



We have been much engaged by the Glaven Valley Conservation Area consultation which ran from 20 September 2022 to 31 March 2023. This was a review of the historic and vernacular buildings, and the landscape of the area. Designated in 1984, there was an opportunity to assess the boundary, both for deletions of locations that had been eroded by development growth, and the extension to parts not previously included. We gave our strong support to the largest proposal, on the west bank of the valley from Little Thornage to Thornage. We also suggested the extension from Selbrigg Pond should be extended further to include the source of the Glaven at Baconsthorpe Castle (photograph above). This is still a work in progress and will be followed by another consultation on the boundary changes.

The other article is a revisit to the Hunworth river and meadow restoration project. The first phase in March 2009 was to remove the very large spoil from the east bank, accumulated by dredging the river bed over many decades. The second phase was in August 2010, the creation of a new river channel, de-

signed to be narrower and more sinuous, with shallow gravel riffles and deep pools. The project was unique for a lowland river, which lacks energy. It led to the Bayfield New River in 2014.

Ian Shepherd

We are finally making some progress to better monitor water quality in the Glaven. The monitoring by the Environment Agency is much reduced with various funding cutbacks. We have received a testing kit from Anglian Water, a response to our plea for AW to clean up the outflow from Holt WRC, particularly by lowering phosphates. We will start testing water quality for phosphate, ammonia, oxygen etc. at various sites soon, and would welcome volunteer 'citizen scientists' who might wish to help. We also hope to link up with NRT expertise, from a monitoring group on the Wensum. Contact Henry Crawley.

Edgefield sewerage is to be pumped to Holt which will be better for the river upstream, but Holt is already taking excess from the Blakeney area in the summer (by tanker), and with housing

expansion, and historically unified foul water and surface drainage from Holt, the capacity is strained. A new phosphate stripper will help a little, but a more environmentally friendly solution is creating wetlands that clean the outflow. AW are increasingly supporting these elsewhere in the county.

Many of our readers will have noticed the Hornsea3 wind farm cable route that is now carving through the Glaven Valley from Weybourne. This will be a protracted exposure of the land, and concerns are real that erosion and silt run off after heavy rain, will pollute watercourses. One of the most damaging effects of silt is to suffocate water invertebrates, and thus up the food chain, also destroying gravel and spawning grounds for trout and others.

As I write, a sandy run off has just occurred from a new land drain put into the river by the contractors at the river crossing at Baconsthorpe, (see photos on back page). It reached Hempstead Mill. This must not be allowed to happen. Complaints have been made.

Henry Crawley

Glaven Valley Conservation Area and Management Plan

Ian Shepherd

The Glaven Valley conservation Area (GVCA) was designated in 1984, one of very few large rural areas for landscape and historic buildings. Within this was a cluster of individual village settlements based on parish councils. A review had begun on the individual settlements in 2021, with those in the Glaven Ports and some others following in March 2021. A fresh start was made with a consultation from 18 November 2022 to 20 February 2023, and then extended to 31 March 2023. This brought with it a change in approach, a fresh start, which in our view was a good decision. The GVCA would be one unified area, with the area being one integrated creation rather than an amalgam of ten based on the parishes.

Following discussions between North Norfolk District Council and the consultants "It was concluded that the overlapping Conservation Areas should be removed from the GVCA boundary. The protection areas within the individual Conservation Areas will remain the same". The units will be part of one unified GVCA. In addition to this rationalisation, a major benefit was that it helped to bring up to date the boundary of the area as a whole. This had not been reviewed in the thirty-seven years since the designation in 1984. There might have been a number of 'missed' opportunities, and certainly some deletions through encroaching development and areas no longer worthy of the designation status.

We considered the listed buildings and predominant brick and flint character status as on the whole being stable, albeit there was now the opportunity for some local listing of individual buildings. The RGCG response to the consultation focussed

Top: view from east to west valley banks.

Centre: looking down on Little Thor-nage hamlet from the east bank.

