Cressbrook and Litton Flyfishers Club

The River Wye, Derbyshire

Adult Upwing and Stonefly Records – 2018

By Stuart M Crofts

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Contents

Introduction

This is the fourth year of this project and it has once again produced some interesting results. The way the project works is quite simple. In each of the fishing huts there are "sample packs" available for members to pick up. Each sample pack consists of a small zip-lock bag inside of which is a screw top sample tube and an information slip. Members are invited to take along a sample pack when they go fishing and if they come across any upwing flies, or stoneflies, they can be caught and put into the sample tube. On returning to the fishing huts the sample tube is filled with some preserving alcohol and, very importantly, the information slip is completed with the members name along with the date and the beat number where the sample was caught. The tube and the information slip are then put back in the zip-lock bag and placed in a box where I can pick them up for analysis.

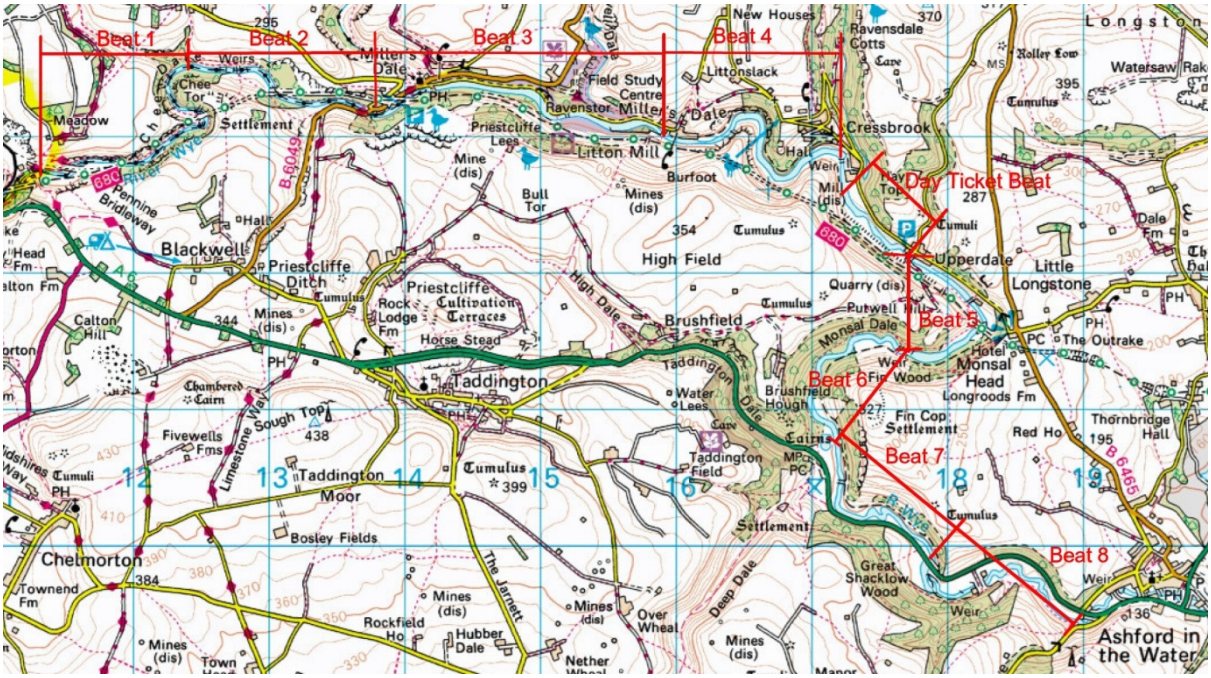
The term "upwing flies" relates to the insects in the order Ephemeroptera, this includes some very familiar insects as far as the anglers are concerned such as the blue winged olives, mayflies and iron blues. The name "stoneflies" relates to the insects in the order Plecoptera, these are less well known, and like caddisflies (that I also study in detail), tend to be overlooked by the anglers yet they are often taken eagerly by fish the anglers are trying to catch.

