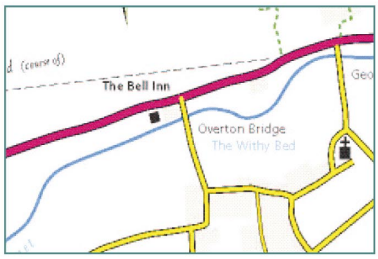
Spring 2005

ARK

ACTION FOR THE RIVER KENNET

Newsletter Number 11

River re-alignment at West Overton



Extract from the ARK Map and Guide to the River Kennet

Anyone looking at the ARK map of the River Kennet will notice that the river immediately upstream of the Bell Inn as far as Manor Farm (West Overton) is relatively straight. This is uncharacteristic of the Upper Kennet, which elsewhere meanders across the valley. The natural curves in the river swirl the current and provide a variety of water depth and habitats for fish, plants and invertebrates.

During the 1970s the river was artificially straightened at the same time as a livestock bridge was constructed. A deep pool was also lost. This pool was important because it provided a temporary refuge for fish when the river ran dry. ARK has been supporting the case to re-align this stretch of river to its natural course.

The owner of the land at West Overton and the Environment Agency have agreed to jointly fund the project to bring back the diversity of flow and habitat typical of a natural chalk stream. The deep pool will also be replaced. Although fish can sense when the flow is dwindling, and generally swim downstream to deeper water, some are slower to react and inevitably die when water levels drop. The 'holding pool' will allow these fish to survive until flow recovers.

ARK will provide project management and financial services for the project, which is expected to start this Summer.

The artificially straightened stretch of Kennet at West Overton

Spring River walk

Sunday May 8, 2— 5pm

As the warmer months approach ARK is pleased to invite members, their friends and families to our next open event on Sunday May 8th at Marlborough College.

The afternoon will include a tour of the Marlborough College Fishery to show rehabilitation work to the River and the trout ponds. The walk will then follow the College Nature Trail and end in the Master's Gardens. Tea and cake will be served indoors.

A map and booklet will be available, and a quiz for youngsters. Parking in the college parade ground will be signposted.

Tottenham House development

ARK continues to challenge this proposal in its current form because of the negative implications for the health of the Kennet catchment.

Interpretive panel for Marlborough town

The Marlborough Area Development Trust has teamed up with ARK to put an information board about the River Kennet in Marlborough town centre.

The poster sized board, based on the ARK map, will be installed next to the river in the Waitrose car park, near the Mustard Seed Café. Kennet District Council has cleared a space and moved the railings to accommodate it. The board will be officially unveiled later this year. We hope it will encourage greater awareness and enjoyment of, and the river Kennet in Marlborough.

Inside this issue:

Willow blight in the Kennet Valley

Peter Marren

As I'm sure most people have noticed, many of our willows are looking sickly. Along Newtown Road in Ramsbury, which runs along the edge of the Kennet marshes, several trees have died, and at least two others had to be felled or drastically cut back recently after they had sagged on to the telephone line. Recent gales have shredded exposed trees leaving a litter of broken, lichen-covered boughs. The most obvious symptom of willow blight is the die-back of the crown, leaving the stricken tree with fewer twigs and a thinner canopy of leaves. On closer inspection you find blackened leaves and young shoots, and ugly cankers on the branches which split open the bark like a suppurating wound and rapidly kill the sapwood underneath. Eventually whole branches fall away, bark sloughs off and the tree is gradually reduced to a skeleton. Not a pretty sight is it?

The blight seems to have coincided with two very wet autumns around 1998 and 1999. Whether or not by coincidence, the willow blight has also coincided with climate change in our area with early springs and mild winters. It is new: the blight has not struck before with the same virulence – otherwise we wouldn't have any mature crack willows left. Thankfully the disease is not attacking all willows indiscriminately. As far as I can tell, mainly from wandering about staring at trees in Ramsbury, the disease is hitting mature crack willows, but sparing other kinds of willows.

Perhaps I should explain that the Kennet valley has several different kinds of willow. In terms of species it is one of the most willow-rich places I have ever seen. The crack willow, so-called because the twigs snap off easily with a crack, is the commonest large willow in the valley, and it is also the most important in terms of the scenery. But we also have plenty of white willows, a lovely tree with a broad oval crown and long thin leaves which are lined with silky hairs on the underside so that, in a breeze, the crown flashes green and white. Kennet District Council recently put a Tree Protection Order on a splendid roadside white willow near Newtown Lodge, although their tree experts claimed it was an alder. Some white willows are showing signs of the disease, but fortunately they are not succumbing to it. Clearly something in their make-up is resisting the infection.