Bottom: view on the plateau, from north to south.





on the landscape, and its connection with the natural environment and geology, in relation to the river. There were several small but important boundary extensions, which we supported, and within that made a case that it could have been taken further in some cases. Much the largest boundary extension was described as: "Breck Farm. The west boundary of the Glaven Valley Conservation Area. This location passes unusually close to the river compared to the rest of the boundary and does not include the rise of the valley on the west bank. This extension creates more of a buffer to the river as well as including Breck Farm to the west. This is a farm complex with large barns, now sensitively converted into a farm shop and cafe".

It is certainly the case that the west side of the valley does not compare with the east, and most easily seen from above the Little Thornage hamlet. In fact not only the valley side had not been included, but also the plateau above, with an undulating landscape well placed with tree lined fields, hedges and woodland. This area extended from Breck Farm to Thornage, from a broad to narrow area of land, some 2 km in length.

The reason that this large area was excluded at the 1984 designation lay with a longstanding Highways 'protected' route, going back to 1967. On the county council list of new roads was an A148 bypass for Holt and Letheringsett. That for Holt was clearly necessary, and a straightforward alignment on open, unbuilt land saw that being completed in 1982. The route options for Letherigsett were set to start from west of Breck Farm to the top of the plateau, and two would go in a straight line to the Holt roundabout, and two further south to join at the Holt-Thornage road bridge, and then follow the B1110 to the roundabout. The protected red route would take out Drewery Farm buildings, cross the meadows at an angle, and the road bridge over the river some 40 metres upstream of Little Thornage Ford, then cut through the Holt footpath to reach the roundabout. The next south. the green route, would come down from the plateau and cross the river near the Thornage Common cottages, midway through the County

Top: looking into the plateau from east to west.

Centre: from north to south.

Bottom: west to east

Wildlife Site rather than the northern area of the CWS. The most southerly two options avoided a new river crossing (but needed a wider bridge), and run down the west plateau, and up that on the east.

The Highways launched their proposals in 1987, but early on the village matriarch, the Hon Beryl Cozens-Hardy, said the protected red route was too close to Little Thornage, and with it Letheringsett itself. There was a contentious debate between supporters and objectors to the bypass, with many letters to the *EDP* and the weekly *North Norfolk News*, plus some to national level. CPRE Norfolk lead the local objectors views, with the support of the CPRE National Office, and the objector supporters via a sub-committee of the Parish Council. However there were also many local individuals on both sides. This continued until 1991, when the county council Planning and Transportation Committee came to the decision that the environmental issues outweighed those of the Highways. There was a year with some protests at the decision, and later when settled the removal of the Letheringsett Bypass from the Norfolk Structure Plan, and after that two other proposed county council bypasses of the same era before coming to consultation.

The Glaven is unique for a lowland river in having a relatively big fall in the gradient, due to the formation coming from 12,000 years ago with the retreat of glacial ice. While the Wensum and Bure flowed to the east coast, the Glaven and Stiffkey were pushed to turn north and cut through the geological debris piled up by the advancing ice, this being as far as it went before melting. The Glaven sharp turn at Hunworth most clearly illustrates this. Both rivers flow into the Blakeney Lagoon to reach the sea on the north coast. So this boundary extension is at one with the shaping of the landscape. Photographs taken from both the east bank of the valley, and from all points of the compass on the west bank and plateau, show our support to bringing this large area into the GVCA fold.

Breck Farm barn is a large and very impressive building and dates from around mid C18, in the time



Top: Breck Farm interior.

Centre: gable end, left side of the building.

Bottom: exterior wall showing the Flemish bond brickwork.

Selbrigg wet woodland.

a Defra competitive Catchment Restoration Fund at 2012 to 2015. While the larger proportion went to river restoration projects, these were two important off-river projects.

While the GVCA is based on a buildings and landscape evaluation, there are also wildlife assets. The river and valley provides an ecological corridor for many species. Parts are also listed as County Wildlife Sites (CWS) and Sebrigg Pond is one of these. The river and meadows from Little Thornage to the cottages at Thornage Common were early designated as a CWS, well before the proposed bypass, as seen on the Highways consultation map, and was an important consideration in the rejection of the road. In retrospect this was the start of the fading away of an era, to be replaced by what we have seen since.

