suggest there could well be other species that have been missed and are out there waiting to be found.

| Genus | Species | Common Name |
|------------------|--------------|--------------------|
| Baetis | muticus | Northern Iron Blue |
| Baetis | niger | Southern Iron Blue |
| Baetis | rhodani | Large Dark Olive |
| Baetis | scambus | Small Dark Olive |
| Baetis | vernus | Medium Olive |
| Caenis | rivulorum | Anglers Curse |
| Centroptilum | luteolum | Small Spurwing |
| Ecdyonurus | dispar | Autumn Dun |
| Ecdyonurus | torrentis | Large Brook Dun |
| Ephemera | danica | Mayfly |
| Paraleptophelbia | submarginata | Turkey Brown |
| Procloeon | pennulatum | Large Spur Wing |
| Rhithrogena | semicolorata | Olive Upright |
| Serratella | ignita | Blue Winged Olive |

2015 Upwing Records

| Conug | C | | | | | Mo | nths] | Recor | ded | | | | | | |
|------------------|--------------|---|---|---|---|----|--------|-------|-----|---|---|---|---|--|--|
| Genus | Species | J | F | Μ | Α | Μ | J | J | Α | S | 0 | Ν | D | | |
| Baetis | muticus | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| Baetis | niger | | | | ✓ | | | | | | | | | | |
| Baetis | rhodani | | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | | |
| Baetis | scambus | | | | | | | | | ✓ | | | | | |
| Baetis | vernus | | | | | ✓ | | | | | | | | | |
| Caenis | rivulorum | | | | | | ✓ | | | | | | | | |
| Centroptilum | luteolum | | | | | ✓ | ✓ | | | ✓ | ✓ | | | | |
| Ecdyonurus | dispar | | | | | | | | | ✓ | ✓ | | | | |
| Ecdyonurus | torrentis | | | | | ✓ | ✓ | | | | | | | | |
| Ephemera | danica | | | | | ✓ | ✓ | ✓ | | | | | | | |
| Paraleptophelbia | submarginata | | | | | ✓ | | | | | | | | | |
| Procloeon | pennulatum | | | | | | | | ✓ | ✓ | | | | | |
| Rhithrogena | semicolorata | | | | | ✓ | ✓ | ✓ | ✓ | | | | | | |
| Serratella | ignita | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

| C | | | | | Fis | hery Bo | eats | | | | | |
|------------------|--------------|--------------|--------------|--------------|--------|---------------|--------|--------|--------|--------|--|--|
| Genus | Species | Beat 1 | Beat 2 | Beat 3 | Beat 4 | Day Ticket | Beat 5 | Beat 6 | Beat 7 | Beat 8 | | |
| Baetis | muticus | | | | | ✓ | | ✓ | ✓ | ✓ | | |
| Baetis | niger | | | | | | | | | ✓ | | |
| Baetis | rhodani | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Baetis | scambus | | | | | | | ✓ | ✓ | | | |
| Baetis | vernus | | | | | | | | | √ | | |
| Caenis | rivulorum | | | | | | | | ✓ | | | |
| Centroptilum | luteolum | | | | ✓ | | | ✓ | ✓ | ✓ | | |
| Ecdyonurus | dispar | | | | | | | ✓ | ✓ | ✓ | | |
| Ecdyonurus | torrentis | | ✓ | | | ✓ | | | ✓ | | | |
| Ephemera | danica | \checkmark | ✓ | | ✓ | ✓ | | ✓ | ✓ | | | |
| Paraleptophelbia | submarginata | | | | | | | | ✓ | | | |
| Procloeon | pennulatum | | | | | ✓ | | ✓ | ✓ | | | |
| Rhithrogena | semicolorata | \checkmark | ✓ | ✓ | | ✓ | ✓ | | ✓ | | | |
| Serratella | ignita | ✓ | \checkmark | \checkmark | | ✓ | ✓ | ✓ | ✓ | ✓ | | |

Summary of Stonefly Results and Comments

Below is a table showing all the species of adult stoneflies that were recorded in 2015 on the Cressbrook and Litton fishing beats on the River Wye. On the same table the common or "anglers" name are also given for each species.

