

## Alton walking festival on Caker Stream by June Chatfield

Over the weekend of 10-11 May 2014 Alton Town Council organised a festival of walking with a range of short to long walks and we were asked also for a short river walk which I led on the afternoon of Sunday 11<sup>th</sup> May which was well attended. As the Wey at Holybourne was still closed due to sewage pollution, we settled on the Caker Stream. It was a repeat of a joint NWT and Alton Natural History Society walk run last year and reported in the last newsletter (No. 41). Being earlier in the year it was overcast and not so warm, but the keen group ignored that: most of them had never walked that stretch of the river before and were pleasantly surprised.

The marsh behind the recycling centre had low water but its fringe was bright with spring flowers - *red campion*, *water forget-me-not*, *garlic mustard* (food plant of caterpillars of the orange tip butterfly) and *green alkanet*.

Water had dropped in the Caker of last winter but evidence of flooding was from the grey film of silt deposited on the ivy leaves of the far bank and grassy debris attached to low hanging branches of riverside trees.



*Alton walking festival on the Caker Stream. Photo: J Chatfield*

## Alton walking festival on Caker Stream by June Chatfield ..... Continued

Along the Caker we saw the remains of an old hatch from earlier water meadow use of the stream and the brick bridge carrying a former farm track (now Hangers Way Walk) over the stream. The walk ended with some pond-dipping in the balancing pond that had been dug as part of flood protection when Omega Park was developed. The Trust had been consulted in this and worked with the Environment Agency on recommendations to protect the stream. However

one point of concern was the pile of wood and soil against the fence high above the Caker Stream bank on land owned by the sewage works, poised to drop into the Caker Stream – they need to move it back! It is important for site owners / occupiers to view their sites from outside when doing health and safety risk assessments. This is where people walking along and enjoying the river can be useful eyes on potential hazards.

*Editors Note : The 2015 Walking Festival is currently being organised by Alton Town Council and will be held on*

**16/17th May**

*with a variety of themed walks to suit all tastes and styles. More news when the next newsletter comes out.*

**June Chatfield**



*Pond-dipping in the balancing pond, Omega Park. Photo: J Chatfield*



# Flood Meadows Management by The Alton Society

Alec Baker



On the third Sunday of every month, a group of local volunteers meet at Flood meadows with Team leader **Martin Gibbs** of the Alton Society to maintain the river, the surrounding banks and the adjacent footpaths.

One task in September was the removal of the *Wild Watercress* in the river bed. With the help of the local Scout group, all the pulled vegetation was laid in a heap on the far side of the river and left to naturally decompose as compost.

On the following Sunday get together it was agreed that one of the foot bridges was in need in of repair. Alton Town Council, who are land owners of Flood Meadows, were approached by **Martin Gibbs** and duly provided the materials for the work.

Work commenced to dismantle the rotten timbers and directions were given to construct a newly designed bridge. Such was the hard work with all involved, that it was completed by 3.30 that same afternoon!

All volunteers were a mix of Alton Society, Northern Wey Trust and Alton College members as well as members of the public. All are most welcome for volunteering help



Replacement of the existing bridge Photo: A. Baker

along Flood Meadows, no experience is necessary. **Martin Gibbs** can be contacted on [martin.gibbs@fentontraining.co.uk](mailto:martin.gibbs@fentontraining.co.uk)

The group meet on the third Sunday of every month from 10 am until midday. **All volunteers are rewarded with free biscuits, tea and coffee!**

**Alec Baker**





## King's Pond to confluence with Caker Stream

### with Alton Natural History Society – Dr June Chatfield

This was a joint walk between the NWT and Alton Natural History Society held on 8<sup>th</sup> August 2014. The group met at King's Pond car park and after viewing the bird life in the pond including the diving activities of little grebe from the weir, we examined the two alder trees in the corner by King's Pond Bungalows for alder tongue galls (*Taphrina alderi*) emerging from the alder cones.

They are produced by a fungus and look like red tongues hanging out. In looking for the galls a parent bug (*Elasmuch grisea*) sitting on its eggs was seen on an alder leaf. Exiting on the footpath beside the Waterside Court flats we noted the Lasham Drain and the stream merging from below the weir, all of which was channelled when the old mill site was redeveloped in 1989.



Tongue gall (*Taphrina alderi*) on alder cones at Kings Pond Alton. Photo: J. Chatfield

Crossing Paper Mill Lane wild flowers were seen on the banks including a fine plant of soapwort

(*Saponaria officinalis*) in flower. This plant is usually associated with settlements as it was used as a soap (hence its name) in earlier times before detergents. Usually found near human habitation, soapwort was once used for washing wool and woollen cloth: when bruised and boiled in water it produces a frothy liquid. It was once cultivated near woollen mills and Orps Mill above King's Pond was for the cloth trade (see above walk) but today soapwort is grown as a garden flower and that was probably the origin of this one.

