

Catchment Matters

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The newsletter from the Parrett Catchment Project
Sharing information between organisations, local communities

Achieving 'Favourable Conditions'

The last edition highlighted the growing prominence being given by English Nature and the Environment Agency, in the context of the EU Habitats Directive, to achieving 'Favourable Condition' for the Somerset Levels and Moors SSSI's.

This was debated at a recent meeting of the PCP Management Group and it was concluded that the key role which the PCP needs to play here is to:

1. Explain what the Favourable Condition targets are all about.
2. Seek to ensure that an appropriate balance is struck between hitting those targets and achieving other important objectives such as sustainable economic development and flood risk reduction.

According to English Nature, only 44% of the SSSI's in the area qualify as being in Favourable Condition, as compared with the Habitats Directive target of 95% by 2010.

Some of the main reasons are:

- * Low water levels which leave ditches and fields too dry during winter months.
- * Poor water quality arising from general pollution, such as fertiliser run-off from fields, and specific sources, such as sewage outfall pipes. Important within and outside designated nature conservation sites.
- * Intensive agriculture in general, such as the application of artificial fertilisers, use of herbicides near watercourses and both over-grazing and under-grazing.

What can we do?

Farming: - Maintaining a farmed landscape is vital to ensure that nature conservation land on the Somerset Levels and Moors will be in a favourable condition to support wildlife. Practices which benefit wildlife include:

- * Extensive grazing with beef cattle during the spring and summer months;
- * Using only well-rotted, home-produced

farmyard manure instead of artificial fertiliser;

- * Taking one hay cut followed by aftermath grazing rather than silage cuts;
- * Maintaining pollarded willows.

Water levels: - Getting water level management right is the key to providing the right conditions for wintering and breeding birds. Help wintering birds by :

- * Retaining water on land to provide feeding and roosting sites.
- * Installing gutters on fields and ensure they are piped through ditch banks.
- * Block gutters from December to March to create at least surface splashing when weather conditions permit.

Ditches: - Management of ditches for wildlife includes:

- * Clearing a few ditches each year during late autumn to maintain a range of different plants in the ditches;
- * Clearing ditches on a rotation of at least every 3-4 years and leave a fringe of vegetation along one bank;
- * Keeping ditches free from scrub as shaded ditches support fewer plants and invertebrates, and cattle can be prevented from getting to the water's edge to drink. Light poaching of parts of ditch banks is good for some ditch invertebrates;
- * Maintaining shallow, gently sloping ditch edges as they provide more opportunity for plants to grow than steep banks;
- * Pen ditches so they hold water through the winter.

The main source of funding for positive management on the Levels and Moors will be the Higher Level Stewardship Scheme; part of the new Environmental Stewardship programme. For information about:

- * Environmental Stewardship ☎ Defra Rural Development Service 01823 285500
- * How to achieve Favourable Condition on your land ☎ English Nature 01823 283211

A slow death for Somerset's wetland heritage?

Monuments At Risk in Somerset's Peatlands (MARISP)

The MARISP project was set up by Somerset County Council, English Heritage and the Environment Agency to assess the condition of the most important monument sites, the threats to their continued survival and the possibilities for their future protection.

The sites chosen for the study included two Iron Age wetland settlements, an early Medieval causeway and numerous prehistoric wooden trackways.

Initial results suggest that some of the sites may have suffered considerable damage from desiccation and one site may have been totally destroyed.

Contact Richard Brunning (Somerset Archaeology & Heritage team) on ☎ 01823 355426

The Somerset Levels and Moors contain a wealth of important heritage features from the campsites of early hunter-gatherers to the medieval monasteries who canalised the rivers and started to drain and enclose the moors.

The deep waterlogged peat of the moors has also preserved rare wooden structures and artefacts for thousands of years.



Photo: Timbers of a Bronze Age ritual monument beginning to be exposed on the ground surface due to gradual peat wastage.

These prehistoric track ways and lake villages have made the area internationally famous. The peat itself is composed of the remains of plants and animals that would rapidly decay in normal conditions. Analysis of these remains allows archaeologists to reconstruct the changing local landscape over thousands of years and see how it responded to sea level and climate changes and how people began to use and adapt it.



Photo: 'Bog oaks' from a Bronze Age woodland being brought to the surface on an arable field south of Burrow Mump

The Somerset moors have the most important prehistoric wetland archaeology in the UK but how well is this heritage surviving today? When peat is drained large amounts of water are lost and oxygen is introduced allowing the organic matter to be decayed by micro-organisms. This results in the shrinkage of the peat as it literally wastes away. In arable fields 1 cm to 2 cm is lost annually and many arable fields on the moors have become so low that they can now no longer be farmed conventionally.