A clue to the change to come might have been that the road project manager told the Highways Councillor, a retired RAF Air Chief Marshall, that the Department for Transport would not allow a 30 mph speed limit in Letheringsett. I informed the Air Chief Marshall that the DfT had permitted one for High Kelling and for Bodham six months previously, both also on the A148, within two miles to the east. He was less than impressed with being told a lie, and made the project manager write a letter of apology.

Highway's Letheringsett Bypass route options came off the A148 far west. The red and green cut across the CWS, shown in red.

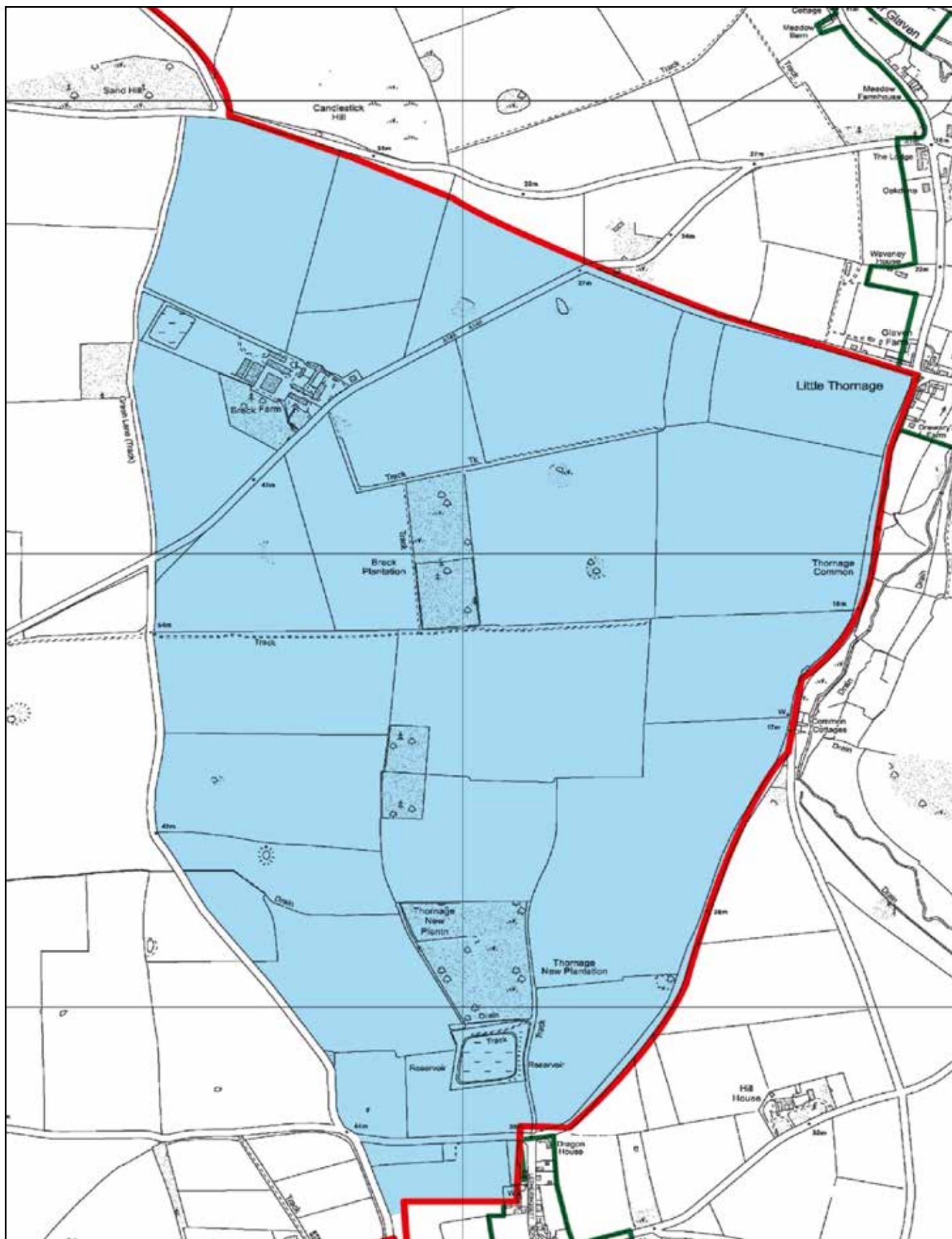


This would be unthinkable now, in a very different era and culture. The county councillors who took the Letheringsett decision included several who would be described as the 'Norfolk great and the good'. Some were hereditary landowners who had an interest and involvement in both landscape, and in particular wildlife.

