

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

A word from your Environment Agency Co-ordinator

Many thanks to all who managed to get out during the winter/Spring period. Yet again the weather was very much against us for most of January and February with widespread snow and ice. March was thankfully much kinder to us and luckily many volunteers managed to get out. Fingers crossed for a real “barbecue summer”, not a Met Office one, to follow!

Refresher Training

A refresher training day took place at Colin’s house in March (many thanks, Colin!) with the aim that some of our newer samples could get to grips with the tricky Blue Winged Olives. Luckily we had some specimens in the EA collection (Blue Winged Olive nymphs aren’t found in rivers during early spring due to their life cycle) so we brought them over so everyone could have a good look under the microscope and compare them with the similar looking Olives.

A practical session to get to grips with the kick sampling method, and to give us a few more beasties to look at also took place on the nearby river Teifi. Hopefully everyone found the session useful, and it was really nice to put a few more faces to names as well! If we get enough interest we’re hoping to be able to run a similar session somewhere further east so that our Carmarthenshire and Swansea volunteers can also benefit.



Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Teifi Results

Once more the TRIM group have sampled nearly all of the monitoring points, which is very encouraging to see, especially considering the prolonged winter conditions.

Teifi Group Sampling Points

Collection Point	River	Grid Reference	Monitors
1	Cych	SN249411	C. Chapman , M. Tabernacle
2	Cych	SN276359	C. Chapman , M. Tabernacle
3	Cych	SN244382	C. Chapman , M. Tabernacle
4	Mamog, a tributary of the Cych	SN294361	C. Chapman , M. Tabernacle
5	Dulas, a tributary of the Ceri	SN313468	R.Harding,
6	Nant Bargod	SN358379	S.Elcomb, S.Owen
7	Nant Bargod	SN354391	S.Elcomb, S.Owen
8	Clettwr Fach	SN440483	G.Jones, I.Thomas
9	Clettwr Fawr	SN425469	G.Jones, I.Thomas
10	Clettwr	SN448436	G.Jones, I.Thomas
11	Cwerchyr	SN367446	I. Thomas
12	Nant Gran, a tributary of the Tyweli	SN437347	E.Davies, S.Jones
13	Talog, a tributary of the Tyweli	SN463376	E.Davies, S.Jones
14	Tyweli	SN422390	E.Davies, S.Jones
15	Nant Ythan, a tributary of the Cerdin	SN412428	D.F. Roberts, R.Foulkes
16	Cerdin	SN409441	D.F. Roberts, R.Foulkes
17	Cerdin	SN422416	D.F. Roberts, R.Foulkes
18	Ceri	SN324469	R.Harding
19	Teifi above Llanybydder	SN524445	Meurig Davies, Emyr Jones
20	Teifi abve Llanybydder	SN529447	Alan Davies , Emyr Jones
21	Afon Duar	SN524444	Alan Davies , Emyr Jones
22	Nant Cledlyn	SN492431	Alan Davies, Meurig Davies
23	Afon Grannell	SN534471	Meurig Davies, Emyr Jones
24	Afon Pedran	SN276358	Rob Wilson, Jez More
25	Afon Cneifa	SN269371	Rob Wilson, Jez More
26	Afon Brefi	SN667553	Cap Morris, Emyr Lake
27	Afon Teifi	SN641548	Cap Morris, Emyr Lake
28	Afon Ceri	SN318462	Andrew Thomas
29	Afon Ceri	SN344481	Andrew Thomas
30	Afon Dulas, Ceri trib	SN318462	Andrew Thomas

