

FRIENDS OF THE MEADOWS

Newsletter 178

Winter 2011

Hibernation

In common usage 'to hibernate' means to pass the winter in a lethargic or torpid state. This broad use of the term hibernation encompasses many species of animals that use various strategies to cope with food shortage and cold stress.

Warm blooded animals need to prevent their body temperature falling below 35°C and have evolved various mechanisms for coping with cold stress: shivering generates heat by raising metabolic rate, using fur, fat or feathers reduces heat loss in extreme conditions, migration to warmer latitudes avoids the cold . Small mammals with a high surface area in relation to volume have a greater potential to lose heat, faced with prolonged periods of cold weather and food shortage they are presented with acute problems. Many mammals including mice, voles shrews and squirrels can tolerate hypothermia to a body temperature of 15°C when they may be referred to as being in a torpid state. This ability, together with the propensity to lay up food caches raises the chances of small mammals surviving a hard northern winter.



Some mammals have evolved the ability to reduce their winter core body temperature to the near ambient temperature yet spontaneously re-warm without recourse to an external heat source, this is true physiological hibernation. In Britain only bats, our native dormouse and the hedgehog exhibit the extreme physiological state of hibernation. Sometime in October the hedgehog that used to snuffle around your garden at night, no longer put in an appearance; she found a safe place, built herself a nest, a hibernaculum, in which to pass the winter and from a deep sleep entered a state of hibernation. This transition took place over several days and was characterized by profound changes. The hedgehog's heart rate dropped to between 3 and 10 beats per

minute, her respiration rate became greatly reduced interspersed with periods of apnoea, cessation of breathing followed by several deep breaths. The record for holding breath is 150 minutes for a hedgehog, though an average period of apnoea lasts 60 minutes. The hedgehog's body temperature may be reduced to $6^{\circ}C$.

No warm blooded hibernant can sleep for six months and arousal is frequent varying between species from 30 minutes to many hours. It is not unusual to see one of our deep hibernants, the hedgehog, fully active on a night of hard frost in the middle of winter. The stimulus for arousal may be internal such as a fall in blood glucose, or external such as a fall in ambient temperature to below zero.

Rather than viewing hibernation as a mystery we should regard it as one end of a continuum, at the other end is the normal rest-activity cycle characteristic of all warm-blooded animals including ourselves; in between are species that undergo various forms of torpor. Plants exhibit dormancy, insects exhibit diapause, fish and amphibians aestivate. The ability to hibernate confers considerable advantage to particular species in terms of energy expenditure and by conserving energy they are better able to cope with cold stress and food shortage.

Chairman's Page



A very Happy New Year to you all – here is the first newsletter of 2011, and it's a bumper issue which I hope you will find interesting. For those of you who were not able to get to the Annual General Meeting we have included copies of the winning entries for the photographic competition and a somewhat condensed version of the very interesting talk on the History of the Meadows, given by our Secretary Tim Finch. It was good to see so many of you at the AGM and EGM and to hear your views about what we should be doing.

We have started to plan our events and projects for this year and will be giving you more details and some dates for your calendars in the Spring issue of the Newsletter. If there is anything that you think we should be organising please let me know and we will add your ideas to the list. We also need articles for the next Newsletters so if you are able to contribute please send these to me.

Subscriptions for this year are now due and a renewal form is included with this newsletter. We hope that you will renew your membership and that you can persuade your friends and neighbours to join as well – new members are always welcome.

I would like to thank all the committee members who have agreed to continue and to welcome a new member Rachel Cross to the Committee. There are however still two vacancies which we would like to fill if we can. If you are interested in joining the committee or know anyone who you think might be interested please do contact me.

