TALES FROM THE RIVER BANK

After a long dry spell when the Gaywood river was very low we have had a lot of rain. There is abundant growth of aquatic plants, even more than the same time last year. The water level is now quite high due to this . The Blackberries are already ripe and the Indian Bean Trees in The Walks in King's Lynn are in flower and the Plane trees are also sporting early mini conkers ! Farmers are eager to harvest their cereals.

3/7/23 Otter and Water Voles

I met my farming contact Justin and he informed me that there is a new Otter at Bawsey (Site 2b).He reported that it has probably being preying on Water Voles in the Northern drain (Site 2c). However, he reassured me that there were still many Voles in the River itself.

7/8/23 Gaywood Valley Conservation Group visit to Derby Fen (site 4a)

I led the group on a survey of this site . I supervised an aquatic netting while Jenny Kelly and Sue Matchett led a party looking at the terrestrial flora on the fen. We normally survey this site in May when the mayflies are hatching, so it will be interesting to compare the flora and fauna in the summer. Because of the abundant growth of aquatic plants the normally shallow riffle over the gravel was about 0.5 Metres deep. Thankfully Jim Tripp had his waders on and was able to sample the vegetation and catch some small fish. Hamish wrote up a long report which was in the Gaywood Conservation group website but there were two errors. The photograph of the Water Louse is in fact a Mayfly nymph and the dominant plant was Water Cress.

Derby Fen Aquatic Fauna.Site 4a TF 706206

Land use : Fen, River bed: Sand and Gravel, width : 5M.
Caddis cased 13
Mayfly nymphs (including Blue Winged Olives) 20
Freshwater Shrimps 23
Adult Beetles 5
Bugs (Water Boatmen) 7 (One dried in the sun and flew off ! See photo)
Snails Including *Hydrobia jenkinsii* and *Bythinia* spp. 7
Leeches 10
Flatworms (*Polycelis)1*
Fish including Minnows and Sticklebacks 12. GRAND TOTAL 107.

It was noteworthy there were no caseless Caddis, Stoneflies, Dragonfly nymphs ,Worms or Chironomids (midge larvae) . Most probably because of the depth and seasonal differences. Most of the Caddis larvae were *Limnophilus* in small stone cases. One Caddis in a leafy house was very stressed when placed in a white tray. They can actually alter their home according to their surroundings. Clever.
I tested the water quality and it was normal except the pH was acidic pH 6.4 or below. This could have been due to a heavy downpour and run off. The ammonia was low. See results below.

Aquatic Flora
This was mainly Water Cress and Cladophora alga and Water Mint and Callitriche Starwort. and River Crowfoot (*Ranunculus fluitans).*There was also Common Reed (*Phragmites australis).*There was no sign of the Brooklime found previously. It was probably shaded out by the Water Cress.

Derby Fen Terrestrial Flora(Jenny and Sue

Three-nerved Sandwort	Chickweed
Germander Speedwell	Wild teasel
Ragwort	Water figwort
Field forget-me not	White dead nettle
Sheep's sorrel	Clustered dock
Lady's bedstraw	Great willow herb
Dandelion	Fool's water cress
Self-heal	Hogweed
White bryony	Mullein spp
Creeping thistle	Lesser stitchwort
Mint	Birdsfoot trefoil
Common nettle	White campion
Lesser burdock	Common poppy
Ground ivy	Common hemp nettle
Yarrow	Creeping cinquefoil
Doves'foot cranesbill	Creeping Buttercup
Prickly sowthistle	Small flowered cranesbill
Smooth hawkshead	Shepherds purse
White clover and red clover	Devil's- bit scabious
Spear thistle and Dwarf thistle	Wild marjoram

In addition we saw a Brimstone (*gonepteryx rhamni)* butterfly and a Small Copper (L*ycaena phlaeas) ,* Gatekeeper (*Pyronia tithonus)* and several

Large Whites (*Pieris brassicae)*.Also heard a Green Woodpecker (*Picus viridis)* and two Kestrels were mobbed by a flock of Sand Martins !

I then performed my usual survey of the other three sites that I visit regularly.

8/8 /23 Gaywood Stone Bridge Site 1 TF 639213
I was ably assisted by Prof Brian Falconbridge today. The water was clear . The depth was 2.5. There was again abundant growth of *P.australis and Glyceria maxima* and Strapweed.
Nitrite NO3-25, General Hardness GH-250, Calcium Hardness KH-100, pH-6.8 and Ammonia-0.5. level 2.5

8/8 /23 Bawsey Ruins / Church farm Site 2b TF 664209
The water was clear here too but there was a dense growth of aquatic plants .These included a clump of unbranched Burreed (*Sparganium emersum) (S*ee photo) .There was no flow from the Northern drain (site 2c) and it was choked by Common reed.
. Although it reduces the nitrate it does reduce the flow to the river which means more silt settles out. It needs dredging again. When dredged it encourages the growth of submerged plants such as *Myriophylum* and *Elodea nuttalii.* Along the bank by the ruins I found a Painted Lady (C*ynthia cardui)* and a Wall Brown(*Lassiommata megera)* and Bugloss (*Anchus arvensis)* with bristly leaves and 4 conical seeds, and Wild Basil (*Clinopodium vulgare) (see photo)* .
NO-0, NO3-50, GH-250,KH-180, pH-7.6 and Amm-*0.5.N.B.* The water was neutral here .

8/8/23 Sugar fen / Leziate Drove (sites 3 and 4g) TF 706206.
There was no discharge from the Leziate drain this time (site 4g). Below the bridge there was a high level of water at the flume (2.2) and we only saw one small fish fry compared to the last visit. There was however an abundant growth of submerged plants such as *Callitriche* spp and Common Reed (*P. australis)* and P*otomageton natans.* . On the bank there was a nice patch of Toad Flax (*Linaria vulgaris).*I have noticed a lot of this on motorway verges lately. A good year for it.
Alistair Milner 11/8/23