Smaller willows in the valley are the purple willow, which forms thickets with blue-green leaves, shiny twigs and beautiful upright catkins with dark tips. There is also the osier, with its long straight twigs and bunches of long, silky leaves. And, perhaps the least common, the almond willow, a broad-leaved fragrant willow whose twigs taste like marzipan if chewed. On top of those there are the two sallows, goat and grey, with broad leaves and golden catkins brimming with nectar for the early bees. None of these trees seems to be affected by the blight to any great extent.

Bark sloughing from a diseased crack willow

A few years ago I found an expert on tree diseases on the Council who came out to Ramsbury to examine the sick trees, he told me that the poor trees were being attacked by three fungal diseases all at once (just one disease did for the elms). One was leaf blight, the second a canker and the third was, I think, a wilt. He thought the diseases had all been aided by the mild wet winters, and also by the way willows grow close together, allowing the spores to spread from one affected branch to the next. The blight is widespread in the valley at least as far down as Thatcham (where some of the alders too are diseased – a different disease, spreading in from the roots).

I can suggest another reason why our crack willows are so vulnerable. Like most British willows, crack willows are either all male or all female. This is obvious only in the spring when the males sport yellow catkins and the females fat green stamens (not the fluffy stuff – those are pussy or goat willows). Now, I don't know about you, but I have only found female trees along the Kennet in Ramsbury. If the trees were wholly natural and self-sown one would expect to find roughly 50:50 male and female. The obvious deduction is that the trees are not natural; they were planted. This would make sense, because only the female trees grow well when cut as pollards, the method used to harvest willow twigs for basket-making (and to prevent the trees from becoming top-heavy and keeling over). If they were planted, they very likely came from the same local nursery. Assuming they did, they are probably closely related, if not actual genetic clones; crack willows are normally cultivated from cuttings rather than seed. We know now that English elms were one huge clone, and that is the reason they fell like nine-pins when the disease hit them: there was none of the natural variation that produces disease-resistant trees. So too, perhaps, with the crack willows.

What can be done about it? I have found web-sites, mainly from America where they have the same problem, which advocate pruning the infected shoots below the canker, and removing and burning dead branches and fallen leaves as sources of further infection. This might be

Silhouettes of broken branches typical of the crack willow along the Kennet

practicable on a garden willow, so long as they are not too far gone, but no one is likely to go to that much trouble to save the 'wild' willows along the river. It might be worth trying to coppice or pollard some of them in the hope that the younger shoots may be more resistant (the canker needs bark to get going). My feeling is that many of our crack willows are too far gone. It would certainly be a waste of time and money planting any more, for the disease won't go away. Better plant the white one or any disease-resistant strains going.

The good news is that, as far as I can see, some crack willows are faring better than one would have predicted a few years ago. One fine tree at Newtown Lodge, for example, has survived against the odds, and although showing all the symptoms, and shedding twigs in abundance, it no longer looks moribund. It is fighting back. Perhaps the very dry autumn of 2003 helped. Soggy soil and mild wet weather are the enemy, even to a tree like crack willow that normally thrives in the wet. But, fingers crossed, there may still be hope for the Kennet willows.

State of the River — Early Spring 2005

Report by John Hounslow, River Keeper

The winter should be the river's chance to recover its flow rate and build up the aquifer levels in readiness for the summer. However so far the winter and spring of 2004/5 have proved very dry.

River flow in February 2005 is desperately low. The whole S and SE of England have had very little rain this winter. The average flow at Knighton is well below average for this time of year.

The soilwater deficit has been made up, which means that the ground is now saturated and excess rainfall will run off, or soak down to the aquifer. Springs at West Overton started flowing in the 2nd week of January, which is earlier that last year, but the flow is very weak.

Rainfall has been less than half the expected average for the months of November, December and January.

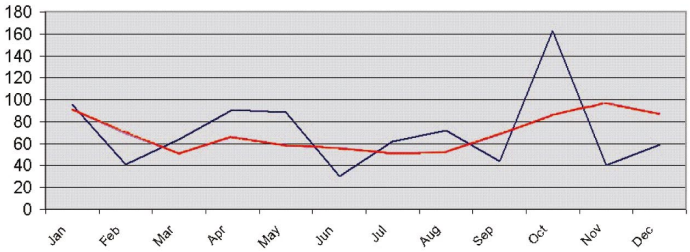
Water quality appears good. Water is clear. However studies of phosphate levels in the Upper Kennet last year showed that when rainfall is low the phosphate levels increase. This sets off algal growth as soon as the warm weather arrives.