Peter Hadfield 01244 341378 or pete.hadfield@btinternet.com

An Old Man's Winter Night

All out of doors looked darkly in at him Through the thin frost, almost in separate stars, That gathers on the pane in empty rooms. What kept his eyes from giving back the gaze Was the lamp tilted near them in his hand. What kept him from remembering what it was That brought him to that creaking room was age. He stood with barrels round him -- at a loss. And having scared the cellar under him In clomping there, he scared it once again In clomping off; -- and scared the outer night, Which has its sounds, familiar, like the roar Of trees and crack of branches, common things, But nothing so like beating on a box. A light he was to no one but himself Where now he sat, concerned with he knew what, A quiet light, and then not even that. He consigned to the moon, such as she was, So late-arising, to the broken moon As better than the sun in any case For such a charge, his snow upon the roof, His icicles along the wall to keep; And slept. The log that shifted with a jolt Once in the stove, disturbed him and he shifted, And eased his heavy breathing, but still slept. One aged man -- one man -- can't keep a house, A farm, a countryside, or if he can, It's thus he does it of a winter night.

Friends of the Meadows Corporate Members

We would like to thank the following corporate members who have supported us during the past two years and wish them every success in 2011

Alfred Green, Chartered Accountants

Bithells Boats

Chester Boat Hire

Dee Valley Water

Homelet UK Ltd, Chester

Morris & Co, Chartered Accountants

Oakbase PLC

Urenco Ltd

Shell UK Ltd, Stanlow

Robert Frost

Friends of the Meadows Photographic Competition 2010



Winner - Peter Hadfield 'Sulphur Polyporus'



2nd Runner-Up Anna Prochazka 'A Winter Scene'



Runner-Up - T.Jenkins 'Flat Cap Fungus-Earls Eye Meadow'



Junior Runner-Up Ben Gregory 'Red Clover'



Junior Winner - Eve Ingham 'Frog in Green'

History of the Meadows

In Roman times the Meadows must have been a pretty unpromising plot of low lying boggy ground on the flood plain of the Dee. The medieval names for the area, King's, Earl's and Newbold's Eye, where eye means island, suggest that part of the land spent periods under water. The individual field names also indicate the wet nature of the land with names such as Bog Field, Bottom and Gorsty Bottom Meadow (bottom = water meadow). Not all the Meadows were boggy. An Archaeological Audit conducted in 1993 found evidence of arable farming on the higher land in the north western corner of the plot where ridge and furrow formations were observed. These ridges are caused by repeated ploughing which moves the soil to a central strip. Over the last 200 years the Meadows have become less wet with the flow of the Dee controlled, the building of a substantial embankment and drainage ditches on the field margins. Although many of these ditches have silted up, their outline can be seen on modern aerial photographs. Georgian and Victorian engravings show cattle grazing on the Meadows and that they were a popular venue for sporting activities with the Chester Regatta based both on the Meadows and on the opposite bank.

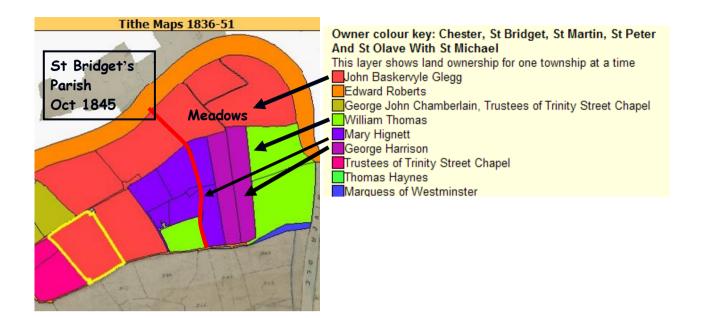


(i) Royals beating Nemesis of Manchester during the 1854 Chester Regatta © Cheshire West and Chester Records Office. (ii) 1870 view of Chester and the Meadows from beside Chester S&CC clubhouse © Chester S&CC

The Meadows ownership can be traced back more than 1000 years. In the tenth century they belonged to the crown, but from 1071 were administered by the Earls of Chester. The first Earl, Hugh Lupus, was given the land by his uncle William I. Hugh is believed to have been responsible for the construction of the weir to provide a constant source of power for the water mills near the Dee Bridge. Although the weir reduced the tidal flooding, it caused problems further upstream, hindered navigation and resulted in much unrest amongst those affected.