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Winter 2010 results

WINTER, 2009/10		1	2	3	4	6	7	8	9	10	11	12	13	14	15	16	17	19	20	21	22	23	24	25	26	31	
CADDIS FLIES	Trichoptera - Caseless Caddis	1	3	10	2	6	0	4	0	3	4	18	7	4	10	10	10	10	5	20	5	1	4	6	3	1	
	Trichoptera - Cased Caddis	2	3	0	0	0	10	0	1	3	0	7	2	1	5	20	15	6	4	1	0	1	14	18	13	0	
MAY FLIES	Baetidae, e.g. Olives	200	20	30	20	50	200	80	70	29	20	140	170	130	30	20	15	20	10	20	50	20	24	26	150	10	
	Ephemeridae, Mayflies	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Ephemerellidae - BWO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	
	Heptagenidae, e.g. YellowMay Dun	300	100	170	100	100	300	40		27	20	110	130		10	20	10	100	20	70	30	50	60	22	25	15	
STONE FLIES	Plecoptera	30	2	4	10	70	200	0	6	9	5	100	150	60	20	20	40	20	10	2	20	10	36	30	12	3	
SHRIMP	Gammarus	2	0	8	0	30	200	0	4	18	6	0	10	30	50	20	10	10	3	2	0	0	0	50	0	7	
Misc.	Leeches	0	0	0	0	0	0	0	0	2	3	0	0	4	10	5	0	0	1	1	1	0	2	0	10	100	
	Snails	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Hog Louse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	20	
	Saucer Bugs/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Fish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1Eel	0	0	UFO	0	0	2BH	0	0	1BH	1SL
	Other Larvae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1DF	0

Interpretation of Results

Cych Catchment

The Cych catchment was looking pretty good this quarter, with very good numbers of Heptagenids recorded at all sites, and Gammarus and Stoneflies also present, which indicates an absence of sheep dip issues, an impact which has been suspected in the past in this area.

Ceri Catchment

No results received this quarter. Myself and other Environment Agency Staff have carried out some intensive work in this catchment as part of the Water Framework Directive, and results show that although there are still a few problem areas, the catchment on the whole has improved considerably over the past few years.

Nant Bargod

No obvious problems shown.

Clettwr Catchment

As observed in the Autumn sampling, the two upper sites are still showing poor numbers of the more pollution sensitive mayfly and stonefly species. Seeing as this problem hasn't resolved itself, and can't be explained by poor sampling conditions, further investigation will be requested.

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Cwerchyr

No obvious problems shown.

Tyweli Catchment

No problems shown

Cerdin Catchment

No problems shown.

Llanybydder and Lampeter sites

No problems shown.

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Pembrokeshire results

Pembrokeshire Group Sampling Points

Collection Point	Sample Point	Grid Reference	Monitors
1	Knock Brook at Cutty Bridge	SM942188	J. Codd and D.Nattress
2	W Cleddau at St Catherines Bridge	SM945192	J. Codd and D. Nattress
3	W Cleddau at Musland Farm Bottom	SM945271	L. and G. Evans
4	W Cleddau at Musland Farm Top	SM945271	L. and G. Evans
5	Cartlett Brook	SM966164	R. Davies, R. Baker and J. Wright
6	Merlin's Brook	SM948147	R. Davies, R. Baker and J. Wright
7	Halt Pool		E. and G.W. Williams
8	Anghof		E. and G.W. Williams

Winter Sampling Results

WINTER, 2009/10		1	2	5	6	7	8
CADDIS FLIES	Trichoptera -Caseless Caddis	7	13	3	1	2	0
	Trichoptera - Cased Caddis	300	400	10	0	20	2
MAY FLIES	Baetidae, e.g. Olives	40	18	120	0	0	40
	Ephemerae, Mayflies	0	0	0	0	0	0
	Ephemerellidae - BWO	0	0	0	0	2	0
	Heptageniidae, e.g. YellowMay Dun	40	2	90	7	3	10
STONE FLIES	Plecoptera	3	2	2	1	70	3
SHRIMPS	Gammarus	8	9	100	6	5	0
MISC.	Leeches	2	1	1	0	0	0
	Snails	0	1	1	0	0	0
	Hog Louse	0	0	0	0	0	0
	Saucer Bugs/ Beetles	0	0	0	0	0	0
	Fish	0	1 bullhead	0	0	0	0
	Other Larvae	0	1000+ blackfly!	0	0	0	0

The results for the W Cleddau at St Catherine's bridge is a bit of a cause for concern, due to the huge numbers of blackfly larvae. Possible causes for the phenomenon are a reduction in predators caused by the cold weather, increased organic input, or a potential freak occurrence of perfect conditions for them to breed in. Hopefully this problem is a one off, but it will be interesting to see if it happens again.