Imported soil was used on the river bank in restoration work after disturbance when the Lampports flats were built. Following the footpath along the Wey from Paper Mill Lane to the steps up to Newman Lane, verges in Newman Lane and Mill Lane and the River Wey from Anstey Popham Mill to its confluence with the Caker Stream over 100 species of flowering plants were listed. A rabbit was seen on a bank across the Wey and house martins were whirling overhead.



Soapwort (*Saponaria officinalis*) on the river bank at Paper Mill Lane, Alton. Photo: June Chatfield

# White Clawed Crayfish (*Austropotamobius papillipes*)

## The White Clawed Crayfish

(*Austropotamobius papillipes*) is the only native species of crayfish in the British Isles and is the largest crustacean in our fresh waters. It is locally abundant in some areas of the north east of England and Wales but is suffering a serious decline due to external factors in other areas.

Their greatest threat comes from non-native invasive species. Six alien species of crayfish currently infest our rivers, most notably the North American Signal crayfish. This particular species now inhabits 80% of our waterways and it is only in the north west of England that is currently clear of the species. Since the 1970's when the Signal Crayfish was introduced, the population of the White Clawed Crayfish has declined by over 50%.

The species in this country originated as an introduction from America in the 1970's which were sold to farmers as a means of diversifying into new markets. A few of these species escaped, and, as with all non-native invasive species currently in this country has managed by a stint of adaptable ecology and aggressive competitiveness to spread swiftly through a broad spectrum of niches. It is even able to cross over terrestrial habitats between water courses. New populations have also been established as result of accidental translocations.

## Ecology

**Table 1:** Taxonomy of the White Clawed Crayfish.

<b>Phylum</b>	<i>Crustacea</i>
<b>Class</b>	<i>Malacostra</i>
<b>Super Order</b>	<i>Eucarida</i>
<b>Order</b>	<i>Decapoda</i>
<b>Superfamily</b>	<i>Astacoidea</i>
<b>Family</b>	<i>Astacidae</i>
<b>Genus</b>	<i>Austropotamobius</i>
<b>Species</b>	<i>Austropotamobius pallipes</i>

Crayfish are crustaceans. This is a vast invertebrate phylum of predominantly aquatic animals and from this taxonomic group they can be further subdivided into the Class Malacostra and the Order Decapoda, the largest Order in the phylum. Decapods are easily recognisable as animals we are very familiar with such as Crabs, Hermit Crabs, Shrimps and Lobsters. All have a dorsal carapace, ten legs with the first claws modified as pincers or claws, and an eight segmented thorax with a six (and rarely seven) segmented abdomen.

The thoracic segments are fused together with the head structure to form what is termed a cephalothorax. This in turn is joined to the abdomen. Covering all of the cephalothorax and varying degrees of the abdomen, dependant on species, is a hardened dorsal structure called a carapace. This gives a degree of protection to a vulnerable area on the animal. In crabs for instance, the carapace extends to cover the whole of the abdomen which gives them the broad solid look that is so distinctive. In Crayfish this extends down laterally to cover the thoracic gills within a protective chamber and is thus a feature to assist in identification.

They are omnivorous and will capture live prey and also eat vegetation should needs arise. As with all Crustaceans, Crayfish need to extract minerals, primarily calcium ions, from their environment to sustain their shell like exoskeleton. Chalk rich streams are a preference for their ecology, and being intolerant of pollution, they are good water quality indicators: a high amount of dissolved oxygen; a balanced, stable pH (6.8 – 8.6) and an absence of toxic chemicals are habitat preferences.

Crayfish are principally nocturnal species, and although they do not actually hibernate, they spend much of the winter months holed up in their burrows, which may be in water course banks or amongst the river beds. These refuges are important to Crayfish as they form a protective retreat away from predators; juveniles are particularly vulnerable. Where habitats are missing these, there is a low correlation for Crayfish population numbers.



## White Clawed Crayfish (Continued....)

The Signal Crayfish will predate on the White Clawed Crayfish, out compete them for fish in their habitats and is a vector for a pathogen – the deadly White Crayfish plaque. All other non-native species of crayfish originating from America also have the potential to be a vector for the pathogen.



White Clawed Crayfish (*Austropotamobius pallipes*)  
(©Mike Drew Buglife 2013)

As a result of this decline, the White Clawed Crayfish is protected under law and the Environment Agency have produced a code of conduct to help the spread of the invasive species and their pathogen;

### **Do not introduce alien crayfish**

It is a criminal offence to release or allow to escape, signal and other non-native crayfish species into the wild anywhere in England and Wales without a licence.