When the seventh earl died without any heirs in 1237, the land was reclaimed by the crown. However, in 1285 Edward I sold almost half the Meadows some 29 acres to a Surrey nobleman, Randle of Merton. The land remained in the hands of the Mertons and their heirs, the Gleggs of Gayton until the middle of the 19th century. Ownership of the other portion is less clear. Although it is known that Gilbert Gerrard acquired a section of the Meadows in 1556 from Sir Thomas Venables. This holding was passed on to William Gerrard and subsequently Gilbert Gerrard, who is recorded as having sold 30 acres to George Beverly in 1588 for £400.

The 1845 tithe map shows that most of the Meadows, and much of Queen's Park, was owned at the time by an heir of Randle of Merton, John Baskervylle Glegg. Smaller portions belonged to William Thomas, Mary Hignett and George Harrison. I am not sure of the precise date but in about 1850 the Meadows and much of the Queen's Park Estate were bought by three brothers, Samuel, John and Joshua Fielden. The Fielden's wealth came from a highly successful cotton spinning business based in Todmorden. They had already invested in railways and shipping and were looking for additional investment opportunities. In 1853, they began to sell plots of land for housing development in Queen's Park.



A portion of the 1845 Tithe Map for St Bridget's Parish © Cheshire West and Chester Records Office

The timing was immaculate. The value of the land must have increased following the erection of the first suspension bridge by Enoch Gerrard in 1852. The Fieldens bought an additional piece of the Meadows, Near and Bottom Meadow, in 1871 from Charles Parker, Cecile Parker and Richard Barton. They paid £1250 at an auction held at the Nag's Head (now Boot's Chemists) in Foregate Street in 1871. When Samuel Fielden died in 1890 his estate passed to his only son John Ashton Fielden, who gained ownership of all the family holdings including Queen's Park when he paid his uncle (John Fielden) £72,250 for his half share in 1890.

The purchase of the Meadows is a story of great persistence and tenacity by the City Council and Councillor H.F. Brown in particular. The Council first considered buying the Meadows for use as playing fields in late 1923. However the asking price was considered to be too high as JAF wanted to include the whole of his Queen's Park holdings which included the more valuable higher ground. In June 1925 the purchase was considered again, and in November the town clerk suggested that the land could be bought by compulsory purchase. He also reported that two citizens were willing to buy the land. The two citizens were Harry Faulkner Brown and his wife Louise Phyllis Brown. In January 1926 they drew up an agreement to buy the Meadows for "The mayor, aldermen and citizens of the city and county of the city of Chester." "For use as a public park recreation ground or lands for cricket and football or other games and recreations in perpetuity."

The discussions moved slowly forward, and by the end of 1928 negotiations were underway to purchase 64.5 acres of low lying ground, as a proposal to purchase the remainder of the high land had provoked a claim for compensation "greatly in excess of the amount contemplated". Finally on 5 June 1929 Harry and Louise Brown bought the Meadows for £5000 (more than £300,000 today). Ownership was transferred in a formal ceremony at the end of June when Harry and Louise Brown presented the Mayor with the title deeds. In his speech Harry Brown asked "for the land to be forever maintained and preserved as a recreation ground for the use of citizens." This statement which imposes a commitment on the custodians was originally omitted from the council minutes, but inserted a month later. Two additional pieces of higher land were bought by the Browns in 1939.

As a result of his intransigence during the protracted negotiations, it is easy to give John Ashton Fielden "a bad press". However, like his mother and father he was a philanthropist, giving, amongst other donations, vast sums to hospitals in Cambridgeshire and London. During the First World War he bought, equipped and paid for the running costs of a small hospital ship. In the Second World War he gave more than £90,000 to the war effort and bought four Spitfires and numerous ambulances. He died in 1942.



October 2010

Birds

02/10 2 Redwing flying out of an oak tree on water co land were the first of the autumn.

09/10 A steady movement of Skylarks flew high above the Meadow. The largest group seen was 5 heading north.

