

THE ALDE & ORE ASSOCIATION

Registered Charity No. 1064789



The Association exists to preserve and protect for the public benefit, the Alde and Ore River and the Butley Creek and their banks from Shingle Street to their tidal limits and such of the land adjoining them or upstream as may be considered to affect them, together with the features of beauty and or historic or public interest in that area.

RIVER DEFENCE COMMITTEE BULLETIN NO. 2 JULY 2007

1. RIVER DEFENCE COMMITTEE REPORT JUNE 2007

The Estuary defences have now been recorded and the following final report has been sent to the Environment Agency for their comments and costing. We expect an initial response by the end of July, if all our points are accepted then they will go to the Regional Committee for Norfolk and Suffolk who will select the sites for submission for funding from EA's national budget. Any rejected will become subject to negotiation between the RDC/A&O and the EA in behalf of the landowners

Members of the Committee have surveyed the banks of the Alde, Ore and Butley Rivers from Snape Bridge to the mouth. Nine locations have been identified which are in need of urgent repairs. These are listed below as follows:-

1. **HAM CREEK (Grid Ref 4315.5780)** River Wall showing erosion and break down of concrete armour



2. **ALDEBURGH TOWN SLUICE**

- i. **Grid Ref 458557** River Wall either side of Aldeburgh Corporation Sluice TM45857 17-25 feet to west of Sluice steps, 6 revetment blocks wide, above two lines of blocks, the blocks have gone or are displaced exposing the earth in the bank.



- ii. Around 15 feet from the steps to the west, some loose revetment blocks so likely to get washed away (one in photo already lying on shore)
- iii. Blocks coming loose at west side of sluice steps



ii



iii

- iv. 36 feet to east of steps, revetment blocks gone leaving a 4-5 foot gap where the bank earth has been eroded back about 18 inches (at that point the whole river wall is only 5 feet wide at the top)



- v. Beginnings of block loosening a few yards to east of sluice steps
- vi. A further 40 feet east a couple of blocks are dislodged



(v)



(vi)

3. ALDEBURGH RIVER WALL

High tide debris is within 18 inches or less of the top- already identified by Environment Agency as a priority zone. Rebuild slumped wall, near the ‘We’ of West Row on the map.

NB **Grid Reference 462547** South of Martello, by the granite blocks on the river side of the sea wall near the gate to the National Trust land, vehicles have been racing down the shingle bank and are eroding it - some chestnut paling here could be very helpful, just as it has been alongside the road to the Yacht Club.

4. IKEN TO CHAPMAN’S CREEK

i. Grid Reference between 425564 and 430563 Landowner: Richard Mann

200 metres of broken armour allowing water penetration into the foundations of the wall



ii. Grid Ref 438567
Broken armour with water penetration

Landowner: Paul Cooke

iii. Grid Ref 443559 Severe erosion where mattress armour ends



(ii)



(iii)

iv. Grid Ref 444556 Wall slumped for 200 metres with high tide debris line under 2ft (no photo)

5. BLACKSTAKES REACH

Landowner: John Grimsey/David Black boundary

Grid Reference: TM 443 520 Area of seriously collapsed and eroding wall approximately by Blackstakes Reach Grimsey/Black boundary. This will, in time, become more costly to repair.



6. ORFORD

Landowner: Michael Cordle

GPS N52 05 338 E001 32 192 (Grid Ref 423493)

20+ metres of seriously dislodged and collapsed armour with water penetration and erosion.



7. GPS 053.219 (Grid Ref 423492) Area of 2 metres dislodged armour on Cordle/Greenwell boundary but could be dealt with at the same time as location 5. No photo.

8. BUTLEY CREEK

Landowner: George Watson

GPS 662.712 (Grid Ref 395497) Area of 6 blocks 2 deep seriously dislodged and water penetrating and eroding



9. GPS 591 803 (Grid Ref approx 398494) Area of 2 rows of 12 blocks collapsed with water penetration



10. OTHER AREAS OF CONCERN

- 1. Lantern Marsh Breach** remains of great concern to the Committee as there is no secondary defence should the sea overtop the shingle bank.
- Our coordinator for this area also noted that immediately south of Martello Tower (**Grid Reference 463548.5**.) 70 yards from the end of the concrete sea wall/curtain, there is only a flat area 17 feet wide from the concrete curtain keeping the sea out before the shingle slopes down and it is evident that it is eroding, not helped by 4x4s.
- There are a number of other small areas of dislodged armour along the river that have been recorded that will need maintenance at some point in the future, as well as the slumped wall by the pill box on Michael Cordle's land (GPS 278.151) which is now well below the original level of the wall.