### **Do not trap or remove crayfish**

It is an offence to trap and remove any crayfish (native or non-native) in the North West England without a licence.

### **Never use crayfish as bait**

It is an offence under national fisheries bylaws to use any crayfish (dead or alive) or any crayfish part as bait.

### **Disinfect and dry equipment**

Crayfish plague spores can be spread on damp equipment such as fishing tackle, canoes and machinery. Do not

move any equipment that has been in contact with river or lake water without either disinfecting (iodine based disinfectant) or washing (clean tap water) then drying completely.

### **Protect native crayfish habitat**

Native crayfish and their habitat are protected by law. Always seek advice from the Environment Agency before carrying out work in or near a watercourse.

### **Report sightings**

If you see any signal crayfish or anyone in possession of, or attempting to trap, release or sell live crayfish, please report it to the Environment Agency immediately.

**Environment Agency Hotline 0870  
8506506**

**Ask for the Fisheries, Recreation &  
Biodiversity Team**

[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

An excellent resource for habitat ecology and guidance for the White Clawed Crayfish can be found on the following Environment Agency link where it can be downloaded as a PDF:

<https://www.gov.uk/government/publications/guidance-on-habitat-for-white-clawed-crayfish>

**Kevin Stevens**



A ventral view of a dead American Signal Crayfish (*Pacifastacus leniusculus*) minus the modified front legs and claws showing leg and abdomen detail. Photo: J. Chatfield

# Comparison of all British crayfish and their status in this Country

(our only native species, the White Clawed, is highlighted in grey)

Species Vernacular	Species Latin	Origin	Size	Body Description	Claws	Ecology	Distribution
<b>White clawed</b>	<i>Austropotambius Pallipes</i>	<b>Native (European)</b>	10 - 12cm	Brown/olive brown. 2 pairs ridges behind eye sockets. Sharp spines on carapace	Rough; pink/white	<b>Docile,</b> Streams, canals, rivers, reservoirs, quarries	Central, N England; Wales
<b>Signal</b>	<i>Pacifastacus leniusculus</i>	<b>American</b>	15 – 30cm	Bluish- reddish brown; smooth; 2 pair ridges behind eye sockets. Spines absent carapace	Smooth; bright red	<b>Aggressive, invasive.</b> Streams, canals, rivers, reservoirs, quarries. Extensive burrowing	England (south), Wales, Scotland
<b>Turkish; narrow clawed</b>	<i>Astacus leptodactylus</i>	<b>Eastern European</b>	15 – 30cm	Pale yellow/ green. 2 pair ridges behind eye sockets. Rough carapace	Long, narrow; Same colour as body	<b>Docile, invasive.</b> Still waters: lakes, ponds, rivers. Non burrowing	SE England, Midlands
<b>Noble</b>	<i>Astacus astacus</i>	<b>European</b>	<15 cm	Brown, smooth. 2 pair ridges behind eye sockets. Developed carapace	Rough; dull red	<b>Docile, Invasive</b> Streams, rivers, lakes and reservoirs	SW England
<b>Red Swamp</b>	<i>Procambarus clarkii</i>	<b>American</b>	10 - 15cm	Red -reddish brown. 1 pair ridges behind eye sockets. Carapace rough	Spiny top; red all over	<b>Aggressive, invasive.</b> Still waters: lakes, canals. Adaptable	South England, London catchment .
<b>Spiny cheeked</b>	<i>Orconectes limosus</i>	<b>American</b>	>12 cm	Pale brown – black. Brown stripes top tail. 1 pair ridges behind eye sockets. Spines on carapace	Pitted; smooth touch	<b>Aggressive, invasive.</b> Streams, rivers, lakes, reservoirs.	Midlands, E England
<b>Virile</b>	<i>Orconectes virilis</i>	<b>American</b>	>12 cm	Brown. 1 pair ridges behind eye sockets. Developed carapace	Broad; flat-tened; pale, yellow warts	<b>Aggressive, invasive.</b> Canals, rivers, lakes. Non burrowing	River Lee catchment London