16/10 Å single Goldcrest moving through a Holly Tree on Gorsty bank was a welcome find. Their absence has been due to the previous harsh winter early in 2010.

24/10 A pair of Ravens observed flying low over Queens Park may well have been descendants from Ravens which nested in Chester a few years ago. **TD**

24/10 The first Snipe of the autumn was flushed from the long grass on the Meadow.

Mammals

Late news for September was a badger visiting gardens at the lower end of Appleyards Lane . The Badger may well have been a cub which has left its family home in search of new territory.

Insects

9/10 The last of the autumn sunshine saw the last of the butterflies: 1 Small Copper, 1 Large White on the Meadow & 2 Commas either side of the Handbridge Allotment.

Operations

The horses have returned to Water Co land and now appear not to be as inquisitive to walkers who venture beyond the Meadow. This may be due to the signs that were put up to discourage feeding. Without wishing to tempt fate there is no need for anyone to feel nervous about walking through this area.

November 2010

Birds

03/11 A flock of 40 Redwing were feeding on berries below the Handbridge allotments.

04/11 On Water Co Land 8 Fieldfare stopped to feed on Hawthorn berries.

18/11 A Woodcock took flight from underneath one of the hawthorn bushes, circled around the Meadow then dropped on to Gorsty Bank. 5 Little Grebe fished under the overhanging willow & 30 Goldfinch fed on Alder along the riverbank by the Reuben Joan Wesley seat.

20/11 A startled Woodcock flew out of the copse below the Handbridge allotments. These large waders with long bills migrate at night from Scandinavia & Russia & have been known to fly into windows around the Meadows. It is thought the birds mistake window reflections for open skies, so a bump in the night may well be only a Woodcock.

Insects

A Hornets nest continued to remain active in one of the willows & the occupants may not have welcomed the attention of the tree specialist (see operations below).

Operations

A number of the Crack Willows were heavily pruned. As the name suggests the willows have cracked & were becoming a danger to walkers. Red Squirrel tree specialists were called in with their equipment to deal with the problem.

December 2010

Birds

04/12 A fine sight was a flock of 20 Lapwing leisurely flying up river, low over the Meadow.

11/12 The Waxwing invasion arrived in Chester with an internet report of a small flock feeding on berries in Eaton Road. 2 birds were still present the next day & made a welcome distraction from Christmas shopping. A Water Rail was also present in the ditch at the lower end of Bottoms Lane track.

12/12 A Kingfisher was observed for a good hour fishing undisturbed from a fence bordering the Chester Sailing Club dinghy park. **TF**

18/12 A male Goldeneye duck in eclipse plumage was on the river by the united utilities mound & was the first of an influx of duck to arrive on the river. A Water Rail was briefly seen again in the ditch at the lower end of Bottoms Lane track .

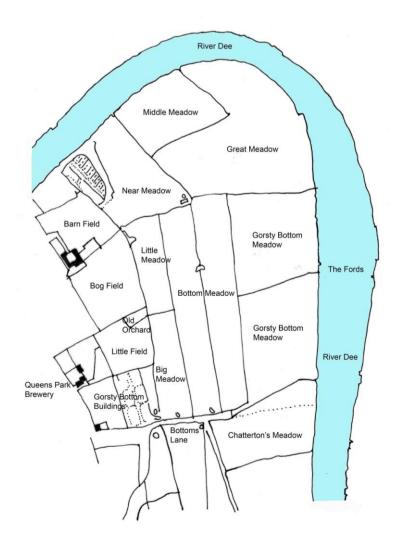
22/12 With the river freezing up, eyes were on the areas which remained ice free. 27 Wigeon, 26 Tufted Duck & 4 Pochard were all on the river between Sandy Lane & Deva Terrace.

With snow on the ground & food in short supply, A flock Fieldfares fed on apples in a garden bordering the Meadows. **DL**

26/12 With the river now almost completely frozen the ducks were confined to the fast flowing weir. Joining the 200 plus Mallard were 26 Tufted duck, (like the 12 days of Christmas) 12 Little Grebe, 11 Coot,10 Mute Swan, 6 Teal, 2 Goldeneye, 1 Goosander & a male Mandarin Duck. A fabulous end to the year & showing you don't have to travel too far to see plenty of wildlife.