Weed growth. There is almost no *Ranunculus*, and what little exists is grazed by swans, who because the flow rate is so low, can easily reach the weed. In fast flow conditions swans can't easily graze weed and go into the fields instead. By contrast, Starwort is abundant. Usually it is moved on by faster flows, but it is growing in clumps.

Outlook. Once the growing season begins in March most of the rainfall is used immediately by plants, so relatively little can percolate down into the aquifer to be stored for the summer. If the spring is wet, the river can still recover in time for the Summer, but as time goes on the outlook is looking less promising.

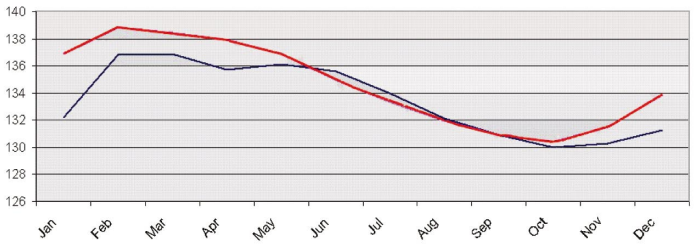
Rainfall recorded at Marlborough Sewage Treatment Works
January to December 2004
Total in mm

Blue: recorded
Red: monthly average 1990-2003



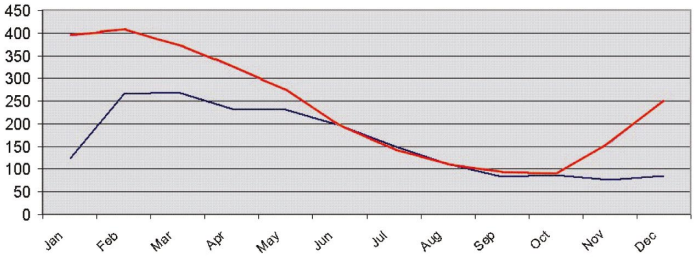
River Flow at Knighton
January to December 2004
Flow in Megalitres per day

Blue: recorded
Red: monthly average 1990-2003



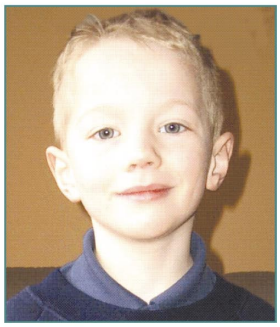
Groundwater Levels
Rockley Observation Borehole
January to December 2004
Water level in mAOD

Blue: recorded
Red: monthly average 1980-2003



Competition winners

Jessica Shields



Euan Reid

At ARK's open day at Marlborough College, new young ARK members were encouraged to enter two competitions: an invertebrate recognition quiz and a colouring challenge for under 8s. The winners were Jessica Shields from Pewsey (invertebrate recognition) and Euan Reid from Marlborough (colouring). They each received a prize book token.

As members, they are invited to ARK's open events and receive regular fact sheets about life in the River. Child membership costs just £3 per year.

AGM

ARK held its Annual General Meeting in Marlborough in December 2004. The well-attended meeting was followed by fascinating presentations by naturalist, Peter Marren and River Keeper, John Hounslow. Minutes are available from Charlotte Hitchmough: 01672 513672 or email info@riverkennet.org

St George's Church, Preshute

Thanks to the hard work of the team at St George's Church, passers by can now stop and enjoy a view of the river flowing through the peaceful churchyard. The Kennet at St George's has been hidden from view by trees and shrubs for many years. However, since last summer the bank has been cleared, and a bench has been placed alongside the river.

The clearance work will also improve the river habitat by allowing light to penetrate through the trees, and by reducing the leaf and twig debris that falls into the river during the year. ARK would also like to thank the congregation of St George's for the charitable donation they made towards ARK's work in 2004.

www.riverkennet.org

For updates on the state of the River, and more detail about projects ARK is involved with please visit our website.

Membership for 2005 is now due. Please complete and return this form **no later than end of April** and enclose your subscription of £10.00. Please feel free to make a further donation to support ARK's work.

New members are entitled to a free Map and Guide to the River Kennet, which retails at £5.00

Send a cheque payable to 'Action for the River Kennet' to:

Charlotte Hitchmough, Secretary, Action for the River Kennet,

Preshute Cottage, 60 High Street, Marlborough, Wiltshire, SN8 4HW

Your Details

Name: _____

Address: _____

_____

Postcode: _____

Tel: (_____) _____ Email: _____

☐ I enclose my subscription of £ 10.00

Plus a donation of £ ☐

☐ I'm a new member, please send a map