



Catchment Wide Invasive Species Education

New Interpretation highlights the catchments invasive non native species.

The threat of non native invasive species within the South Esk catchment was highlighted earlier this year by a range of leaflets and by the partnership's new website. A new suite of onsite interpretation now complements these and brings invasive species education to all areas of the catchment. The A2 size interpretation boards are located in Glen Doll, Cortachy, Brechin and at Montrose Basin. They are located at points



where walking routes begin, end or where there is a high footfall. The content of the boards will aid anyone in using the river to identify problem plant species such as giant hogweed, Japanese knotweed and Himalayan balsam. American mink is also highlighted and there is help to distinguish between this problem species and native biodiversity. The partnerships "River Watch" scheme is highlighted on the panels allowing the public



to report any sightings of invasive species or

activities being carried out within the catchment which are detrimental to the river's health. In the short time the project has ran we have already had numerous reports of invasive species which have been passed on to the relevant parties for treatment. The boards were kindly funded by Angus Council, Esk Rivers & Fisheries Trust, Esk District Salmon Fisheries Board, Scottish Natural Heritage, Cairngorms National Park Authority, and Rural Tayside LEADER.



What is a priority catchment?

Priority catchments are river and coastal catchments that are currently failing to meet water quality standards, and which will not achieve improved water quality without a focused management approach. They contain some of Scotland's most important waters for bathing, drinking water, conservation and fishing. As agreed by stakeholders, SEPA has used a risk based approach to select 14 priority catchments throughout Scotland for restoration and protection.

Our approach has three phases:

- desk based study, catchment walks and ongoing monitoring;
- awareness raising;
- farm visits and advice on solutions.

For more detail on our approach, and how priority catchments are selected, please see our diffuse pollution website*.

What is diffuse pollution?

Often driven by rainfall and land use activity, diffuse pollution occurs when sediment, nutrients, bacteria and chemicals are lost from the land to local burns, rivers, lochs and groundwater. The impacts of diffuse pollution include:

- silting up of river beds;
- faecal contamination of bathing waters;
- excess nutrients causing algal blooms in lochs and estuaries;
- toxic substances affecting drinking water quality.

Changes in water chemistry also affect protected species such as salmon, freshwater pearl mussels and water voles in and around rivers, lochs and coastal waters. Although water management has led to huge improvements in water quality over the last 50 years, diffuse pollution is now the largest source of pollution in Scotland's waters and a national, co-ordinated approach is being taken to address it.

*www.sepa.org.uk/water/river_basin_planning/05/water_pollution_mag.aspx

Available at: <http://theriversouthesk.org/our-projects/sepa-priority-catchment-work/>

INSIDE THIS ISSUE:

Funding Secured For Catchment Projects	2
Renewable Energy and Biodiversity Funding	2
Barn Owls in the Catchment	3
Angus Woodland & Forestry Framework	3
Montrose - The Energy Port	4
Fisheries Management Demonstration Project	5

Funding Secured For Catchment Projects

Major restoration project planned for the New Year

“Restoration of the water course as far as possible to its original course would allow the creation of a diverse riparian and aquatic habitat and a return to a more natural flow regime”

Angus Council have matched the £10,000 commitment made by Scottish Natural Heritage to ensure funding is available for projects within the catchment over the next year. The Cairngorms National Park Authority have pledged £2000 and the Esk Rivers and Fisheries Trust £4000. The Scottish Environment Protection Agency have offered over £90,000 in funding from the SEPA Restoration Fund allowing the large scale project proposed, the Restoration of the Rottal Burn in Glen Clova to take place subject to all environmental mitigation measures being in place. The reach of the Rottal burn between Rottal Lodge and its confluence with the

South Esk has historically been realigned and straightened. Just prior to the Water Framework Directive coming into force in 2000, the stretch was dredged out destroying the existing habitat.

Restoration of the water course as far as possible to its original course would allow the creation of a diverse riparian and aquatic habitat, a return to a more natural flow regime, attenuation of flood peaks and would visually enhance the area. The proposal

would also restore sustainable, functional populations of salmon and trout, enhance habitat for freshwater pearl mussel populations and would allow the burn to be used as a demonstration site available for future research.



Rottal Burn, Glen Clova

Renewable Energy & Biodiversity Funding

Community led projects encouraged to apply



Westmuir Community Woodland Project @AET

Angus Environmental Trust has now been funding many and various projects around Angus, through The Landfill Communities Fund for more than 13 years. In early 2011 the Board of Directors agreed to extend the remit of the Trust and consider applications from community groups with regard to renewable energy and energy efficiency projects to assist with the im-

provement of village halls across Angus.