Happy New Year to all those who enjoy the Meadows.

Andy Ingham Meadows Log Recorder 01244 677135



Queens Park Brewery

The map on the left gives the field names recorded in Tithe Awards of 1845 and also shows the brewery. This was situated on the northern corner of the junction of what is now Elizabeth Crescent and Edinburgh Way. It is shown on maps from 1835 but it had gone by 1885. The OS maps show a fresh water spring in the corner of the brewery site, so maybe that is why it was located here.

The 1871 census of St Bridget, Chester shows William Richards, Brewer and Maltster from Newtown, Montgomeryshire living at the brewery with his wife Harriet and daughter Ada together with 2 servants. By the 1881 census, the brewery had reverted to a private dwelling named "The Woodlands" and was occupied by the Couroy family.

No trace of the Queen's Park Brewery remains today, however householders still unearth bottles and other items connected with the brewery in their gardens and barley and hops now grow wild in the fields and hedgerows near the former brewery site.

Summer

There isn't a great deal to write about in December if you rule out Christmas. Perhaps a good subject is Summer, especially if you write about it during a spell of very hard frost.

Alongside me is a vacant plot of land. It has had various uses during the years. On the riverbank there used to be three summerhouses, one of which was demolished more than thirty years ago. Another was moved to a different location about seven years ago and the third collapsed after being battered by a big gale about five years ago. All that remains of that now is the roof and part of the front. On the top part of the land there were once some garages, a greenhouse and a mushroom house. After the Second World War many men tried their hand at growing things to earn a bit of extra money and the greenhouse and mushroom house were relics of that time. All these temporary buildings were removed long ago.

So this plot of land remained apparently empty and attracted attention from builders and developers because of its pleasant location overlooking the river, meadows and the city beyond. Eventually the City Council sold it to a developer. What was not readily apparent was the fact that it housed an underground Victorian sewage system consisting of two sewers entering from the North East end South East corners and two silt traps. The silt traps were designed so that any silt could be cleared before it entered the main sewer pipe which runs beneath the gardens of the properties located along the riverside from Sandy Lane to Dee Lane.

For more than seven years since it was sold the land has stood sad and neglected but two groups of insects have flourished, bumblebees and butterflies. From the first sunny day they are out and about, busy bumblebees collecting pollen and nectar and butterflies, mainly red admirals, peacocks, commas and little brown speckled ones flit from wild flower to flower or warm themselves on the wooden boarded side of Williams Boat Co.'s boatshed.

The fluctuating river levels have washed up seed of various common wild flowers so that there is probably something to suit all who care to visit. For the first time for many years the yellow and black caterpillars of the red and black spotted cinnabar moth have fed on the ragwort which has started to colonise the dry sandy oil.

We used to see many bats in the Summer but the riverside trees and hedges have now lost their definition through lack of management this past seven years and last summer was a very lean time for bats in this part of Boughton. With the aid of a bat detector I did locate at least one bat last Summer but could not see it. It was probably a Pipistrelle as I tried various settlings on the detector and this one was detected within the correct range for Pipistrelles.

There is a great deal of ivy growing on the south facing sloping bank of the land and the green ivy flowers provide a valuable winter food for insects that venture out on warm sunny winter days. Not that they will venture out at the moment because as I write the temperature has dropped to probably 10 degrees below zero and the sky looks full of snow. So far we have been extremely fortunate and escaped the heavy falls of snow Scotland and the North East have experienced. At the time of writing this we have just about enough snow to build a snowy garden gnome!

Rita Hibbert 1st December 2010.

New Members

Anyone wishing to join Friends of the Meadows, please contact the Membership Secretary Clive Gregory, 6 Victoria Pathway, Queens Park, Chester, CH4 7AG, Telephone 01244 680242.

Please let us know who introduced you if appropriate.