The Northern Wey Trust

Number 36

Membership Newsletter

Autumn 2010

Editorial

This summer there has been field work on the river with the Conchological Society of Great Britain and Ireland on the northern Wey at Froyle, attended by 18 people and recording around 40 species of water snails and mussels. The report on this is scheduled for the next NWT Newsletter. This issue includes report of some river dipping in Flood Meadows with the Alton Natural History Society. Water levels in the upper reaches of the Wey have held up well this year, although the flow through Alton has stopped (30 October) and much bare mud is exposed on the river bed which is dry upstream from the bend in Flood Meadows.

Again this year we congratulate the Alton Society's Environment Group, led by Martin Gibbs, at Flood Meadows, whose entry was submitted by Alton Town Council, received a Silver Gilt Award in the South and South East in Bloom competition for their volunteer work in the meadow. We also congratulate the Alton Society on their 40th anniversary: they are holding an exhibition in the town on 13th November. (www.altonsociety.org.uk) As joint winners of the Alton Society Award for Outstanding Services to the Town we congratulate Greg Burt, Deputy Town Clerk and Tony Cross, Curator of the Alton museums.

Alton and district members will have been following the developments proposed for the Curtis Museum and Allen Gallery where Hampshire County Council is proposing cuts to the Museums Service budget that will make all staff at these two museums (together with



Bull reflected in the water at Bentley. Phot: J. Chatfield

Rockbourne Roman Villa and Basing House) redundant as from 31 March 2011. Local people organised a public meeting at which officials and Councillors from HCC were invited to put their case and this was attended by about 400 members of public. Further details on the website www.savealtonmuseums.org. The two museums and their staff play an important part in interpreting the history of the northern Wey, documentary resources, river dipping for children and display space for artists and photographers aesthetically inspired by the river, as well as welcoming visitors to the town.

In October I gave a talk on the River Wey and the Northern Wey Trust to a meeting of the Farnham Rotary Club. Enthusiasm for our activities there will hopefully lead to reconnections with the Surrey stretch of the river after the sad loss of Bill Tichener. A walk in the Farnham area of the river is planned.

June Chatfield Acting Chairman and Editor



newsletter

This newsletter has been compiled by Dr June Chatfield. Any news items or other features of interest should be sent to June Chatfield, Anglefield, 44 Ashdell Road, Alton, Hampshire GU34 2TA or to the Secretary by e-mail: glovermgr@aol.com



Sunday 9 January 2011 10am–12noon

Borelli Walk and Gostrey Meadow.

Meet on the road bridge between the two near Hickley Corner Leader: June Chatfield (Tel: 01420 82214)

Subscriptions

Adults: £5 Family: £10 Corporate: £25 **Treasurer/ Membership Secretary:** Jaqueline Martin, 15 Finches Green, Alton, Hants GU34 2JU. **Cheques payable to:** The Northern Wey Trust 2

Good Ecological Status of Inland Waterbodies

This is a recent article by Keith Alexander, Garth Foster and Neil Sanderson in the June 2010 issue of British Wildlife on pages 236-332. It starts by pointing out that "Riverbanks are amongst the richest places for wildlife." By bringing in river flood plains as well as the watercourse you have a complex and dynamic mosaic of habitats such as seasonally flooded fields that are becoming rare in the homogenised modern countryside. The authors postulate on what the landscape would have been like following the last Ice Age, with wild cattle and boar roaming the countryside and their effect on the riverside habitat as they went to drink the water. With the settlement of humans and the beginning of farming, the large mammals were domesticated, but the main damage to wildlife habitats in the river flood plains appears to have been in the last 60 years of intensive farming. This has brought increased stocking density of flood plain grasslands, use of fertilisers for grassland "improvement" and more obvious poaching of riverbanks and eating by cattle of bankside vegetation. Soil and bank erosion is also a recent concern.