Projects to provide improvements to other types of public amenities ranging from works to improve the external environs of village halls, improvements to parks, and path and access projects on both a small or medium scale and works to other types of public amenities will also be considered. Funding is also available for nature conservation and biodiversity projects. The Trust has not set funding thresholds or intervention rates but considers each proposal on its own merits dependant on the type and nature of the project. All projects must be for public benefit and meet the criteria of the

Trust and importantly be eligible under the Landfill Communities Fund.

If you are looking for guidance or for the mechanism to undertake improvements to an area near you, for the benefit of the Community, please get in touch with Angus Environmental Trust. The Trust Administrator can be contacted by telephone on 01307 473334 or email phillipsge@angus.gov.uk



Have you seen a Barn Owl in the Catchment ?

As winter approaches keep an eye out for this enigmatic species

Last winter was particularly hard for Barn Owls over the whole of the UK and although in Angus we escaped much of the snow, we still had prolonged periods with much of the ground covered in ice. Barn Owls find life in these conditions particularly hard as these beautiful birds are actually quite a lot smaller than most people would think and so do not have much in the way of reserves to see them through a cold snap. The ground conditions last winter also meant that their usual prey (voles, mice and shrews) were able to move about underneath the thin layer of ice or snow and so escape capture.

On behalf of the Tayside Biodiversity Partnership Carol Littlewood has been collecting information on the presence of Barn Owls in Tayside for a number of years and the information has been used to inform the placement of a number of Barn Owl nest boxes around Angus, to provide potential nest sites or safe winter roosts which the birds can use. Some of these boxes are in the South Esk Catchment and the number of sightings collected from the area suggests that there was a good population of Barn Owls around the South Esk corridor and that of its tributaries. Last winter there were quite a few Barn Owl deaths reported and Carol would be particularly interested to receive any information on Barn Owls, particularly in the South Esk Catchment, but also in Tayside as a whole. This will help to inform the Partnership about where Barn owls survived the bad weather.

Any details of Barn Owl sightings,

dead or alive, or information about where they used to be seen regularly but they now seem to have gone, would be greatly appreciated. Please drop a note, send a text or e-mail Carol with when and where (preferably including a grid reference) you saw your Barn Owl and any other information you think might be useful.

Carol Littlewood, Tel: 0791 999

2064 E-mail:

carol@littlewoodlandcare.co.uk

© Carol Littlewood - Almost fully fledged female Barn owl in one of the nest boxes in the South Esk catchment.



Angus Woodland & Forestry Framework

A new focus for sustainable management

Forests and woodland across Angus already make a significant contribution to the attractive landscape of the county. They also provide a wealth of benefits to the local population and visitors to Angus, to the local economy and to Angus' environmental quality and biodiversity. In addition, on many of the traditional estates, where forestry has historically been incorporated into land use practices, forests and woodlands have provided woodland habitats for sporting gain and form an important part of the sporting landscape.

Agriculture plays a major role in terms of Angus' land-use, economy and population distribution. Covering nearly 190,000 Ha, the county's agricultural land constitutes 87% of the total land area in Angus and also contains 40% of Scotland's Class 1 agricultural land. Furthermore, in terms of its economic contribution, the county's agricultural output, at 8.9% (£99.2 million), represents a significant proportion of the total GDP of Angus.

Traditional sporting estates also make a significant contribution to the economy of Angus with estates such as Airlie, Dalhousie and Strathmore offering

a range of activities including shooting, fishing and deer stalking.

Given therefore, the importance of agriculture and traditional sporting activities to Angus, it is essential to ensure that any developments/strategies for forests and woodland are focused on creating an appropriate balance between, rather than competing with, other existing land-uses.

Angus Council's Infrastructure services committee approved the plan on 11th October 2011 and it will soon be available on www.angus.gov.uk.



Silver birch, Glen Clova

Montrose - The Energy Port

Long term commitment to economic growth

“ Montrose Port is strategically important for the catchment areas economy and of that as Angus as a whole. ”

Nestling in a sheltered haven on the river South Esk, within a mile of open sea, the thriving port of Montrose offers a cost-effective alternative for vessels using Scotland's East Coast. Developed on both the north and south banks of the river the port has an interesting history which can be

There is long-term commitment to quayside transit warehousing and open storage at deep water berths and Well stimulation has been a speciality in the port for over 25 years. New fuel and bulk chemical facilities are in process of being provided to broaden the appeal of Montrose to the oil and gas sector.

Montrose is well placed to offer modern accommodation for their operating and maintenance phases of their business and with a regeneration initiative of a large area of portside land involving Angus Council, Scottish Enterprise, Tac-tran, Glaxo SmithKline and MPA together with other property own-



traced back to the 12th century. Montrose Port is strategically important for the catchment areas economy and of that as Angus as a whole. A study undertaken by Halcrow on behalf of Angus Council and Scottish Enterprise Tayside identified that overall the Port may support in excess of 500 jobs in Angus. With almost forty years experience in providing onshore and maritime services to the offshore oil and gas industry, Montrose Port Authority (MPA) is investing in new facilities to cope with demand from that and other energy industries.