Even in pasture fields there is often poor summer irrigation and over a century 50 cm to 75 cm of peat can be lost. This is enough to destroy all the known wetland Scheduled Monuments in Somerset. Recent studies on some of them have shown that this process of destruction is already underway. Unlike wildlife habitats, once lost this unique heritage is gone forever and cannot be recreated.

Hopefully the new Environmental stewardship scheme can help to develop the more sustainable farming practices that are needed to preserve the wetland heritage for future generations.

For further information about Somerset's archaeological heritage contact Richard Brunning on 01823 355426.

Wildlife benefits from flood management

"As we move into a time when climate change is going to change the rainfall patterns prevalent in the UK, we need to look for more sustainable solutions to flood control and aquifer protection. We believe that woodland, especially native woodland can help to provide such solutions." The Woodland Trust



Research into the potential role of woodland in the floodplain to alleviate flood risk is well underway in the UK. Latest findings from studies at Portbren in Wales (Centre for Ecology and Hydrology) have shown that water infiltration capacity of an area planted with trees is 60 times greater than in adjacent agricultural land.

Such findings lend even greater credibility to PCP's woodland planting work carried out in the catchment over the last year. These woodlands will assist in the battle to reduce flooding by stabilising high-risk soils, increasing infiltration rates and slowing the flow of runoff onto the floodplain. To support our planting work we are also conducting our own local monitoring and research in association with Forest Research.



Photo: Despite their small size the saplings planted at one farm have already illustrated real flood management value by trapping flood debris against their trunks. This function serves to further slow down flood water flows.

GOOD NEWS

woodland grant available

PCP has been able to access further EU funding from the *Joint Approach for Managing Flooding (JAF)* project to continue our woodland development work. We are now able to offer grants to landowners, farmers and community groups for new woodland projects. In particular we are seeking sites on the flood plains of the River Parrett, Tone, Cary, Isle or Yeo.

This initiative is supported by the Somerset Wildlife Trust (SWT) and Farming and Wildlife Advisory Group (FWAG) who are keen to see more floodplain woodland created in the County.

Ben Thorne from FWAG welcomes PCP's initiative saying "As well as encouraging areas of floodplain farmland to be managed more extensively there is also real opportunity to manage land more positively for wildlife. PCP is demonstrating that flood management can reap biodiversity and wildlife benefits."

If you have land that you feel would be suitable for a new woodland planting scheme and you would like to take part in this new woodland initiative contact Nickie Harris on:

☎ 01823 355281

💻 PCP@somerset.gov.uk

!Get tree planting for wildlife & floods!

The *River Festival* visits Bridgwater Docks



Willow sculpting in the sunshine at the River Festival 2004

"Against the backdrop of the Bridgwater Docks, once the lifeblood of the town, it is only fitting we celebrate a day to remember."

Caroline Dunn, River Festival Coordinator.

The River Festival has fast become one of Somerset's annual attractions celebrating our greatest natural asset; water.

22nd May 2005 will see our third and final event, when Bridgwater will be host to a feast of activities and a packed programme of events including water inspired entertainment, boat trips, canoeing, fishing, guided walks, exhibitions, interactive computer and video demonstrations, local craft workshops, storytelling, live music, live animals, special guest appearances and much more.

This rich programme of events will transform The Docks and the adjacent Brewery Field.

The main aim of this River Festival is to: showcase the ongoing activities of the organisations and people who work and live within the Parrett catchment, focussing on flooding, water and land management; a chance to learn

more about our rivers and local environment.

Make sure that you come and celebrate with us on **Sunday 22 May 2005**. The event is open to the public from 10 am - 5 pm and it is **free!**

We are also inviting boaters to come along to The Docks for the weekend and join in the celebrations. Last year we had 28 boats who joined in the festive spirit. For more information and a boat entry form please contact John Tucker, Festival Harbour Master on 01823 490443.

The River Festival is financed by the Parrett Catchment Project through the European Regional Development Fund as part of the *Joint Approach for Managing Flooding* (JAF) Project.

For more information about the Festival contact Caroline Dunn on:

☎ 01823 356156

Email: PCP@somerset.gov.uk.



Communicating with you



Did you know PCP also produces a quarterly **Catchment Matters: Farming Edition** for farmers, land-owners and anyone who wants to know what's happening on the ground to improve land and water management in the catchment.

We also produce a **PCP CDROM**, which is regularly updated, to assist stakeholders with explaining the whys and wherefores of the PCP internally within your organisations or to external interested groups and individuals.

Farming Water: Flood retention schemes news

We are pleased to be able to report that four of our flood retention schemes are progressing well and two are near completion. Disappointingly, for operational reasons we have had to cancel the fifth project, which was to be a large scheme sited in the Isle Valley.