As a result there has been a move to exclude livestock from river courses from a concern over faecal contamination of the river that in some cases is a water supply too. This article reexamines the position of farm animals and rivers. It then considers the European Union Water Framework Directive (D2000/60/EC) requiring all inland water bodies to achieve "Good Ecological Status" by 2015 (less than 5 years away!). A response in the UK has been to fence off river banks and isolate them from neighbouring landuse. It poses questions of what impact will fencing have on biodiversity? Has any ecological impact analysis taken place? How much consultation has taken place and how do interested parties get access to do this? It uncovers a range of issues on soil erosion affecting sediment loads and agricultural products entering water (such as silage slurry and veterinary medicines). Monitoring work has taken on water quality and biological indicators but they do not take on the land animals and plants that use waterside habitats. And what do we take to be "pristine condition"? Lots of questions to ponder.

One of the lessons from palaeoecology is that there is no such thing as a stable state.... and the good ecological status is an engineering one, so perhaps we need to go for integrated catchment management. The latter has a familiar sound from some of the LEAP projects we have been involved in and the current Environment Agency approach.

Also a complicating factor now is the extent of bank reinforcement and flood alleviation work that has modified most water courses. Here on the northern Wey we are fortunate in having a river that, apart from mills and the odd water meadow, has generally been allowed to meander across its rural flood plain. This is well demonstrated when viewing the Wey from the train on the raised embankments between Alton and Farnham. Yes. there are flood defence systems in Farnham but there is also good river bank alongside them in Gostrey Meadow and Borelli Walk and in the Farnham stretch, where there are no cattle grazing, the bankside vegetation can flourish. This is not fenced off.



Cattle in the river at Bentley. Phot: June Chatfield

The British Wildlife article explains the way that wild herbivores would use rivers to drink and for lush standing vegetation on the banks to feed on, together with selective browsing on trees and shrubs. And it is the large herbivores that created and maintained open habitats in the wild in the first place. Modern farming has the problem of heavy stocking rates that require high fertiliser input and supplementary feeding of animals to work, together with routine veterinary dosing (for worms), but even parasite management can benefit from a pasture management approach to reduce the dependence of drugs.

Wildlife benefits

Fencing of riverbanks, whilst helping the tall dense emergent vegetation, can exclude many smaller plants that cannot compete, especially in high nutrient situations that lead to dense dominating communities of stinging nettles or Himalayan balsam. In nutrient-rich conditions from intensive modern farming the woody plants also prosper, so closing in the habitat. Fencing essentially can exclude management from the bankside vegetation while light trampling and grazing is more beneficial to wildlife. Survey work on the River Itchen in Hampshire (also a chalk stream) has shown that invertebrates and insects were best in unfenced riverbanks and pasture grassland with few species of note on the fenced sites. There was a similar result with bank vegetation on Winnal Moors, Winchester, and they even suggested that fencing could result in loss of BAP

(Biodiversity Action Plan) species like the Hairy Click Beetle. Buffer strips also came in for discussion in a box feature in the article.

Angling

The final section considers a major use of rivers for angling and here there is also an economic incentive. The anglers in general were in favour of fencing and this is one of their targets for river restoration.

A general conclusion reached was that rivers should not all be fenced and greater research and monitoring is needed on the effect of fencing and biodiversity. Fencing needs to be targeted just for sections where the current farming system is damaging. It is thought that the integrated approach alongside the EU Directive can give progress in achieving good ecological status together with contact between the different interest groups using the river. This sounds like LEAPs again.

The riverbank is a complex link between the land and aquatic habitats and many animals use both. Many insects like dragonflies, water beetles, caddis flies and mayflies have their adult life on land but spend several years as larval stages in the water.

British Wildlife is obtainable from The Old Dairy, Milton-on-Stour, Gillingham, Dorset SP8 5PX Tel: 01747 835511. Email: enquiries@britishwildlife.com. Single back copies £4 (3 issues £3.50 each). It is an excellent bimonthly publication with very informative articles on recent data. £19.95/year direct debit, £20.95 other payment methods.

Galls on Lombardy Poplar at Farnham

In September 2010 twigs of Lombardy poplar that had been blown off a tree in Gostrey Meadow by the River Wey in Farnham showed a large number of petioles (leaf stalks) that were spirally twisted and swollen. This gall is caused by an aphid. Looking up in the foliage of the tree, many more were seen in situ but out of my reach. They are Pemphigus spyrothecae that matures and releases aphids from August to November. The gall occurs on Black Poplar Populus nigra or its hybrids. Lombardy is a cultivated variety of fastigiated poplar and so carries the gall.