Further investment by MPA, now commencing construction, will provide further warehousing and riser servicing accommodation for Transocean whose focus for such facilities has increased job opportunities in the port. The energy sector and off-shore renewables represents a very significant development opportunity for Montrose including project developers, utilities, port related landowners, supply chain firms and the port authority. The National Renewable Infrastructure Plan indicates that Scotland has significant potential to play a lead role in the continental shelf off-shore wind industry.



ers in the area between the port and GSK manufacturing facilities MPA looks well placed to provide a sustainable economic focal point for Angus.

Atlantic Salmon | Salmon Facts

- Unlike Pacific salmon that die after one spawning, wild Atlantic salmon survive and can repeat their migration cycle and spawn again.
- Wild Atlantic salmon can attain swimming speeds of up to 20 miles per hour (30 kph)
- Wild Atlantic salmon can survive for up to 22 months without eating when they return from the ocean to their birth rivers to spawn.
- Wild Atlantic salmon were one of the earliest known art subjects.
- Wild Atlantic salmon will return to the almost exact spot where they hatched to spawn.
- At maturity, wild Atlantic salmon females can carry 22% of their body weight in eggs
- Large salmon, weighing more than 50 pounds can be more than 20 years old.
- Some Atlantic salmon populations never go to sea, inhabiting lake and river systems in areas bordering the North Atlantic.



The South Esk Fisheries Management Demonstration Project

New conservation work to be carried out in catchment

In their 2010 application for conservation measures on the South Esk, the Esk District Salmon Fishery Board applied the rod catch assessment tool. The tool provides a structured way in which to look at trends in rod catch and is used in situations when a more robust, and preferred, conservation limits approach cannot be applied.

The results of the assessment tool using rod catch data indicate that management action should be considered in respect of the salmon run timing groups February to May. In addition, the results of the assessment tool indicate that management action should be considered in respect of South Esk sea trout stocks.

Given the lack of information on the potential factors affecting abundance, Scottish Ministers have instructed Marine Scotland to undertake an investigation by way of a 3 year National Fisheries Management Demonstration Project

focussing on early running salmon stocks with a view to identifying potential underlying causal factors and appropriate management responses and remedial actions.

The first step is to determine from where in the South Esk catchment early running salmon stocks originate. This will be achieved by radio tagging salmon captured in the net fishery and tracking them to their spawning locations. In addition, the application of genetic tools, if they can be developed satisfactorily, will identify spawning locations for a larger sample of early running salmon.

Once the spawning areas have been identified, the suitability of the habitat for supporting the freshwater stages will be assessed to identify where bottlenecks to salmon productivity, at all freshwater stages of the salmon's life cycle, may be occurring. This will involve assessing salmon abundance with expected values and investigating



the relative impacts of the physical, chemical and biological factors that may be responsible where observed abundances are at variance with the expected values. It may also be necessary to evaluate the potential for removal of obstacles to migration.

For any comments or to join our mailing list, please contact:

Project Coordinator
River South Esk Catchment Partnership
Angus Council, County Buildings,
Market Street, Forfar, DD8 3LG
Phone: 01307 473355
Fax: 01307 467357
E-mail: info@theriversouthesk.org

About The River South Esk Catchment

To address the many issues which affect the South Esk catchment, representatives of some organisations have been meeting regularly since 2004 with the development of an integrated Catchment Management Plan at the forefront of their aims. Gradually an informal Steering Group was formed*. The process of developing a Catchment Management Plan began in earnest in 2008 with the employment of a part-time Project Officer to oversee an intensive two year consultation phase which would capture people's views on what they considered the key environmental, social and economic issues to be within the catchment. These views were used to form the basis of the plan's strategic aims, catchment objectives and actions. Phase one of the plans implementation is now complete and development of the next phase of implementation is at the forefront of the Partnership's mind.

The River South Esk Catchment Partnership would like to thank all its funders and supporters. Without them it would be impossible to carry out the work we are undertaking. The logos on display denote the funders of the 2011/12 phase. Their funding will allow us to work towards enhancing and promoting many facets of the catchment .

*The Esk District Salmon Fishery Board, Angus Council, Scottish Natural Heritage, Esk Rivers and Fisheries Trust, the Scottish Environment Protection Agency, Atlantic Salmon Trust, Scottish Agricultural College, Forestry Commission Scotland, Littlewood Land Care, Cairngorms National Park Authority, Macaulay Institute, Scottish Water, National Farmers Union Scotland, Scottish Rural Property and Business Association Scottish Government Rural Payments and Inspections Directorate.