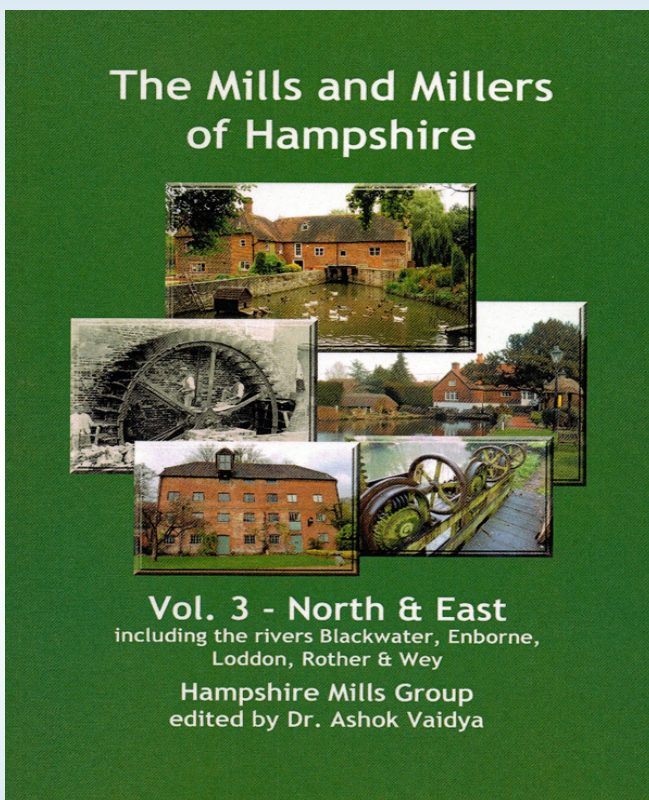
(From Buglife 2013; Environment Agency 2014) Kevin Stevens



## Bookshelf

**The Mills and Millers of Hampshire Vol. 3 North & East including the rivers Blackwater, Enborne, Loddon, Rother & Wey. Edited by Dr Ashkov Vaidya, Hampshire Mills Group, 2013. 171 pp., ISBN 978-0-95690-343-3.**

[www.hampshiremills.org](http://www.hampshiremills.org).



E-mail: [millsbook-three@hampshiremills.org](mailto:millsbook-three@hampshiremills.org). Can be ordered from bookshops.

This is the last of the series on Hampshire mills. There is a useful map showing the county's rivers with the chalk hills north of Alton being the water shed dividing North East Hampshire drainage from the rivers in the rest of the county. This area is part of the Thames catchment with the

exception of the headwaters of the Rother in Liss and Petersfield that flow south to drain into the English Channel in Sussex.

Mills are then listed by location in alphabetical order and given a number reference on the map and this is the sequence in which they appear in the book, river by river. Some of the mill buildings are still intact, others have gone but wheel-pits may remain. An individual mill may change its name through time so the various alternatives are given on the page for that mill. Listed for the Northern Wey are: Alton: 32. King's Mill, 33 Anstey Mill, Holybourne: 34 Upper Neatham Mill, 35 Lower Neatham Mill, Froyle: 36. Wyck Mill (or Mill Court), 37. Froyle Mill, Bentley: 38. Isington Mill and 39. Groveland or Bentley Mill. Nos. 40-51 are on the southern Wey and 52-56 on the Rother.

As in the previous books there is a general introduction to the work of the Hampshire Mills Group, simplified structure and working of a watermill and a glossary of milling terms followed by individual accounts of the mills. References to source material are given at the end, directed through superscript numbers in the text. Unfortunately this misses out a great deal, especially for King's Mill, Alton with the fire in 1984 and clearing the site prior to redevelopment for flats in 1989. The spare space could usefully have been used for a photograph of the mill in the early years of the last century. The modern photographs of the mills were taken in 2012-13. Various points coming out in the stories of the mills and the millers include bankrupts, disputes for holding back water and the decline of milling in the community.

***June Chatfield***



## Bookshelf

**Britain's Freshwater Fishes**  
by **Mark Everard**,  
**Princeton University Press, New Jersey, USA and WILD Guides Ltd, Old Basing, Hampshire, 2013.**

**144pp. ISBN 978-0-691-15678-1**

*Mark Everard* introduced this book when he gave a talk to the **Wey Valley Fisheries Consultancy** earlier this year. He is a professional biologist and author as well as a keen fisherman and with this background we have a really interesting and informative book that is lavishly illustrated with colour photographs.

He clearly has a good understanding of and sympathy for fish. The introductory section includes life cycles, habitats, identification to family, alien species and a glossary of terms.

Each species is given at least a page with specific information on identification (not always easy as they hybridize), ecology and conservation. A box feature in each entry gives conservation status, abundance, habitat, size, weight and hints on identification. At the end space is given to fish that were once thought of as separate species and illustrated in 19<sup>th</sup> century books but a status no longer accepted. Thence follows some pages on legislation, conservation, problems with invasive species, fish closed seasons, catch and release, stocking and further reading.

This attractive book is fully recommended for naturalists as well as fishermen.

***June Chatfield***