A recent observation by Michael Demidecki of the British Naturalists' Association in another part of the country was a host of the introduced Harlequin Ladybirds waiting to pounce on the mature aphids as they emerged from the gall.



Spiral gall on poplar at Farnham. Phot: June Chatfield

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Guide book walk from Farnham to Waverley

Continuing on from Farnham on 4 June 2010 that was a very hot day, (in contrast with our previous walk see NWT Newsletter No. 35), June, Gill, Jacqueline and Rosalie followed the marking for the North Downs Way from the bypass to a trackway behind the BP garage that ran parallel to the northern Wey at Snayleslynch Farm. Greater Celandine was in flower (yellow juice), foxgloves in bud, buttercups in the picnic meadow behind the BP garage, hemlock water dropwort on the river bank and stream water crowfoot in the river. Animal life in this stretch included speckled wood butterfly basking in a sunny patch in the track, oak apple galls made by a gall wasp and many recently emerged beautiful and banded demoiselles or damsel flies on the riverside vegetation that we were to see in abundance later downstream. Mole hills were evident in mown grass by the river bank at Snayleslynch but we came across a dead one on the track at The Kiln. This was unusual in being pied, with large ginger patches of fur. At The Kiln we left the riverside to continue the footpath under the railway arch and alongside a large water meadow. The river, after flowing behind The Kiln, makes a sharp right angle bend changing its course to run south towards High Mill: this is the "elbow of

river capture" telling the story of the river's past history when the northern Wey once flowed north from Farnham to join the Blackwater, its path being intercepted by a tributary of the Wey that was eroding upstream from Tilford. Once it cut into the northern Wey, the greater gradient deflected the water down to Tilford to join the Wey instead of the Blackwater. The bend is easy to see from the London train as it leaves Farnham giving an overhead view of this part of the walk from the raised embankment.

Under the railway arch horses were grazing in the rather dry water meadow. To the right of the path is a steep wooded bank cutting into the Folkestone Beds of the Lower Greensand and the acidic soil is indicated by bracken, sweet chestnut and certain mosses. This section of



Hard fern above northern Wey at Waverley. The wide fronds make food and the tall narrow ones produce spores. Phot: June Chatfield



Timber-framing and jetty of Snayleslynch Farm. Phot: June Chatfield

river through the Folkestone sands has a different character of landscape compared with the Hampshire stretch on chalk and Upper Greensand as we shall see later on the walk. The North Downs Way goes through Surrey and Kent and there was a finger post giving 153 miles to Dover, but not for us today.

Mills cause considerable changes to river courses and this is so of High Mill. Our footpath left the North Downs Way to cross the river by a footbridge allowing sight of a range of river and bankside plants and then across in front of the mill buildings to join a track that we take right on a level path parallel with the river to Moor Park House. A feature here is the use of dark ironstone or carstone from the Folkestone sands used for a wall. The ironstone was formed by mineralisation long after the original sands were laid down under the sea in the Cretaceous period over 65 million years ago. The track crosses Moor Park Road to Moor Park House (see Darwin on the Wey in NWT Newletter



Waverley Abbey ruins. Phot: June Chatfield

No. 34) now being renovated, where there are some interpretation panels here and further along the path. The track then goes through an avenue of trees showing regrowth after storm damage and climbs steadily up the river cliff through a beech woodland. Interpretation panels point out pill boxes built to defend against perceived risks of invasion up the river in World War II. From the high vantage point are glimpses of the river below and the Surrey Wildlife Trust nature reserve (open access) in a wet meander loop of the river. The track becomes wet as spring seepages from the sandstone emerge to flow down to the river giving rich growths of damp-loving ferns and liverworts and a cave, known locally as "Mother Ludlam's Cave"

mentioned in William Cobbett's Rural Rides in 1825. Today there is a grill across the entrance as it is an important bat roost.