The Merlins Brook was also pretty disappointing, with very low numbers of individual invertebrates as well as low diversity. This catchment has a number of potential polluting sources upstream of the sample point, and has suffered from serious pollution in the past, so continued monitoring is definitely required. If it continues to perform badly, an Environment Agency investigation will be requested.

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Carmarthenshire Rivers Trust Results.

Lower Tywi Catchment Sites

Site Number	Site Name	Grid reference	Monitors
1	Gwili at Abergwili Road Bridge	SN 43350-21040	N Evans, S Edwards
2	Duad at Cwmduad	SN 3740 3015	N Evans, S Edwards
3	Gochen at Cynwyl Elfed	SN 372 274	D N Evans, D M Greves
4	Myddyfi d/s Cilsan Ford	SN 5959 2210	Jamie Harries
5	Dryslwyn Dulas	SN-5557-2253	M Jones, G W Price
6	Llangadog Bran u/s Tywi	SN 6964 2841	Mike Jenkins
7	Llanwrda Dulais at Llanwrda	SN 7190 3130	Mike Jenkins
8	Rhosmaen Dulais at A40 Road Bridge	SN 6467 2443	Mike Jenkins
9	Rhosmaen Dulais at Glanthes	SN 6420 2670	E Rimmer, M Davies
10	Rhosmaen Dulais at Pont Rhyd Y March	SN 7557 2887	Mike Jenkins
11	Sawdde at Llangadog Common	SN 7060 2765	Helen Scutt
12	Crychiau at Dalpen Bridge	SN 445 227	D N Evans, D M Greves
3	Nant Alltwalis at Llanpumsaint	SN 4191 2929	Dominic and Rosie Carmichael
14	Gwili at Llanpumsaint	SN 4192 2907	Dominic and Rosie Carmichael
15	Gwili Aeron at Llanpumsaint	SN 4196 2936	Dominic and Rosie Carmichael
16	Sawdde at Hen Bont	SN 7418 2332	Helen Scutt
17	Sawdde Clydach at Pont Newydd	SN 7362 2336	Helen Scutt
18	Cennen at Ffairfach	SN 6208 2148	Jamie Harries
19	Cib at Ffairfach	SN 6331 2161	Jamie Harries

Winter 2010 results

WINTER, 2009/10		1	1A (Gwili u/s A40 bridge)	18	19
CADDIS FLIES	Trichoptera -Caseless Caddis	4	63	1	0
	Trichoptera - Cased Caddis	1	3	0	0
MAY FLIES	Baetidae, e.g. Olives	20	82	8	45
	Ephemeridae, Mayflies	0	0	0	0
	Ephemerellidae - BWO	0	0	0	0
	Heptagenidae, e.g. YellowMay	7	155	0	3
STONE FLIES	Plecoptera	7	46	0	2
SHRIMPS	Gammarus	0	0	3	8
Misc.	Leeches	0	0	1	1
	Snails	0	0	0	0
	Hog Louse	0	0	0	0
	Saucer Bugs/ Beetles	0	0	0	0
	Fish	0	0	0	0
	Other Larvae	0	0	0	0

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

The original site on the Gwili (site 1) showed a disappointing result, so it was sampled from the next bridge further upstream (also upstream of a sewage overflow pipe). This site (1A) showed quite an improvement, so a site visit to the sewage works in question is in order!

The samples taken on the Cennen and Cib were also not as good biologically as expected, so myself and a colleague went out and revisited the sites in January. The results were as follows:

WINTER, 2009/10		Cennen	Cib
CADDIS FLIES	Trichoptera -Caseless Caddis	1	4
	Trichoptera - Cased Caddis	0	0
MAY FLIES	Baetidae, e.g. Olives	8	30
	Ephemeridae, Mayflies	0	0
	Ephemerellidae - BWO	0	0
	Heptagenidae, e.g. YellowMay Dun	7	100
STONE FLIES	Plecoptera	13	114
SHRIMPS	Gammarus	2	0
Misc.	Leeches	0	0
	Snails	0	0
	Hog Louse	0	0
	Saucer Bugs/ Beetles	0	0
	Fish	0	0

As you can see from the results, the Cennen scored poorly again, but the Cib was fairly good (the previous poor result was probably down to the recent spate conditions before the original sample). Some more investigative monitoring of the Cennen is definitely in order.