In this era we have seen two councillors who have been very influential, and their interest is still in the land, but as an asset to be developed, and zero interest in wildlife. Witness the saga starting in 2014 and still running for a dual carriageway viaduct across the River Wensum valley near Ringland, to the west of Norwich, 720 metres long. The Wensum is a chalk river, as are the others mentioned

here, but has an international designation Special Area of Conservation (SAC), one of four in England. This stretches for 78 km from the headwaters to Costessey. While the proposed site is less than two miles from Norwich, the only building in sight is a farmhouse, it is in a remarkably quiet and tranquil area. The bridge would disrupt wildlife both in the locality and on the move in the river corridor. The site has been identified by objectors as having a rare barbastelle bat colony of national importance. The interest now is growth based on a high level of housing and other development, which will suck up yet more aquifer and river water, with an increasing crisis for both people and wildlife.





A consultation on the Glaven Valley Conservation Area (GVCA) was undertaken by North Norfolk District Council from 20 November 2022 to 31 March 2023. The original designation was in 1984, and the consultation included a consideration of boundary changes, both for boundary extensions and deletions. This map shows the proposal of much the largest area, from Little Thornage to Thornage, and not included at 1984, as nullified by the bypass proposal.

Hunworth River and Meadow Restoration Revisited



The Hunworth Project took place on the meadow between the disused railway bridge and Beck Farm. The river had been straightened in this area as shown by an early but beautiful and detailed map for Robert Britiffe in 1726, and much the same in the 1886 1st Edition Ordnance Map. In more recent years the river has been taken close to the lane alongside. In doing repeated channel dredging spoil had greatly raised the east bank above the meadow level. The project was carried out in two phases separated by eighteen months. This was because of the complexity of the project, funding across two financial years, and the need to move fish from the stretch and move downstream prior to doing work involving the existing river channel. August was the month which minimised disturbance to the life cycle of a range of species, with fish present (trout, brook lamprey, bull-head, eels, etc), white-clawed crayfish, water voles and otters.

Phase 1 took place in March 2009. The

Top: James Corbridge 1726 map excerpt from Hunworth village to Beck Farm.

Centre: 1886 1st Edition OS map excerpt from the railway bridge to Beck Farm, the project site. The length is 43% of that above.

Bottom: at 2008 the site viewed from the railway bridge, prior to the project starting in March 2009. Note the high east bank.





task was to remove the dredged soil from the east bank as the first step for the river-meadow reconnection, required to enable phase 2 to restore the river channel, and the hydrology of the meadow to improve the plant diversity. In a heavy rain event, have a period of flooding of the meadow and reduce flood risk to property downstream. Phase 1 took place in early March 2009, and took seven working days. The spoil was removed by a tracked digger and 12-tonne dumper truck operated by the Environment Agency. It was estimated that some 1,200-1,400 tonnes were removed from the east bank, and taken away by working from the centre point of the meadow. The north half was taken to an arable field to be spread there later; the south half was stored on the road side of the meadow near the rail bridge for landscaping there at the completion of the project. The spoil removed extended for some 8-10 metres from river edge into the meadow.

Phase 2 started in early August in 2010. The aim was to have a more natural and diverse channel that was sinuous, narrower and with a series of deep pools and shallow gravel riffles, supporting wildlife biodiversity and being stable. There were two stages in working to the river engineering plan. First to create sculpted new sections on the east side of the existing channel, but stop short at both ends of any contact with the channel. There was then a pause to remove all fish and release them downstream. With the 'rescue' completed the new sections were interweaved into the parts of the existing channel to be retained, with the 'redundant' sections of the existing channel being back filled. This had been done in a few upland rivers, but not in a 'low energy' East Anglia river. Particular care was required at the beginning of this process to insure there was no impact on the digital equipment gauge at the railway bridge, designed to provide historic data on river flow as well an indication of high flow (flood risk) or low flow (drought concerns).