Reaching the road at Waverley, going past the Mill House and on the bridge across the river, we ended the first part of the Farnham-Tilford stretch by exploring the ruins of Waverley Abbey (a National Trust open access site) that was built in a meander loop of the river. Here again there are interpretation panels. Waverley Abbey was built in 1128 and was the first Cistercian House in Britain. Much later history comes in again with another World War II pill box and tank obstructions by the river bank. The river here has a steep wooded bank opposite (the continuation of the walk goes up this) and bankside vegetation



Banded demoiselle. Phot: June Chatfield

Concrete war defences at Waverley. Phot: June Chatfield

that was alive with the fluttering of two species of damselflies that we had met earlier in the walk. Retracing steps from the abbey ruin and viewing the lake of Waverley House, we saw mute swans at war with Canada geese and two young families of goslings in combined crèches as they are in a similar situation at King's Pond in Alton. We continued to Tilford on 22 September (to follow in the next NWT Newsletter).

June Chatfield



A field meeting of the British Bryological Society on 5 November 2010 found 44 species of mosses and liverworts at the Moor Park Nature Reserve and Waverley Abbey ruins.

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Geese, Swans and other Waterfowl at King's Pond

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The end – swan upending at King's Pond. Phot: June Chatfield

This year we did not succeed in lining up an available lightweight boat, people and geese on nests to oil the eggs of the Canada geese at King's Pond. High water levels led to only three nests. The one on the small island where a goose was sitting must have got waterlogged and chilled from heavy rain and rising pond water as no goslings resulted. Hopes of the same result on the large island were dashed with a huge hatching from one nest with first 9 goslings and the next day 11 that I suspect came from the nest by the willow tree on the large island, normally the first to appear. Some days later there was a more modest hatching of seven from the nest at the other side of the island. The mute swan cob, who had his own nest with eggs on the large island too, was on the offensive chasing Canada geese on the water as well as his two offspring from last year that had to stay at the mill end of the pond. Interestingly, the two pairs of Canada geese that had successfully hatched young pooled their resources and the two families went round in a crèche. The two clutches were easily told apart by size, then feather markings until, by 25 June, both were well grown and developing adult markings. The two families continued to go around in a group all summer.



Swans at King's Pond. Phot: June Chatfield

Just two cygnets hatched from the swans'nest while the two offspring from last year, now with adult white plumage, remained on the pond and provided they stayed away from the large island, were not challenged whilst the cob was too busy chasing the geese. They took to roosting on the edge of the pond near the weir. In summer of 2009 one of the two cygnets was less advanced and independent than the other and stayed closer to the pen for longer. It transpired that this one was not so secure on its legs on land and by May 2010 walked with difficulty and then stayed on the edge, apparently not walking at all. Several of us noticed this and made independent calls to the RSPCA who came and took both of last year's swans away. This is a repeat of a scenario in 2009 from the 2008 hatchings. I am



Canada goose families investigating pond visitors at lunch. Phot: June Chatfield

wondering whether there is a genetic problem with the current pair of King's Pond swans. In a previous year the pen was attacked by vandals and had to be removed by the RSPCA. The next season the cob remained on the pond with the previous generation unchallenged and helping in the battle with the geese. It would appear that the next season he took one of his daughters as a replacement mate, in which case if there is a deleterious recessive genetic trait, it would be expressed in some of the offspring. The swans are not ringed so we cannot be sure of the situation.

June Chatfield



Swans and the two 2010 cygnets in the car park. Phot: June Chatfield

More Impressions from Down Under A Field Trip to the River Wey by a Novice

In May 2008, while visiting from Australia, I was lucky enough to be invited to accompany June Chatfield and Amanda Green on a field trip to the River Wey below Holybourne. This type of investigation was something that I had never ever done before so I really had no idea what to expect. Although now resident in Australia, I grew up in Alton, but had never been to this part of the river before, so I had a surprise. The river looked quite deep in places and flowing fairly swiftly as we walked along the footpath from Upper Neatham Mill Lane. The first exercise was the rate of flow. June and Amanda threw some sticks in, and I called out when they passed me 10 metres downstream, the time being

taken was recorded in seconds. I was quite nervous in case I missed one, but we had a good supply of sticks.