I **only** require the adult stages of these insects for this project (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 does not matter which are collected, in fact getting samples of both is very useful as some species are easier for me to identify (to the full species level) as duns while others can only be positively identified at the spinner stage.

I hope you find the report interesting as it once again highlights the richness of this wonderful river which I hope no one ever just takes for granted because it is a rare and very special place.

Stuart M Crofts, March 2019

Cressbrook & Litton Flyfishers Club Fishery Beat Locations



The Cressbrook & Litton Flyfishers Club has fishing rights on the River Wye in Derbyshire. 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 Adult Upwing Results and Comments

At the bottom of this page is a table showing all the species of adult upwings that were recorded in 2018 on the Cressbrook and Litton fishing beats on the River Wye. On the same table the common or "anglers" name is 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 and the other table shows the *fishery beats* where they were found. Following this there are similar tables, but these are particularly interesting, as they show the **Ongoing Records** (combined results for 2015, 2016, 2017 and 2018).

With the upwings some species only have short hatch periods, for example; *Paraleptophlebia submarginata.* Others will be around all season long such as *Baetis rhodani*. But, as in previous years, please don't read too much into any of this data because under recording is bound to be a huge factor during any single year. However, looking on the positive side, year on year the gaps in the data are getting filled.

As in 2017 two species of upwing were recorded on every single beat of the fishery during a single season, these were *Baetis rhodani* and *Ephemera danica*. Not a real surprise but there is nothing like getting the samples to prove it. Also, as in 2017, there were no new species of upwings recorded to this scheme during 2018 - so have we got them all? Only time will tell but with fifteen species of upwings now recorded on the club waters it is already a pretty impressive list.

Genus	Species	Common Name
Baetis	*muticus*	Northern Iron Blue
Baetis	*rhodani*	Large Dark Olive
Baetis	*scambus*	Small Dark Olive
Centroptilum	*luteolum*	Small Spurwing
Ecdyonurus	*torrentis*	Large Brook Dun
Ephemera	*danica*	Mayfly
Paraleptophlebia	*submarginata*	Turkey Brown
Rhithrogena	*semicolorata*	Olive Upright
Serratella	*ignita*	Blue Winged Olive

2018 Adult Upwing Records

Genus	Species	Months Recorded											
		J	F	M	A	M	J	J	A	S	O	N	D
Baetis	*muticus*						✓						
Baetis	*rhodani*			✓	✓				✓				
Baetis	*scambus*						✓		✓				
Centroptilum	*luteolum*							✓	✓				
Ecdyonurus	*torrentis*						✓						
Ephemera	*danica*					✓	✓						
Paraleptophlebia	*submarginata*						✓						
Rhithrogena	*semicolorata*					✓							
Serratella	*ignita*							✓	✓				

Genus	Species	Fishery Beats Recorded								
		Beat 1	Beat 2	Beat 3	Beat 4	Day Ticket	Beat 5	Beat 6	Beat 7	Beat 8
Baetis	*muticus*		✓	✓	✓	✓			✓	
Baetis	*rhodani*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baetis	*scambus*		✓							✓
Centroptilum	*luteolum*								✓	
Ecdyonurus	*torrentis*								✓	
Ephemera	*danica*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Paraleptophlebia	*submarginata*		✓							
Rhithrogena	*semicolorata*							✓	✓	
Serratella	*ignita*	✓	✓						✓	

Ongoing Adult Upwing Records (2015-18)