Cothi Catchment Sites

Site Number	Site Name	Grid Reference	Monitors
1	Cothi Clydach at Pont Cwmmawr	SN 51459 32642	B Jones, J Price
2	Cothi at Cwrt Y Cadno	SN 6917 4413	P John, M Heckler
3	Cothi Twrch at Pumpsaint	SN 65391 40799	P John, M Heckler
4	Cothi at Pumpsaint	SN6558 4053	P John, M Heckler
5	Annell at Crugybar	SN 6456 3608	P John, M Heckler
6	Melindwr at Llansawel Road Bridge	SN 6187 3617	Dave Harry
7	Gorlech at Abergorlech	SN 5855 3377	Dave Harry
8	Marlais u/s Brechfa Village	SN 5230 3036	Huw Denman
9	Pib u/s Cwm Marydd Confluence	SN 5010 3067	Huw Denman
10	Cwm Marydd u/s Pib Confluence	SN 5012 3072	Huw Denman

Winter 2010 results

No results received for the Cothi this quarter.

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Upper Tywi Catchment Sites

1	Doethie at Rhydygroes	SN 77045 47413	B Jones, J Price
2	Doethie u/s Pysgotwr	SN 76516 48358	B Jones, J Price
3	Doethie u/s Pwll yr wyn	SN 768515	E Lake, M Morris
4	Pysgotwr u/s Doethie	SN-7645-4826	B Jones, J Price
5	Doethie Fach at Pont Rhiw Gelynen	SN 756533	E Lake, M Morris
6	Doethie Fawr at Pwll Mari	SN 754530	E Lake, M Morris
7	Doethie Fawr at Pont Penlan	SN 742543	E Lake, M Morris
8	Tywi at Rhandirmwyn	SN-7790-4345	B Jones, M Morris
9	Tywi at Llandovery railway bridge	SN 64673 24438	B Jones, M Morris
10	Llandovery Bran at Pont Rhyd Owen	SN 7745 3525	B Jones, M Morris
11	Dunant u/s Tywi	SN 7580 3840	B Jones, M Morris

Winter 2010 results

Winter 10		1	2	3	4	5	6	7	8
CADDIS FLIES	Trichoptera, Caseless Caddis	14	7	5	4	4	14	28	12
	Trichoptera, Cased Caddis	9	4	4	4	2	34	3	7
MAY FLIES	Baetidae, Olives	10	0	0	0	4	0	0	22
	Ephemeridae, Mayflies	0	0	0	0	0	0	0	0
	Ephemerellidae, BWO	0	0	4	0	0	0	0	0
	Heptageniidae, Yellow May Dun	63	27	2	22	61	0	0	51
STONE FLIES	Plecoptera	95	84	77	47	108	95	136	97
SHRIMPS	Gammarus	0	0	0	0	0	0	0	0
Misc.	Leeches	0	0	5	0	6	7	4	0
	Snails	0	0	0	0	0	0	0	0
	Hog Louse	0	0	0	0	0	0	0	0
	Saucer Bugs / Beetles	0	0	0	0	0	0	0	0

As found last quarter, the results for all 4 sites sampled on the Upper Tywi and lower Doethie and Pysgotwr all look fairly good at the moment. There are good numbers of Heptagenid Mayflies and both Cased and Caseless Caddis. Further up on the Doethie Fawr the numbers of Mayflies drop off significantly, indicating that acidity is still a big issue up there. Interestingly, the Doethie Fach doesn't seem so badly affected this time.