Top: digger at top end of the site on the first new channel section.

Centre: digger 10 minutes on its way to forming the first new section. The same process followed to give a series of new sections downstream to the end of the site.

Bottom: electrofishing, long used by the Environment Agency to assess river health. Differences here were an added search for crayfish on the river bank, and fish release outside of the site, as required by the project.

Prior to the joining of new sections to the retained old, there was the need to catch, weigh, measure and release the species downstream (and prior to doing any work at all there had been a water vole survey, in particular for nesting burrows in the river banks). The 'rescue' operation took place on the 3rd August, two runs of electro-fishing during the day, the second using the digger to push-pull the abundant water cress onto the banks, and ran into a night session by torchlight to catch remaining white-clawed crayfish.

This exercise was carried out by six people, all licensed by Natural England to handle protected species. Nets were placed across the channel at top and bottom of the site ahead of this work. Trout caught were all no more than moderate in size, and it was thought this might be because there were no deep pools in the channel. Pulling back the water cress onto the river bank revealed that there was a very uniform channel, both too wide and too shallow. The flow however was quite fast, due to the abundant presence of the water cress causing a significant narrowing effect.

The final sequence of project was the inter-weaving of the new sections of 'dry' channel into the selected parts of the retained old. This took place on the 5th-6th August in a sequence starting at the top end and working downstream. Each join was made first at the lower end, so the river water backfilled into the new stretch being knitted in (a front end fill would have caused more sediment movement). Then the front end to the existing channel was opened with the digger 'hopping' over, and using the excavated soil stored nearby to seal off the 'redundant' section of the old channel. It was realised in doing this process that it would not be necessary to backfill all this section to prevent the risk of a 'break-through' back into the existing channel, and by leaving the lower part open then we would create a series of backwaters. These provided another type of habitat which would give shelter to small fish and water vole when the river was in spate. The first to



Top: the digger is making the connection between parts of the existing channels and a new section.

Centre: the redundant channel section had to be backfilled, but not for the whole length, in the 'knitting' and weaving process.

Bottom: the partial backfill then creates a series of backwaters. A different habitat as 'still' water, but connected to the river. This pattern is a unique feature of the project.



Aerial view of the completed project at 16 October 2010. The backwaters can be clearly seen. They are less visible now with the aquatic vegetation growth. The backwaters were not in the original plan. On site we realised that a complete back fill was not necessary to avoid a 'break-through' into the old channel, and was an opportunity to be taken.

benefit however were spawning frogs. As we moved down this sequence to complete the connections at the end of the meadow, we increased the extent of the backwaters so bringing some variation to them.

The outcome was a very sinuous channel with an increase in river energy (and water oxidation) by having a series of shallow riffles and deep pools, the pools absorbing the energy at each step to avoid any bank erosion at each bend in the river. This would enable the growth of a range of aquatic plants, such as water crowfoot, and thus benefit a range of species, fish and invertebrates. The increased wetness of the meadow by its reconnection to the river gave an increase of wetland plant species on the meadow. It was a joy to see the twist and turn of the strong flow in the channel.

On a wider comparison, the river-meadow reconnection followed and extended on that element of the Cinderella project in 2006, in itself a very early example of a break-through of the embedded culture in agriculture. The river engineering skill to give a sinuous channel was later taken forward in September 2014 with the creation of the New River at Bayfield. In principle this was easier as the river was taken out of a brick channel built at 1890 to 1894, as a diversion of water running through what had been broadened to form a Lake, to the surface. The 1km of river that had been in the tunnel became 1.2km of sinuous river weaving between the tunnel and Lake. The same creation process of sinuosity and riffles and deep pools was applied, with 30 of each along the length. There was a very early indication of use, in that the riffle gravel, by now carrying a little sediment, had patches of pristine gravel, caused by spawning trout wriggling some way down onto it. In another year it looked that it had always been like that, and a electro-fish survey gave a good result.