I saw some quite big fish in the water [Ed. Brown Trout] and lots of thick green weed [Ed. probably Starwort]. The riverbank was lined with plants and grasses which June identified although the grasses all looked the same to me.

The next interesting bit was on a small wooden bridge where a small tributary from Holybourne Pond joined the River Wey. June hopped in and brought out some stones which she placed in a shallow white tray of water. Well, she poked at the stones and all sorts of creatures began to appear – little tiny things wriggling and crawling about. Looking through June's hand lens I saw snails and larvae and all sorts of weird little things [Ed. probably the flatworms that occur there], including amazingly tiny limpets on the stones. I'd only ever seen limpets on the beach and had no idea such things inhabited freshwater streams.

What an eye opener it was to see these things and learn what they were and it was such fun. I resolved that on my return to Adelaide I would go to a local creek and have a look at the watery residents, although I won't be fortunate enough to have an expert beside me to teach me about them. Never mind there is always the library!

Carole Williams

Alton U3A go Down Your Wey: a video

A group of enthusiasts from the U3A in Alton have produced a video on the Hampshire stretch of the river after previously consulting with the NWT committee. We have been sent a copy. It is not for sale, but contact the Secretary if you would like to borrow this DVD to play on your computer. The video includes an informative commentary and subtle background music, complementing delightful scenes of the river, its wildlife habitats and local industries – past and present – as it travels from its source in Alton to the Hampshire/Surrey county boundary.

Census 2011

We have received an e-mail from Capita who are recruiting people (paid – part-time and full-time) to help with the 2011 national census on 27 March 2011. There are opportunities for census coordinators, special enumeration deliveries to organisations (hotels etc) and collectors for forms from households. They are recruiting now. For details and applications visit www.censusjobs.co.uk. 8

Wardening the Holy Bourne



Amanda Green has submitted wardening reports from 6 July 2008 – 10 February 2009 for The Bourne by the footbridge on the path, and the main river just downstream of Upper Neatham Mill. General condition of the river is covered in both stations but accessibility has limited the detailed animal sampling to the small tributary stream.

The Bourne had clear water on all occasions except 7 August 2008 when it varied between slightly and very murky due to cattle damaging the bank along one side from the railway line downwards. There was also water held back and pooling due to vigorous growth of cresses that covered the width of the stream in places. Broken banks were noted on the next three visits. The height of the water varied with the highest level being on 10 February 2009 due to snow melt-water and rain run-off while the lowest level was in



Amanda Green on the river bank. Phot: Gill Glover

October 2008. On all occasions the flow was swift varying from 12 seconds/metre on 6 July 2008 and 10 February 2009 to 14-17 secs/10 m, apart from 7 August 2008 with a slow flow of 54 secs/10 metre due to obstruction by cress growth.

In comparison the main river was only clear on one occasion (12 October 2008) and very murky on 9 September 2008 and 10 February 2009, but its bank was intact throughout as farm animals do not have access to the river bank below the public footpath. Water flow was distinctly slower at 29-48 secs/10 m in the main river except for 10 February 2009 when there was a heavy discharge due to snow meltwater and rain. Snow that week almost cut off Alton's road and rail links. Amanda also reported a sewage leak from Holybourne on 12 June 2008 that did not help the condition of the river – not the first time that this has happened in this location. The steady flow of clean spring water from The Bourne is obviously beneficial in diluting such pollution.

The main river in this stretch has steep banks, deep water and dense vegetation making it unsuitable for solo investigation, so the shallow Bourne was used for the animal studies following a preliminary visit in May 2008 (see article by Carole Williams). The Bourne proved rich in

freshwater life with cased caddis larvae, water shrimps (Gammarus), fly larvae, swimming mayfly nymphs and river limpets consistently present and abundant (usually 20+). The limpets are particularly indicative of clean cool water. Also found in smaller quantity were stonefly nymphs (not common in lowland streams), bottom mayflies, water beetles, water mites, water snails, leeches, segmented worms and flatworms but with flatworms and stonefly nymphs absent in the summer July-September samples. Other invertebrates included blackfly (Simulium) pupae attached to stones and two hydra (related to jellyfish). Bullhead or miller's thumb fish



