

Welcome

Hello and welcome to our Spring 2016 edition of the Newsletter.

First of all thank you to everyone who has renewed their Friends of the Meadows Memberships. It was also good to have a number of you take advantage of setting up a Standing Order.

I want to also say a big thanks to the Corporate donations, noting especially Urenco UK at Capenhurst.

After a quiet Winter, the Watersports Hub project has begun to move ahead. We have been meeting with representatives of the Council and other interested parties such as the Royals and British Rowing to ensure that our views about the proposed development are known. Architects have been appointed and it is expected that a planning application will be submitted later this year. We'll keep you informed.

Meanwhile, other work progresses on the Meadows and we keep in regular contact with Amanda Pritchard the Countryside Ranger about the upkeep and management. An article on recent activity is included in this newsletter.



Rachel Cross Chair

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Meadows Management

Amanda Pritchard, Countryside Ranger, reviews some of the recent work

We managed to pollard the big willows on the bank opposite the Sailing Club and a few of the smaller multi-stem willows working around the high water levels as in the management plan; but now bird nesting season is underway, no further work will be carried out there until the Autumn/Winter.



Hedgelaying with volunteers from Friends of the Meadows progressed very well and we have been delighted with the results. Kevin Feeney from the Cheshire Wildlife Trust took other volunteers there to do some more work. Again any further work on this will now continue in the autumn/Winter.

The work we did over the winter with the ditches seemed to have worked and they were full of water on each visit I made, sometimes with a heron carefully studying them! More in the autumn...

We've cut back a good area of the gorse, both on the lower terrace and the upper terrace along the edge of the house on Elizabeth Crescent. The arisings were chipped on the lower level and deadhedged on the upper level. We can look at this again before the autumn to plan any other areas where we could create glades if this is deemed beneficial. A couple of young sycamores were also felled from the top terrace.

The new bench has attracted a lot of activity and the ground around it quickly eroded. A new base has been installed around the bench by Kevin at Cheshire Wildlife Trust and the regular volunteers. This may need topping up once it has settled – so I will keep an eye on it.

Over the spring and summer season there are a number of jobs that I hope to carry out on the meadows with the volunteers. These include topping up the potholes in the centre path and using the cut willow once it has died off to pin into the bank where it is showing signs of erosion. In addition there will be further fencing repairs, particularly opposite the Sailing Club. We will also be staining the gates and fencing from Bottom's Lane entrance.

Otherwise, the intention is to pretty much leave the area to the wildlife for the breeding season to cause as little disruption as possible.



Botany Evenings on the Meadows

Last year's botany evenings proved very popular and Julie Rose has been encouraged to lead more this year during the summer months!

They will take place on the second Tuesday evening of the month starting at 7pm and finishing when we've had enough or it's dark. As last year, we'll start them in different places each month to visit different habitats. Beginners are very welcome: a handlens, weatherproof footwear and maybe insect repellant will be useful. I hope we can explore different families of plants to help everyone, including me, to improve our ID skills - Julie



Meet at Bottoms Lane Entrance

Do a quick whizz round Gorsty Bank, look at trees, look for saplings to replant, then down onto the meadow for sedges and grasses.

Tuesday 12th July

Meet Lower Park Road entrance.

Quick look at Barnfield - concentrate more on damp patch nearer river; count hedge species, then back onto pond area, count orchid spikes and look at ditch. flora.

Tuesday 14th June

Meet by the ferry.

Another look at the willow carr by the river bank nearer to ferry, and check grassland species.

MEADOWS

Tuesday 9th August

Meet at North West Gate by the riverside path (White Gate entrance)

Explore the river bank opposite Deva Terrace.

The River Dee (Afon Dyfrdwy)

Peter Hadfield traces the river from source to estuary



The River Dee rises in the mountains of Snowdonia National Park, to the west of Bala Lake (Llyn Tegid). After flowing through the lake it runs through a broad valley to Corwen; it then tumbles eastwards through the spectacular Vale of Llangollen before breaching the Welsh foothills. near Bangor-on-Dee, and meandering northwards through the Cheshire plain to its tidal limit at Chester Weir.

During the Summer it gently flows around The Meadows and down to the Groves; in the Winter it flows more strongly often overflowing its banks – what could be more natural? Nothing could be further from the truth: the River Dee is far from natural; it is one of the most highly regulated rivers in the World.