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Loughor Catchment Sites

Collection Point	Site name	Grid Reference	Monitors
1	Amman at Garnant	SN 692 113	J Jones, G Thomas
2	Cathan at Garnswllt	SN 628 320	J Jones, G Thomas
3	Garnant at Garnant	SN 692 451	J Jones, G Thomas
4	Lash below known problems	SN 616 071	J Jones, G Thomas
5	Pedol at Garnant	SN 690 613	J Jones, G Thomas
6	Lash above known problems	SN 614 291	J Jones, G Thomas
7	Loughor u/s Parc Henri	SN 6269 1419	Bethan Dardecker
8	Marlais at Brynmarlais	SN 6239 1362	Bethan Dardecker

Winter 2010 results

Winter 2010		1	2	3	4	5	6	7	8
CADDIS FLI	Trichoptera, Caseless Caddis	11	9	4	6	6	11	10	10
	Trichoptera, Cased Caddis	8	6	6	8	4	9	70	3
MAY FLIES	Baetidae, Olives	35	45	33	45	40	40	60	120
	Ephemeroidea, Mayflies	3	3	5	4	4	4	0	0
	Ephemeroidea, BWO	3	4	6	4	3	3	0	0
	Heptageniidae, Yellow May Dun	50	80	40	115	130	50	130	160
STONE FLI	Plecoptera	14	15	12	14	12	15	60	20
SHRIMPS	Gammarus	6	9	8	8	7	9	2	2
Misc.	Leeches	1	1	1	2	1	1	0	0
	Snails	0	0	0	0	0	0	0	0
	Hog Louse	0	0	0	0	0	0	0	0
	Saucer Bugs / Beetles	0	0	0	0	0	0	0	0

Once more the Loughor samplers excelled themselves and covered all of the sites. Well done everyone! It was also encouraging to see that the invertebrate fauna was looking healthy at every site as well.

Taf Catchment Sites

Collection Point	Site name	Grid Reference	Monitors
1	Gafel at Rhydowen	SN 193 290	Keith and Lesley Jones
2	Gronw u/s Taf	SN 202 163	Keith and Lesley Jones
3	Nant Elwyn u/s Taf	SN 195 286	Keith and Lesley Jones
4	Taf at Llanfyrnach	SN 221 311	Keith and Lesley Jones
5	Taf u/s Elwyn	SN 195 287	Keith and Lesley Jones
6	Taf u/s Gronw	SN 202 162	Keith and Lesley Jones
7	Taf u/s Marlais	SN 186 168	Keith and Lesley Jones

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

Winter 2010 results

No samples collected this quarter.

Gwendraeth Catchment Sites

Collection Point	Site Name	Grid Reference	Monitors
1	Gwendraeth Fach at Gelli Deg	SN 41868 10156	A Stuart, M Price
2	Gwendraeth Fawr at Pont Spwdwr	SN 43383 05873	A Stuart, M Price
3	Gwendraeth Fawr at Pont Henri	SN 47530 09398	A Stuart, M Price
4	Gwendraeth Fawr d/s Pontyates STW		A Stuart, M Price

No samples collected this quarter

Tawe Catchment Sites

Collection Point	Site name	Grid Reference	Monitors
1	Twrch at Lower Cwmtwrch	SN 7670 1020	R Lockyer, P Jones
2	Giedd at Cwmgiedd	SN 7885 1112	R Lockyer, P Jones
3	Llynfell at Cwmllynfell	SN 7480 1250	R Lockyer, P Jones

Winter 2010 results

Winter 2010		1	2	3
CADDIS FLIES	Trichoptera, Caseless Caddis	9	3	7
	Trichoptera, Cased Caddis	9	11	2
MAY FLIES	Baetidae, Olives	305	0	11
	Ephemeridae, Mayflies	0	0	0
	Ephemerellidae, BWO	0	6	5
	Heptageniidae, Yellow May Dun	125	52	9
STONE FLIES	Plecoptera	15	43	17
SHRIMPS	Gammarus	0	5	0
Misc.	Leeches	1	0	0
	Snails	0	0	0
	Hog Louse	0	0	0
	Saucer Bugs / Beetles	0	0	0

Riverfly Monitoring Newsletter



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

Southwest Wales – forward look for 2010

March/April 2010

The Twrch and Giedd both look very healthy, with good numbers of Heptagenid mayflies, caddis flies and stone flies. The numbers were less good on the Llynfell, although sensitive taxa were still present in reasonable numbers so there is unlikely to be too much cause for concern. It will be interesting to see the results for the next quarter.