Genus	Species	Months Recorded											
		J	F	M	A	M	J	J	A	S	O	N	D
Baetis	*muticus*					✓	✓	✓	✓	✓			
Baetis	*niger*				✓								
Baetis	*rhodani*			✓	✓	✓	✓	✓	✓	✓	✓	✓	
Baetis	*scambus*						✓		✓	✓			
Baetis	*vernus*					✓							
Caenis	*rivulorum*						✓						
Centroptilum	*luteolum*					✓	✓	✓	✓	✓	✓		
Ecdyonurus	*dispar*									✓	✓		
Ecdyonurus	*torrentis*					✓	✓						
Ephemera	*danica*				✓	✓	✓	✓	✓				
Heptagenia	*sulphurea*						✓						
Paraleptophlebia	*submarginata*					✓	✓						
Procloeon	*pennulatum*						✓		✓	✓			
Rhithrogena	*semicolorata*				✓	✓	✓	✓	✓	✓			
Serratella	*ignita*					✓	✓	✓	✓	✓	✓		

Genus	Species	Fishery Beats Recorded								
		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*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Heptagenia	*sulphurea*								✓	
Paraleptophlebia	*submarginata*		✓				✓	✓	✓	
Procloeon	*pennulatum*		✓			✓		✓	✓	
Rhithrogena	*semicolorata*	✓	✓	✓	✓	✓	✓	✓	✓	
Serratella	*ignita*	✓	✓	✓	✓	✓	✓	✓	✓	✓

Summary of Adult Stonefly Results and Comments

Below is a table showing all the species of adult stoneflies that were recorded in 2018 on the Cressbrook and Litton fishing beats on the River Wye. On the same table the common or "anglers" names are also given for each species recorded.

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 and the other table shows the *fishery beats* where they were found. Following this there are two similar tables, these are particularly interesting as they show the **Ongoing Records** (combined results for 2015, 2016, 2017 and 2018).

A new species for this project was recorded in 2018; this was *Leuctra hippopus,* known as the early needle fly. This species is common and to be honest I am surprised it has taken since 2015 to record it. A classic example of a creature hiding in plain sight!

Genus	Species	Common Name
Isoperla	*grammatica*	Yellow sally
Leuctra	*fusca*	Late needle fly
Leuctra	*geniculata*	Willow fly
Leuctra	*hippopus*	Early needle fly
Nemoura	*cambrica*	Small spring brown
Nemoura	*erratica*	Erratic small brown
Perlodes	*mortoni*	Orange-striped stonefly
Protonemura	*meyeri*	Common early brown

2018 Adult Stonefly Records

Genus	Species	Months Recorded											
		J	F	M	A	M	J	J	A	S	O	N	D
Isoperla	*grammatica*					✓	✓						
Leuctra	*fusca*	✓							✓				
Leuctra	*geniculata*								✓				
Leuctra	*hippopus*					✓							
Nemoura	*cambrica*					✓							
Nemoura	*erratica*					✓							
Perlodes	*mortoni*				✓	✓							
Protonemura	*meyeri*			✓	✓	✓							

Genus	Species	Fishery Beats Recorded								
		Beat 1	Beat 2	Beat 3	Beat 4	Day Ticket	Beat 5	Beat 6	Beat 7	Beat 8
Isoperla	*grammatica*			✓					✓	
Leuctra	*fusca*						✓			✓
Leuctra	*geniculata*								✓	
Leuctra	*hippopus*				✓					
Nemoura	*cambrica*			✓	✓					
Nemoura	*erratica*						✓	✓		
Perlodes	*mortoni*					✓		✓	✓	
Protonemura	*meyeri*		✓			✓		✓		✓

Ongoing Adult Stonefly Records (2015-18)

Genus	Species	Months Recorded											
		J	F	M	A	M	J	J	A	S	O	N	D
Brachyptera	*risi*			✓	✓	✓							
Isoperla	*grammatica*					✓	✓	✓					
Leuctra	*fusca*	✓							✓	✓	✓		✓
Leuctra	*inermis*					✓	✓						
Leuctra	*geniculata*								✓	✓	✓		
Leuctra	*hippopus*					✓							
Nemoura	*avicularis*				✓	✓	✓						
Nemoura	*cambrica*				✓	✓	✓	✓					
Nemoura	*erratica*			✓	✓	✓	✓	✓	✓	✓			
Nemurella	*picteti*					✓	✓			✓			
Perlodes	*mortoni*				✓	✓							
Protonemura	*meyeri*			✓	✓	✓	✓						
Siphonoperla	*torrentium*					✓							
Taeniopteryx	*nebulosa*			✓									