The Weir (listed Grade 1) by the Old Dee Bridge was constructed in 1093 by Hugh Lupus First Earl of Chester for St Werburgh's Benedictine Abbey (now Chester Cathedral). It is constructed from sandstone with a sloping spillway of large rectangular stones and is 120 metres long; it was also initially also used as a causeway. It was designed to provide the necessary head of water for the medieval Mills of Dee; by 1270 there were 6 millwheels and trains of machinery. During the 13th century the Mills of Dee were amongst the largest and most valuable in England but by 1910 all the mills on the north side were demolished and that on the south bank by c1970. The weir was restored in the early 20th century to serve the City Council's hydro-electric power station which operated from 1913 to 1939, and there are now plans for a new hydro-electric plant.

Much further upstream bevond Llangollen, the Horseshoe Falls at Llantysilio are a large horseshoe-shaped weir 140 metres long designed by Thomas Telford; this allows water from the River Dee to feed the Llangollen Canal. Telford also installed sluice gates at Lake Bala to control the flow of the river. This work was completed by 1808. The Falls are now part of the Pontcysyllte Aqueduct and Canal UNESCO World Heritage site.

Water flows down the Llangollen Canal and feeds the Hurleston Reservoir situated close to the junction with the Shropshire Union Canal. This reservoir provides water to maintain water levels in



the Shropshire Union Canal and drinking water for local homes and businesses.

Water has always been extracted from the River Dee for a multitude of purposes. The water demands of Northwest England including Liverpool and the Wirral, far exceed the locally available sources of clean water and the Dee has been used to provide much of this requirement. The Alwen Reservoir was constructed from 1909 - 1921 supply water to to Birkenhead; it is now operated by Dwr (Welsh Water). The Alwen Cvmru Reservoir on Mynydd Hiraethog (Denbigh Moors) now known as Llyn Brenig was completed in 1976.

Llyn Brenig is only used during drought conditions when the capacity of Llyn Celyn and Llyn Tegid are no longer able to maintain the flow in the River Dee.

The Dee Regulation Scheme allows for abstraction of nearly two hundred million gallons of water each day by United Utilities, Dee Valley Water, Dwr Cymru (Welsh Water) and the Canal and River Trust.

In addition to this the scheme is required to maintain a minimum flow over Chester Weir which neatly brings us back to where this article started.

In the late 1950s the Bala Lake Scheme was promoted to increase the available water for abstraction from the River Dee. Telford's original sluices were by-passed, the natural lake outlet was lowered and new sluice gates were constructed downstream of the confluence with the Afon Tryweryn. This provided significant additional water storage capacity in the lake that could be released when the river level fell. An additional benefit of this scheme was a reduction in flooding events downstream.

As demand for water increased it was necessary to increase the storage on the River Dee; the next development was a new reservoir, now called Llyn Celyn. This was a deeply controversial construction project as the village of Capel Celyn and adjacent farmland was flooded. Work was completed in 1965. Water is released from the reservoir into the Afon Tryweryn which flows into the Afon Dyfrdwy (River Dee). Most of the water passes through a small hydro-electricity plant to supply green electricity to the National Grid.

The Afon Tryweryn provides facilities for international white water canoeing and rafting at the Canolfan Tryweryn (National White Water Centre) and water is held in reserve to allow special releases for these activities.

FRIENDS OF THE MEADOWS

Botany Notes Julie Rose looks at Purple Loosestrife

We can enjoy the long purple flower spike of this tall graceful plant during July and August down on the river banks. It likes the wet, where it coexists happily with the other native plants such as Willow, wild mint, and Meadowsweet.

It is a native of Europe and Asia and is in the family Lythraceae, order Myrtales. It has solid square stems, and long opposite stalkless leaves. Insects love it, for it provides late season nectar for butterflies, moths, bees and others which in turn feed birds.

Yellow-Loosestrife, (*Lysimachia vulgaris*) is superficially similar when not in flower, but it is part of the primrose family, with parts in fives. It has a solid round stem, the leaves may have yellow glands and are whorled in 4's as well as opposite.

In North America, Purple Loosestife was introduced by gardeners and beekeepers, rather like Himalayan Balsmam into this country. There, like Himalayan Balsam here, it is out-competing natives, damaging native ecosystems and costing money and effort to eradicate.