On the page following you will find two more tables with the same list of species; one table shows the months of the year that the different species were recorded in 2015 and the other table shows the fishery beats they were recorded.

Like with the upwing flies there are no adult records for January and February in 2015 as these months were before this project started and although there are no records for November they will have been around it was just that nobody collected any. Of the species recorded through the season you can clearly see some are "summer" species like *Isoperla grammatica* while others appear earlier and yet others later in the year.

Additionally, it is very important to appreciate that even though there is no single species that has been recorded on every beat in 2015 this will probably be just the result of underrecording. I would be very surprised indeed if at least some of these species were not present all the way down the fishery. Of the recorded species I would anticipate that *Isoperla grammatica, Leuctra fusca, Leuctra geniculata* and *Protonemura meyeri* could easily be present on every beat, and you never know, perhaps they all are. I am also equally confident there are other species that have simply been missed.

The clear message to take away from these results is that stoneflies are ubiquitous on this part of the River Wye in Derbyshire and therefore as fly-fishers it would be folly to ignore them because the fish certainly will not!

| Genus | Species | Common Name |
|-------------|------------|----------------------|
| Isoperla | grammatica | Yellow sally |
| Leuctra | fusca | Late needle fly |
| Leuctra | inermis | Smooth needle fly |
| Leuctra | geniculata | Willow fly |
| Nemoura | avicularis | Small brown |
| Nemoura | cambrica | Small spring brown |
| Nemoura | erratica | Erratic small brown |
| Nemurella | picteti | Pictet's small brown |
| Protonemura | meyeri | Common early brown |

2015 Stonefly Records

| Carrie | G • | | | Months Recorded | | | | | | | | | | | | | |
|-------------|------------|---|---|-----------------|---|---|--------------|---|---|---|---|---|---|--|--|--|--|
| Genus | Species | J | F | Μ | Α | Μ | J | J | A | S | 0 | Ν | D | | | | |
| Isoperla | grammatica | | | | | ✓ | ✓ | ✓ | | | | | | | | | |
| Leuctra | fusca | | | | | | | | | ✓ | ✓ | | ✓ | | | | |
| Leuctra | inermis | | | | | | ✓ | | | | | | | | | | |
| Leuctra | geniculata | | | | | | | | ✓ | ✓ | ✓ | | | | | | |
| Nemoura | avicularis | | | | ✓ | ✓ | ✓ | | | | | | | | | | |
| Nemoura | cambrica | | | | | ✓ | ✓ | ✓ | | | | | | | | | |
| Nemoura | erratica | | | \checkmark | | | \checkmark | ✓ | | ✓ | | | | | | | |
| Nemurella | picteti | | | | | | ✓ | | | ✓ | | | | | | | |
| Protonemura | meyeri | | | \checkmark | ✓ | ✓ | \checkmark | | | | | | | | | | |

| | | C&L Fishery Beats | | | | | | | | | | |
|-------------|------------|-------------------|--------|--------|--------|---------------|--------|--------|--------|--------|--|--|
| Genus | Species | Beat 1 | Beat 2 | Beat 3 | Beat 4 | Day Ticket | Beat 5 | Beat 6 | Beat 7 | Beat 8 | | |
| Isoperla | grammatica | | | | | ~ | | ~ | ~ | ✓ | | |
| Leuctra | fusca | ✓ | ✓ | | | | | ~ | ~ | | | |
| Leuctra | inermis | ✓ | | | | | | | | | | |
| Leuctra | geniculata | | | | | | ~ | ~ | ~ | | | |
| Nemoura | avicularis | ✓ | | | | | | | ~ | ~ | | |
| Nemoura | cambrica | ✓ | ✓ | | | | ✓ | | | | | |
| Nemoura | erratica | ✓ | ✓ | ✓ | | | | | | | | |
| Nemurella | picteti | ✓ | ✓ | | | | | | | | | |
| Protonemura | meyeri | ✓ | ✓ | | ✓ | | | | ✓ | ✓ | | |