The following is an update from Dan Alsop PCP Engineer on the status of three of the ongoing schemes.

Bower Hinton Farm Scheme

At Bower Hinton Farm all construction work has been completed with final remedial works completed earlier this month. To ensure correct planting-up of the silt trap and pond, ecologists are currently being consulted. The operation & maintenance agreement is currently under negotiation.



Bower Hinton Scheme - October 2004



Bower Hinton scheme - March 2005

Ten hectares of woodland planting on the west side of the river (middle right in photo) complements this pond scheme.



Construction at Vokers Bridge - March 05

Creedy Bridge Scheme

This scheme, just up river from Bower Hinton Farm, is now 95% complete. We are currently discussing the possibility of liquidated damages from the contractor for the delay in construction works and it is understood that we may need to compensate the farmer for partial loss of grass next season.

For all schemes the aquatic planting is planned for May and hedge planting work is planned for November 2005.

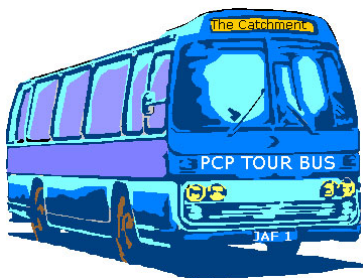
Voker's Bridge Scheme

At Vokers Bridge, near Junction 24 at Wellington, construction commenced in late September. It is now 50% complete. Delays have been experienced due to the weather, but the contractor is making the most of the recent dry spell.

As part of the *Joint Approach for Managing Flooding (JAF)* project, PCP is learning about new technologies employed by our Dutch and German partners to manage water levels. Through this information exchange we have been able to develop a new remote control mechanism which will be fitted to the outlet valve at this site so that stored flood water can be released without attending the site, which is several miles from the farmer's residence. The major components will comprise an electric actuator, a battery power pack with solar panel charging system and associated communication and control systems.



For more detailed information contact
Dan Alsop, PCP
Engineer:
 01297 443535.



'A Future When It Rains' - the Parrett Catchment Roadshow.

We're coming to a venue near you!

The partnership is hitting the road this May and June, visiting nine venues around the catchment:

- * North Curry - Sat 14th May
- * Bridgwater - Sun 22nd May
- * Langport - Thurs 26th May
- * Martock - Sat 11th June
- * Weston-super-Mare - Thurs 16th June
- * Burrowbridge - Tues 21 June
- * Ilchester - Tues 17th June
- * Ilminster - TBC
- * Taunton - TBC

Absolutely anyone can come along and take part. There will be lots to see, do, listen to and take part in.

On offer will be local food, informative displays, talks, question time, exhibitions, and activities, including a film project. Through the film project we're offering people an opportunity to air views and recount memories of life in the catchment, with a look ahead to our future in this beautiful Somerset river catchment.

SUDS - what's the hold up?



A storm water holding pond at Blackbrook Business Park, Taunton (2003)

A key reason the water industry hasn't chosen Sustainable Drainage Systems (SUDS) as a viable option in England has been responsibility—who maintains and, most vitally, who pays for SUDS?

The industry is currently awaiting results from the DEFRA consultation *Making Space for Water*, where options for future management of drainage, including SuDS, were presented for discussion.

In the meantime the National SUDS

working group have produced an *Interim code of Practice for Sustainable Drainage Systems in England and Wales*.

The Somerset SUDS Group keenly await the outcome of the consultation. They have produced *Guidance notes for local developers* and are actively encouraging local developers to implement SUDS in their development designs. Visit the PCP website for further information on the group's activities www.parrettcatchment.info/suds.htm

The partnership welcomes a new member



Currymoor in flood

The **North Curry Flood Group** consists of individuals from North Curry parish and adjacent communities, a number of whose homes were badly hit by the deep and prolonged floods of 2000 and who face the risk of flooding every winter.

The North Curry Flood Group aims to work with the Environment Agency to achieve flood water levels on Currymoor and Northmoor below the level of New Road, the highway that crosses the moors, at 5.2 metres above sea level.

The Group have joined the PCP to:

- * Support the aim of spreading the burden of floodwater across the moors to lessen the average depth and period of flooding;
- * Better understand the feasibility of distributing floodwater normally stored on Currymoor and Haymoor to the other moors
- * Better understand the Environment Agency's schemes underway in the area such as the Hookbridge spillway trials and the river banks reprofiling scheme.

Contact Tom Jeanes on 01823 490562

Are we sustainable ?

Over the last few months the Parrett Catchment Project has undergone an appraisal led by *Forum for the Future* to explore how we are performing in contributing towards catchment-wide sustainable development.