Genus	Species	Fishery Beats Recorded								
		Beat 1	Beat 2	Beat 3	Beat 4	Day Ticket	Beat 5	Beat 6	Beat 7	Beat 8
Brachyptera	*risi*		✓		✓			✓		
Isoperla	*grammatica*		✓	✓	✓	✓	✓	✓	✓	✓
Leuctra	*fusca*	✓	✓				✓	✓	✓	✓
Leuctra	*inermis*	✓	✓							
Leuctra	*geniculata*					✓	✓	✓	✓	
Leuctra	*hippopus*									
Nemoura	*avicularis*	✓							✓	✓
Nemoura	*cambrica*	✓	✓	✓	✓		✓			
Nemoura	*erratica*	✓	✓	✓			✓	✓	✓	
Nemurella	*picteti*	✓	✓					✓		
Perlodes	*mortoni*					✓		✓	✓	✓
Protonemura	*meyeri*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Siphonoperla	*torrentium*	✓	✓							
Taeniopteryx	*nebulosa*							✓		

Appendix 1: The detailed upwing fly records

Note: As you look at these detailed records you will come across a group of samples with the abbreviation "sp." in the species column. This is an indication that the collected sample could not be identified beyond genus level with the identification keys available at this time (2018). If the abbreviation "spp." is seen then it is simply because more than one sample, from the same genus, was in question. With reference to this report all the unidentified species are from the *Baetis* genus. There are nine species from this genus here in the UK and four of these species (*Baetis vernus, Baetis fuscatus, Baetis scambus and Baetis buceratus*) can only be identified to full species level when you have a sample of the male imago. You will see on these records that the samples in question were not at the required imago stage (or they were female) and hence there identification stopped at the level of genus.