2. COASTAL ACCESS

A Press Release from Natural England on the Consultation Paper was issued on 19 June 2007 relating to coastal access. Although it has not been made entirely clear it would appear that coastal access includes access along estuaries to the first crossing point (in the Alde and Ore's case this will be Snape Bridge). Given that the preferred option is new legislation dealing specifically with coastal access (rather than relying on public rights of way, access under the Countryside and Rights of Way Act 2000 or on Stewardship schemes) it will be sometime before any right of access will be introduced.

The good things about the proposals are:

1 "A key aspect of the new powers would be flexibility for us to fit the type of provision to local circumstances and needs" [para 481]. In other words there will not be general access provisions (as under the CROW Act) which apply to the whole country.

2 It is accepted that there are wildlife and health and safety issues on salt marshes and mudflats. "Improving access to these areas would therefore be complicated and the practical public benefits limited, so this should not be a national priority in its own right." [para 385]

3 It is proposed that the liability of Occupiers should be the same as that under the CROW Act i.e. only very limited duty which is less than that owed to trespassers. Where there is already de facto access or permitted access this improves the position of Occupiers.

4 There will also be provisions enabling access to be restricted at certain times of year and for dogs to be kept on short leads in specific areas or at specific times.

5 The Alde and Ore Association has been listed as a consultee, for comments to be in by mid September. The Committee decided that notwithstanding the above that any increased access for its members along the Alde, Ore and Butley, should be access through voluntary agreement negotiated with the individual landowners, as recommended by the CLA. Do please contact David Andren (dandren.edp13@london.edu 01394 450374) Angela Sydenham (Angela@angelasydenham.wanadoo.co.uk 0 1728 453627) or Mandy Bettinson (amanda.bettinson@keme.co.uk 01394 450863) to register if you have any particular issues you wish to discuss or be taken into consideration.

3. THE BUBBLER – a coastal erosion prevention project

This is advanced notice of a trial being run opposite the Aldeburgh Yacht Club. Dr Sam Duby writes: "One does not need to be old enough to remember the devastation wrecked by 1953 floods to be aware of the threat the sea poses to the Suffolk coastline. The floods caused an impressive litany of destruction; 307 people drowned, 24,000 homes flooded, 1,200 breaches along 1,000 miles of coastline, 160,000 acres of farmland flooded, 46,000 livestock lost. These days, a trip to the fallen village of Dunwich, once a prosperous seaport and centre of the wool trade during the early Middle Ages with eight churches and an impressive fleet of royal ships will confirm the existence of the relentless and undiscerning power of the ocean.

Over the years, much effort has been directed at keeping back the sea, however the massive costs associated with such projects these days often mean that too little, if anything is done. It is against this background that we are trialing a new concept off the coast of Suffolk. An effort to mimic the natural processes of coral formation to create a dense and tough, cheap, natural and self-healing structure that will hopefully slow the unrelenting loss of valuable land.

The project has affectionately become known as the Bubbler (owing to the bubbles of hydrogen produced as a by product) and is a combined coastal erosion prevention, carbon sequestration

project. The concept relies on a small electric current being passed through a wire mesh submerged in salty water, using the same mechanism employed by natural corals, this provides an electro-potential which causes minerals to be accreted from the seawater building up a crystalline deposit of calcium carbonate and brucite on the wire mesh. This coral-like deposit is harder than concrete and with a supporting internal wire mesh constitutes a mechanically tough material that will grow in-situ. The small quantities of electricity used to power this process are provided by any one of a number of sources such as the thermoelectric generator mats we have been developing over the last five years or small wind turbines similar to those used to provide auxiliary power for caravans and yachts.

In warmer waters, the structures can also provide a good substrate to anchor natural corals and assist in the construction of their exoskeleton allowing them to concentrate energies on more crucial functions such as surviving pollution or temperature rise.

The tough structures, once accreted, can be used as a low-cost, load-bearing building material. Roofing sections, walls, cladding, pipes, any shape is possible. The only limitation is the creation of a chicken wire former. This implies that coastal communities can grow their own building materials cheaply and in manner that permanently locks up carbon in a very dense, efficient manner. In some areas such as rural Madagascar with no other source of solid building material, this could also be used as a local income generation scheme.