The PCP was chosen as a sustainability case study because it is considered ahead of its time by pre-empting an integrated approach to catchment-wide land use and land management, with social and economic benefits. The measures being encouraged by the project are considered "good practice" but have not been evaluated for wider promotion/dissemination.

The appraisal process is a stock-take and also an audit and review process. Once set up it can fit within existing project planning activities, help to set local targets, and provide an evidence base for securing further resources towards meeting these targets.

A comprehensive catalogue of known and existing documents, research and information about the catchment will provide a baseline assessment of the catchments 'state' and trends.

We are grateful to those partners who took part in the Appraisal meetings and

one-to-one interviews. Each participant directly contributed to the development of an agreed sustainability profile for the PCP - the success it's had in contributing to catchment-wide sustainability, what more it could achieve and what barriers beyond the project's control are preventing further success.

The audit process will result in a 'gap analysis' to suggest how the PCP could further encourage integrated land use and resource management across the catchment in keeping with existing and changing statutory processes such as spatial planning, Local Strategic Partnership and Community Strategy processes, and the introduction of measures under the Water Framework Directive.

The draft Sustainability Appraisal is currently being reviewed by the PCP Management Group and will be made available to all stakeholders this Summer. Notes and minutes from the various meetings are accessible through the PCP website www.parrettcatchment.info/sustainability

If adopted for the PCP as part of its on-going monitoring and review work, the sustainability audit process would be useful to stakeholders for their own organisational purposes.

The final meeting to review our Appraisal Report will be held this Summer. To ensure you receive an invitation please contact Carol Somper on ☎ 01242 266771

Everyone can do their bit in the battle against flooding through.....



In the last Summer issue we introduced this new community initiative. Now we can announce that The Big Sponge campaign has begun and will continue until March 2006.

The initiative offers a **grant of up to £500** for local community groups and schools to help build wildlife ponds and also **discount water butts**. A **virtual teachers pack**, full of watery activities and guidance will also be available on the PCP website.

This is a super opportunity for Community groups and schools to get involved in the Parrett Catchment Project and do their bit in the battle against deep and prolonged flooding in Somerset.

Every pond built and water butt installed will help create a network of household-scale flood retention schemes, with the added benefits of providing new wildlife habitats, educational resources and attractive amenity areas.

Tide rising for the Parrett Sluice ?

The decision of the Sedgemoor in Somerset Partnership to develop and champion the Parrett Sluice has given the sluice project just the boost it needed in the run-up to a crucial decision of the Wessex Regional Flood Defence Committee this Spring.

The Sedgemoor in Somerset Partnership brings together all of the main players in the Sedgemoor area and is chaired by Sedgemoor District Council's Chief Executive, Kerry Rickards. It has agreed to commission detailed studies into the potential of the project for transforming both the appearance and the economy of Bridgwater and the surrounding area.

This will complement the work being carried out by the Environment Agency on the potential of the Sluice for reducing the risk of tidal flooding to the 11,000 properties in Bridgwater that are estimated to be at risk, and its implications for the environment.

It has been clear from the outset that the Sluice would only stand a chance of winning Government backing and the necessary £50 million or so funding if it could be demonstrated both to significantly reduce the flood risk and help regenerate the local area.

The project that is emerging would involve the construction of a sluice near Dunball to exclude the tide permanently. This would hold the water at a constant level through Bridgwater and change its nature from tidal to freshwater; transforming the river into a focal point for redevelopment.

Further upstream, the effect of the Sluice would be to make uncontrolled flooding less likely (because of the increased flood storage capacity at times of high tide) and open the way for eco-friendly water-based tourism.

Meanwhile, studies carried out by the Environment Agency suggests that the risk of a major tidal flood in Bridgwater could be much greater than the one in 200 year event on which plans have been based in the past.

The EA now reckons that, by the third quarter of the current century, potentially devastating tidal surges could be occurring as frequently as every 30 years, putting up to 100,000 homes in Bridgwater and further up the coast at risk. Tidal flooding would also be damaging to the internationally important freshwater grazing marshes on the Somerset Levels and Moors, which are designated SSSI's.

The EA's regional flood defence manager, Richard Horrocks, is quoted as saying that the sea level is rising by 2 mm a year, and that increasingly severe weather systems are expected to hit the region. "If a severe storm coincides with a high spring tide then there could be severe devastation" he said.

A tidal sluice would protect Bridgwater from such a disaster, which is one of the main reasons why the case for it is looking ever stronger.

Photo: Dunball, downstream of Bridgwater



"This project is now moving forward on all fronts. That is most encouraging, and it is most important because it holds the key to transforming the area as well as providing solid defence against flooding."

Francis Cornish,
Chairman of the Parrett
Sluice Partnership.



JAF website: www.JAF.nu



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