Adult Mayfly Occurrence Scheme Records 2018

Genus	Species	C&L Beat Number	Date	Name of Sample Supplier	Sub-imago (dun)		Imago (spinner)		Weather	Brief Notes (when taken)
					Male	Female	Male	Female		
Baetis	*muticus*	7	06-Jun-18	Stuart Crofts	0	2	0	1	S, 17℃	
Baetis	*muticus*	3	07-Jun-18	Stuart Crofts	1	1	0	1	S, 18℃	
Baetis	*muticus*	4	07-Jun-18	Stuart Crofts	1	2	0	0	S, 18℃	
Baetis	*muticus*	DT	07-Jun-18	Stuart Crofts	0	2	0	0	S, 18℃	
Baetis	*muticus*	7	14-Jun-18	Chris Thirtle	0	0	1	0	D, 16℃	
Baetis	*muticus*	2	16-Jun-18	Stuart Crofts	0	0	0	4	D, 17℃	Observed in mid afternoon
Baetis	*rhodani*	8	23-Mar-18	Chris Thirtle	0	1	0	0	D, 7℃	
Baetis	*rhodani*	2	29-Mar-18	Stuart Crofts	0	2	0	0	R, 7℃	Observed in early afternoon
Baetis	*rhodani*	7	29-Mar-18	Stuart Crofts	0	1	0	0	R, 7℃	Observed in early afternoon
Baetis	*rhodani*	8	29-Mar-18	Stuart Crofts	1	0	0	0	R, 7℃	Observed in early afternoon
Baetis	*rhodani*	1	12-Apr-18	Stuart Crofts	1	2	0	0	D, 6℃	Observed in early afternoon
Baetis	*rhodani*	3	12-Apr-18	Stuart Crofts	2	2	0	0	D, 6℃	Observed in early afternoon
Baetis	*rhodani*	4	13-Apr-18	Stuart Crofts	0	2	0	0	R, 7℃	Observed in early afternoon
Baetis	*rhodani*	DT	13-Apr-18	Stuart Crofts	3	2	0	0	D, 7℃	Observed in early afternoon
Baetis	*rhodani*	5	14-Apr-18	Stuart Crofts	1	0	0	0	S, 15℃	Observed in mid afternoon
Baetis	*rhodani*	6	14-Apr-18	Stuart Crofts	1	3	0	0	S, 15℃	Observed in mid afternoon
Baetis	*rhodani*	7	20-Aug-18	Mike Hallam	0	1	0	0	N/R	
Baetis	*scambus*	8	07-Jun-18	Stuart Crofts	0	0	1	0	S, 18℃	
Baetis	*scambus*	2	24-Aug-18	Stuart Crofts	0	0	1	0	D, 16℃	
Baetis	*sp.*	2	24-May-18	Chris Thirtle	0	1	0	0	S, 15℃	
Baetis	*sp.*	7	06-Jun-18	Stuart Crofts	0	5	0	3	S, 17℃	
Baetis	*sp.*	7	12-Aug-18	Mike Hallam	0	0	0	1	N/R	
Baetis	*sp.*	2	24-Aug-18	Stuart Crofts	1	5	0	0	D, 16℃	
Centroptilum	*luteolum*	7	23-Jul-18	Stuart Crofts	0	0	0	2	S, 20℃	Observed in the evening
Centroptilum	*luteolum*	7	12-Aug-18	Mike Hallam	0	1	0	0	N/R	
Ecdyonurus	*torrentis*	7	06-Jun-18	Stuart Crofts	0	1	1	0	S, 17℃	
Ephemera	*danica*	7	29-May-18	Hilary Langan	0	0	0	2	D, 16℃	Observed in the evening
Ephemera	*danica*	7	06-Jun-18	Stuart Crofts	1	2	4	5	S, 17℃	
Ephemera	*danica*	1	07-Jun-18	Stuart Crofts	1	2	0	0	S, 18℃	Observed all through the day
Ephemera	*danica*	2	07-Jun-18	Stuart Crofts	2	2	0	0	S, 18℃	Observed all through the day

Ephemera	*danica*	3	07-Jun-18	Stuart Crofts	1	2	1	0	S, 18℃	Observed all through the day
Ephemera	*danica*	4	07-Jun-18	Stuart Crofts	3	0	0	2	S, 18℃	Observed all through the day
Ephemera	*danica*	5	07-Jun-18	Stuart Crofts	2	1	0	0	S, 18℃	Observed all through the day
Ephemera	*danica*	6	07-Jun-18	Stuart Crofts	1	3	0	1	S, 18℃	Observed all through the day
Ephemera	*danica*	7	07-Jun-18	Stuart Crofts	1	1	0	0	S, 18℃	Observed all through the day
Ephemera	*danica*	8	07-Jun-18	Stuart Crofts	2	2	0	2	S, 18℃	Observed all through the day
Ephemera	*danica*	DT	07-Jun-18	Stuart Crofts	3	5	1	4	S, 18℃	Observed all through the day
Ephemera	*danica*	1	09-Jun-18	Stuart Crofts	4	1	0	0	S, 15℃	Seen from late morming until dusk
Ephemera	*danica*	2	09-Jun-18	Stuart Crofts	0	0	2	2	S, 15℃	Seen from late morming until dusk
Ephemera	*danica*	3	09-Jun-18	Stuart Crofts	3	1	5	3	S, 15℃	Seen from late morming until dusk
Ephemera	*danica*	4	09-Jun-18	Stuart Crofts	2	0	4	2	S, 15℃	Seen from late morming until dusk
Ephemera	*danica*	5	10-Jun-18	Stuart Crofts	1	1	2	3	S, 20℃	Seen from late morming until dusk
Ephemera	*danica*	6	11-Jun-18	Stuart Crofts	2	3	2	1	S, 20℃	Seen from late morming until dusk
Ephemera	*danica*	7	12-Jun-18	Stuart Crofts	1	1	3	2	S, 20℃	Seen from late morming until dusk
Ephemera	*danica*	8	13-Jun-18	Stuart Crofts	2	3	1	2	S, 20℃	Seen from late morming until dusk
Ephemera	*danica*	DT	14-Jun-18	Stuart Crofts	2	1	3	2	S, 20℃	Seen from late morming until dusk
Ephemera	*danica*	2	16-Jun-18	Stuart Crofts	1	2	4	2	D, 17℃	Seen from late morming until dusk
Paraleptophlebia	*submarginata*	2	16-Jun-18	Stuart Crofts	0	0	1	0	D, 17℃	Observed in mid afternoon
Rhithrogena	*semicolorata*	6	28-May-18	Chris Thirtle	0	0	1	0	D, 20℃	
Rhithrogena	*semicolorata*	7	29-May-18	Hilary Langan	0	0	1	0	D, 16℃	Observed in the evening
Serratella	*ignita*	7	23-Jul-18	Stuart Crofts	0	0	0	8	S, 20℃	Observed all evening
Serratella	*ignita*	7	12-Aug-18	Mike Hallam	1	0	0	0	N/R	
Serratella	*ignita*	7	20-Aug-18	Mike Hallam	0	1	0	0	N/R	
Serratella	*ignita*	1	24-Aug-18	Stuart Crofts	2	2	0	0	R, 16℃	
Serratella	*ignita*	2	24-Aug-18	Stuart Crofts	3	0	0	0	D, 16℃	