Snow fall in February 2008 that caused high water levels and faster flow in the river Wey on melting (Paper Mill Lane, Alton). Phot: June Chatfield

were found in The Bourne on four occasions both as adults and fry with 13 and 16 respectively in July and September 2008. Although abundant and common along the length of the northern Wey where they are important food for kingfishers, but they are not so common on the Continent, making our British populations of bullhead of international conservation importance. Birds observed along the river at Holybourne included grey wagtail and grey heron. Flowering plants noted were water mint, common fleabane, purple loosestrife, hedge bindweed, buttercups, ragwort, greater willowherb, meadowsweet, watercress and fool's watercress.

We are very sorry that Amanda's health has led to her giving up the wardening of this stretch but thank her for the very good records that she kept. Is there a volunteer out there who would like to continue the good work on this stretch of river? If so, please contact the Secretary Gill Glover Tel: 01420 88600 or on email glovermgr@aol.com. We can give training.

June Chatfield



The rushy field along the Wey near Upper Neatham Mill. Phot: June Chatfield

More Weyside fungi

In the last NWT Newsletter (No. 35) we reported on fairy rings of the toadstool Marasmius oreades on the mown grass outside Coors brewery in Alton. The dry summer of 2010 inhibited their appearance in July when the grass was brown and dry but following rain in September, fruiting bodies of the two rings were again above ground. The recent rain had caused a lush growth of green grass, but conspicuous was the bare ring immediately behind the toadstools where the nutrients had been exhausted.

Another ring of a different fungus – the Bearded Milkcap (Lactarius pubescens) was seen on 12 September on the grass verge outside Waterside Court in Paper Mill Lane near Alton station, very close to the river. It surrounded a birch tree and the ring was 1 metre out from the edge of the canopy demonstrating where the operative roots of the tree are for absorbing water and minerals. This fungus like many others forms a beneficial partnership (mycorrhiza) with the fungal hyphae wrapping round the root tips and extending their effective area. It is possible that the fungal culture may have been added when the tree was planted. One word of warning, although the fairy ring toadstool outside Coors is edible, the bearded milkcap is poisonous and it looks rather like a common mushroom to the uninitiated. Milkcaps are distinguished by a usually white milk-like liquid exuded when the flesh is broken.

June Chatfield



Bearded milkcap associated with birch. Phot: June Chatfield

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Field meeting of Alton Natural History Society in Flood Meadow

The Alton Natural History Society held a field meeting to investigate the freshwater life of the River Wey in Flood Meadow and old watercress beds at Alton on the evening of 5 July 2010. In its upper reaches, less than a mile from the spring source, the Wey is a winterbourne, drying up for part of the summer, and this influences the range of species. Whilst some like water snails (Valvata cristata, Lymnaea peregra or now Radix balthica, Anisus vortex, Bathyophalus contortus) and pea mussels (Pisidium) are a constant part of the fauna downstream, but here they are able to hide in the dried mud protected by their shells in summer drought. In Flood Meadow habitats there are more ostracods. water lice (Asellus aquaticus) and the introduced pond shrimp (Crangonyx) that are more indicative of still water. The pond shrimp is smaller and grey and swims upright rather than on its side as the larger river shrimp normally does. Frogs and newts also favour still water for breeding and the success of this site was evident in the abundance of well developed newt tadpoles and frog tadpoles

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Photographing the tadpoles from Flood meadow. Phot: June Chatfield

with four legs evident. The limited numbers of fish and water birds that are normally predators of frogs and newts are not as evident at Flood Meadow as they are in the river downstream on the other side of



Newt tadpoles, probably Smooth Newt. Phot: June Chatfield

Alton. The white tray shown in the photograph is ideal for examining the catch when living water creatures give their presence away by movement.

June Chatfield



Frog tadpole well developed with four limbs but with the tail not yet resorbed. Phot: JuneChatfield

This newsletter is available in colour to members as a PDF. If you would prefer to receive your copy electronically, please email the Secretary, Gill Glover at glovermgr@aol.com

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