The devices also work as very effective fish aggregation devices, promoting local biodiversity and increasing the yields for local fisherman.

The extension of course is that if you bury these meshes in the sandy shore. The coral will form around the sand particles using them as an aggregate and building up a much larger volume of solid material in the same time. This means that sections of beach can be stabilised, thus constituting a very effective erosion prevention device. The process also negates the need to use large amounts of carbon intensive concrete to build sea defences and being largely calcium carbonate, the material constitutes a dense, permanent and quantifiable sink for carbon dioxide allowing the seawater to absorb more from the atmosphere, which what with all the talk of carbon credits and such-like is big business these days.

A number of tests sites are already up and running, with more scheduled. The tests all consist of a wire mesh, serving as the cathode and target for the accreted material, a steel anode, sophisticated monitoring and logging systems to keep track of the current flow and voltage fed into the meshes and a wind turbine power source. The first test to be set up was the control; meshes in freely moving saline water. The idea being to gather raw data on the rates of mineral accretion as a function of power provided, and as defined by local conditions. So far the results look promising and material is already being accreted. This test is sited in the River Alde, near Chapman's Buoy on a mooring very kindly donated by the Aldeburgh Yacht Club. Look for the old blue and white fishing boat with a powerful wind turbine strapped to the top and various bits of scientific equipment attached to a yellow buoy dangling off the back. The second test is located on Ferry Farm, on the rapidly eroding mud shoreline a few hundred yards from the boat. Again, this can be spotted by the whistling turbine and the lengths of mesh partially sunk into the mud against one of the banks.

It is very early days yet, and we are not sure whether the process will in fact be rapid enough or cost effective enough to be an effective erosion prevention device, however thanks to funding from the UnLtd. funding body, we have the chance to find out. We shall keep you up-to-date on any progress.”

Dr. Sam Duby

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July 2007

4. WHITE-TAILED EAGLE POTENTIAL REINTRODUCTION

A précis of Natural England's press release: let me know if you would like all 4 pages. AB

This is a potential reintroduction to establish an English population of white-tailed eagles but will only happen if planning work is completed successfully. Around 15 young birds a year will be released for five years on the Suffolk coast.



The partnership project is led by Natural England, with Anglian Water, the RSPB, and the Suffolk Wildlife Trust. The birds are likely to be sourced from Poland which has a large population of tree nesting eagles in low-lying areas of forest and wetland habitat very similar to the habitat of the Suffolk coast. A significant amount of the Suffolk coast receives statutory protection with large areas of wetland notified as Sites of Special Scientific Interest and Special Protection Area; the highest level of protection available reflecting a site's international importance. There is also a large programme of wetland restoration and creation currently underway in this area.

The earliest potential release date is summer 2008. The birds cannot be reintroduced without the necessary licences and permissions. Further planning work must be undertaken successfully for licences to be granted. The first stage of the project will involve working with local communities, landowners and other stakeholders to address and resolve any concerns and issues about the project.

White-tailed eagles, also known as sea eagles, are the UK's largest bird of prey and the world's fourth largest eagle. They have a wingspan of over two and a half metres, bodies around a metre in length and weigh between four and five kg. They are generalist scavengers and opportunists and feed on carrion or steal prey from other predators. They also catch live prey including fish, water-birds and medium sized mammals. In Scotland white-tailed eagles occasionally take lambs, but most reports of predation relate to white-tailed eagles scavenging dead lambs. In Scotland lamb predation was localised where productivity was very low i.e. sheep were in the poorest condition and lambs were weakest. Ewes in more productive areas were stronger and able to defend their young. There is a risk that white-tailed eagles could take piglets, but Natural England are hoping to work closely with farmers to ensure this is not a problem. Using feeding stations located close to the release sites should prevent the birds from wandering, which they are prone to in their first year, and encourage them to settle close to the release sites where there is a rich, abundant supply of food.

On arrival in England the birds will be quarantined and undergo rigorous checks to ensure they are fit and free from disease before release into the wild. www.naturalengland.org.uk

PS Editors Note: Highly unlikely to prey on poodles/pets and babies in prams ... further views no doubt in the Newsletter.

5. Correction to last Bulletin: Just to keep the record straight it was pointed out (by a trusted Sage) that the EA is only legally obliged to do work to protect European Habitats Directive sites (i.e. Special Areas of Conservation, (SACs) or Special Protected Areas (SPAs). They do not have an obligation to protect SSSI's which, as a national designation, are in a lower tier.