Totals	**53**	**72**	**39**	**55**
	125		**94**	
	219			

Appendix 2: The detailed stonefly records

Adult Stonefly Occurrence Scheme Records 2018

Genus	Species	C&L Beat Number	Date	Name of Sample Supplier	Male	Female	Weather	Brief Notes (when taken)
Isoperla	*grammatica*	7	17-May-18	Mike Hallam	0	1	N/R	
Isoperla	*grammatica*	3	29-May-18	Mike Hallam	0	1	N/R	
Isoperla	*grammatica*	7	06-Jun-18	Stuart Crofts	0	1	D, 17℃	Observed in early afternnon
Leuctra	*fusca*	5	01-Jan-18	Stuart Crofts	0	1	D, 6℃	
Leuctra	*fusca*	8	13-Aug-18	Hilary Langan	1	0	R, D, 11℃	
Leuctra	*geniculata*	7	12-Aug-18	Mike Hallam	1	0	N/R	
Leuctra	*geniculata*	7	20-Aug-18	Mike Hallam	1	0	N/R	
Leuctra	*hippopus*	4	06-May-18	Chris Thirtle	1	0	S, 15℃	
Nemoura	*cambrica*	4	05-May-18	Chris Thirtle	0	1	S, 15℃	
Nemoura	*cambrica*	3	11-May-18	David Marriott	0	1	N/R	
Nemoura	*erratica*	6	01-May-18	Hilary Langan	0	1	N/R	Observed in early afternnon
Nemoura	*erratica*	5	04-May-18	Mike Hallam	0	1	N/R	
Perlodes	*mortoni*	7	15-Apr-18	Stuart Crofts	0	1	S, 15℃	Egg carrying female - mid afternoon
Perlodes	*mortoni*	DT	01-May-18	Stuart Crofts	0	1	S, 12℃	Egg carrying female - mid afternoon
Perlodes	*mortoni*	6	06-May-18	Jim Playle	0	1	S, 20℃	
Protonemura	*meyeri*	8	23-Mar-18	Chris Thirtle	1	0	D, 7℃	
Protonemura	*meyeri*	2	14-Apr-18	Hilary Langan	0	1	D, 16℃	Observed in mid afternnon
Protonemura	*meyeri*	6	01-May-18	Hilary Langan	1	0	N/R	Observed in early afternnon
Protonemura	*meyeri*	DT	27-May-18	Stuart Crofts	0	1	N/R	
				Totals	6	13		
					19			

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