In two ways this was a less complex operation than at Hunworth. There was no Phase 1 required, and no need for the nature rescue operation. The only issue of this kind were the bats who lived in the tunnel, and some river water was allowed to flow through the tunnel, so the stable low temperature in the tunnel was maintained. These were two very important projects for the Glaven, and perhaps that at Hunworth has been given less recognition. Hence this article, albeit recorded in RGCG *Newsletters* at Spring 2009 pages 4-5, and Phase 2 at Autumn 2010, pages 6-9. In addition to the detail in text and photographs, these give the credits and acknowledgements of the organisations and people involved in Phase 1 and Phase 2 in the two articles.

Ian Shepherd

Norfolk and Suffolk councils given authority and funding to help nature's recovery: Defra statement 04 July 2023

"Norfolk County Council and Suffolk County Council have been formally appointed by Government as responsible authorities for preparing a Local Nature Recovery Strategy for their respective counties. This means they will be working together to help improve wildlife habitats and reverse the decline of biodiversity across the region, working with local communities to develop a tailored nature recovery for their areas. They will also work with other local planning authorities, the Broads Authority, Natural England, and a wide range of stakeholders and partners, including farming and landowner groups.

This is all part of Government's ambition to further drive nature recovery, with 48 individual local authorities across the country receiving allocations from a £14 million funding pot. Norfolk and Suffolk County Councils will get £333,000 and £282,000 respectively over two years to fund this work. With the best ways to support nature recovery depending on local character and geography, Local Nature Recovery Strategies will help communities map out the action needed in their area to restore nature. The Norfolk and Suffolk Councils have already been working closely with each other, and jointly hosting the Norfolk and Suffolk Nature Recovery Partnership, and a host of other stakeholders and interested parties to prepare with this moment.

The Strategies will focus on how to improve habitats and protect the natural environment, with local approaches tailored to the specific circumstances of each area. Norfolk and Suffolk are home to a variety of beautiful and unique landscapes, from the chalk streams of the Norfolk Coast to the Stour estuary at the southeast of Suffolk and across many habitats in between, and specific policies will be drawn up to best protect and nurture each location. Future plans will include working closely with other neighbouring counties, to identify and support opportunities for nature recovery at sufficient scale to really benefit wildlife".

RGCG Comment on DEFRA statement

The long term plan is to first focus on landscape scale Local Nature Recovery Strategies. These will then be 'stitched' together to form a single Nature Recovery Network across England. Rivers are important as they provide a wildlife corridor both inland and to the coastline and sea; and vice versa. The RGCG welcomes this first big step to what will be a long haul to reverse the dire situation we have arrived at over many decades, and the damage inflicted on our natural environment. We give our full support to the Norfolk-Suffolk Local Nature Recovery Strategy.

Ian Shepherd

An RGCG Tribute to Max Garrett:

Max died in mid-May after a long illness. We owe him much for his interest and skills in assembling text and photographs for our Newsletters from 2004-2014. The first was just four pages and in black and white, but he soon saw us move to colour and print in colour, as we had more to say. We were in the CD age for photographs, but led by Max in the period 2009-2010 in going to electronic camera. We were still very much in CD mode when our first major project took place in October 2006, river restoration upstream of Little Thonage. The project was funded with a £10,000 grant from the Environment Agency. As well as fully reporting the project, and what we learned for the benefit for other volunteer groups, we had to do the text and CD photographs separately. Plus talk to a group of local people on-site, and lunch for all, including EA staff, at the Kings Head pub, and more discussion. Max put some 200 photos on a CD, with a booklet and line to identify each. As his wife Joan said "Max enjoyed making a computer do what he wanted and the satisfaction of a task well finished". We remain very grateful for that.

Ian Shepherd



A sandy run off has just occurred from a new land drain put into the river by the contractors at the river crossing at Baconsthorpe. (see front page for details).

We aim to work in friendly collaboration with landowners and farmers, conservation organisations and relevant public bodies.

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