Purple Loosestrife has many vernacular names as you would expect from a showy widespread plant: Long Purples, Red Sally and sometimes Ragged Robin – which shows how confusing local names can be.

"My" Ragged Robin is the shorter, more delicate *Lychnis flos-cuculi*, which others may call Cock Robin or Cuckoo Flower.



Millais painted Purple Loosestrife when he depicted Ophelia and alludes to 'long purples' in the play Hamlet, although Shakespeare probably meant the purple orchid. In Act 4 Scene 7, Queen Gertrude, in her monologue reports that Ophelia had climbed into a willow tree, and then a branch broke and dropped Ophelia into the brook, where she drowned:

There is a willow grows aslant a brook,

That shows his hoar leaves in the glassy stream;

There with fantastic garlands did she come

Of crow-flowers, nettles, daisies, and long purples

That liberal shepherds give a grosser name,

But our cold maids do dead men's fingers call them.



January to April 2016

There are no entries for January and February this year, largely due to a period of inactivity on the Meadows, the like I have never seen before. Hopefully, the Spring and Summer will make up for it!

25th March

Chiffchaffs announced their arrival by singing below the Handbridge Allotments & also on Gorsty Bank. *(see photo below)*



30th March

A single bat species, probably a Pipistrelle was observed flying up and down the Bottoms Lane track at dusk. Pipistrelles were recorded at this very spot during the Bat surveys last year.

31st March

4 Sand Martin, the first of spring, flew purposefully across the Meadow without pausing to feed.

3rd April

In between being chased by a Chiffchaff that did not take kindly to the presence of a new arrival the first Willow Warbler of the year was singing on Gorsty Bank.

8th April

On a still evening the first Swallows of the year made their way across the Meadow. *Jon*

It is a few months since the last Goosander was recorded on the river so the presence of a male Goosander by the Weir made a welcome change from the growing numbers of Herons and Cormorants that fish here at this time of the year. A female was also seen on the 10th April flying with the male over the Old Dee Bridge.

9th April

A Blackcap singing on Bottoms lane track was probably a summer migrant and not an over-wintering bird. Wintering Blackcaps have been few and far between on the Meadow this year.

12th April

The first Sedge Warbler and Lesser Whitethroat were observed and heard singing from the scrub by the Horses Paddock below Belgrave Park. *Jon*

14th April

On the cusp of darkness a dark Owl quartered the reeds below the Horse Paddock. Possibly a Short eared Owl or

FRIENDS OF THE MEADOWS

maybe a Long Eared Owl. It was too dark to make a positive ID. *Jon*

16th April

The first migrating Common Sandpiper of the spring was seen from the path that overlooks the river on Edgar's Field.

17th April

Butterflies finally started to appear in good numbers a dozen Peacocks, 6 Small Tortoiseshell and a Comma were all out of hibernation. Small fish presumably minnows were observed in the ditch along Bottoms Lane track.

21st April

The first Common Whitehroat of the spring was singing from Hawthorn on the bank below Andrew Crescent and best of all 2 Redstarts, a stunning male in the

centre of the Meadow and a female in the hedgerow along Bottoms lane track.



Andy Ingham Meadows Log Recorder 01244 677135

Garden Open Day at Barrel Well Hill, Boughton

It's that time of the year again when Friends of the Meadows members John and Christine Browne open up their garden at Barrel Well Hill to members of the public under the National Gardens Scheme.

A spectacular terraced garden with views over the River Dee to the Meadows and Clwyd Hills. Uniquely, preferred method of arrival is by leisurely river cruiser from Chester. Informal cottage style garden on historic site by the Martyrs Memorial. Lawns running down to the river, prolific shrub and flower beds, productive vegetable patch and soft and hard fruit areas, springs, stream and lily pond. River cruisers leave the centre of Chester regularly and arrangements have been made that they will drop off and pick up garden visitors on their way up river.

Not suitable for wheelchairs or children under eight due to steps and unprotected drop into river.



Opening information

Saturday 25 June, Sunday 26 June (11am - 5pm). Admission £4.00, child £2.00. Home-made teas. Address: 150, Barrel Well Hill, Boughton, Chester, CH3 5BR