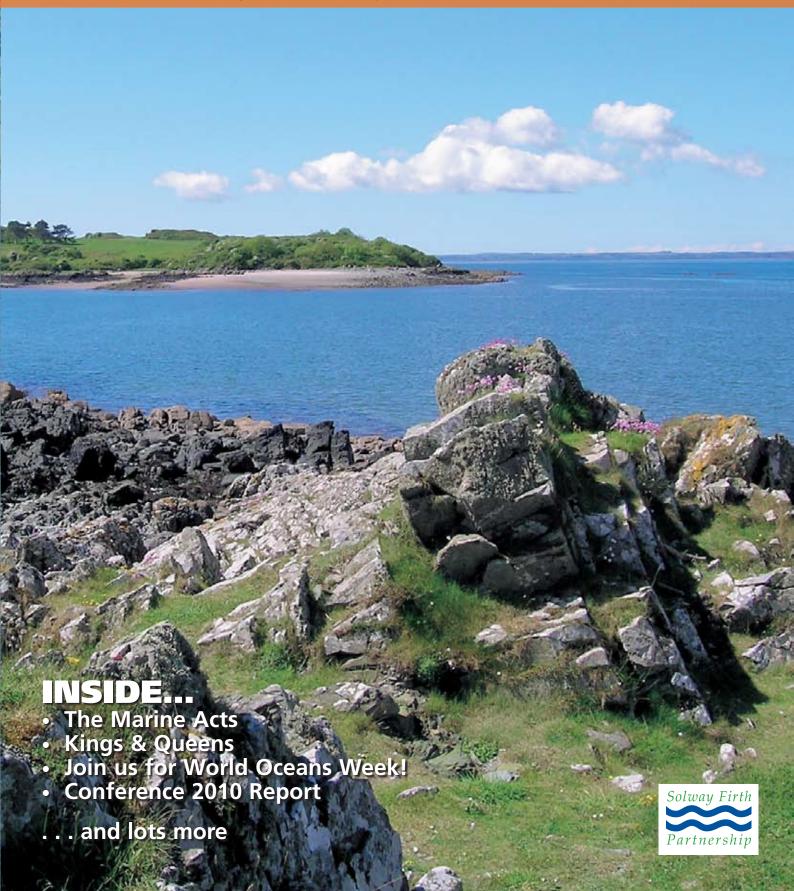


Newsletter of the Solway Firth Partnership

Issue 33

Summer/Autumn 2010



Contents

Page 3

Departures and Arrivals

Page 4 -5

■ The Marine Acts - What happens next?

Page 6

Inshore Fisheries and Conservation Authorities

Page 7

■ Inshore Fisheries Groups

Page 8 -9

Kings and Queens

Page 10-11

■ Come and join us at World Oceans Week 2010!

Page 12 -13

Conference 2010 Report; past, present and future

Page 14

■ The wreck of the SS Riverside

Page 15

■ Philip Henry Goss

Page 16

- Unusual shell found in Luce Bay
- Invasive sea squirt arrives in Scottish waters

Page 17

- More energy sources in the Solway?
- Irish Sea Conservation Zones project wants your views!
- The Green Blue
 good and bad news

Page 18

- Marvellous Mersehead- an experience of a lifetime!
- Festival of the Solway Mosses

Page 19

■ The fireworks of Shoulder O' Craig

Page 20

RSPB Mull of Galloway - getting ready for a busy summer!

Page 21

- Explore the Solway Sea Shore
- Dates for your Diary

Page 22-23

Dates for your Diary

Chairman's Column



Gordon Mann, OBE SFP Chairman With the Marine and Coastal Access Act passed in late 2009 and the Marine Scotland Act in early 2010, administrations both north and south of the border are now steaming ahead with implementation. For anyone working in the marine environment there is a lot of change to keep up with and for people working in and around the Solway and North Irish Sea there is an even larger volume of information to contend with. As well as keeping up to date with developments in both England and Scotland, people around the Solway are also affected by the marine management of other nearby administrations, not to mention developments further afield such as EU initiatives.

Closer to home, an important next step will be the establishment of marine planning regions and the Partnership has been pleased to contribute to the recent

consultation on Defra marine plan areas. The outcome of this is yet to be confirmed but the likelihood is that the southern part of the Solway will form part of a large North West marine planning region extending right down to Wales and well out into the Irish Sea. To the north, a Scottish marine region consultation is expected to get underway in June and the Partnership expects to have an active role to play in ensuring the views of local people are heard.

As many of you will know, the exceptional flooding at the end of November resulted in the disappointing postponement of our annual conference. However, we were delighted to welcome around 150 people to our re-scheduled event in early February where we enjoyed an irreverent and entertaining keynote address from Eric Robson. The launch of the Solway Energy Gateway Feasibility Study attracted much media interest and it will be interesting to see what the future holds as renewable energy technology develops. We have had excellent feedback on the event and our thanks are due to all the speakers who played such an important part in making the day a success.

Progress on a Management Scheme for Luce Bay Special Area of Conservation (SAC) has been frustratingly slow for reasons outwith the Partnership's control and this has tested the patience of everyone with an interest in the site. The fact that there are very strong views about the way Luce Bay should be managed is a healthy and encouraging demonstration of the genuine passion people have for the marine environment. As the plan moves towards a conclusion, it is more appropriate for the statutory bodies, principally SNH and Marine Scotland, to lead this work. The Partnership will continue to contribute to the process and to support integration between all interests in the site.

On the education front, the Partnership was pleased to attend another successful Environment Day in Dumfries in March. Throughout the day, around 400 children donned white coats and goggles to take part in an experiment at the Solway Firth Partnership 'laboratory'. The aim was to demonstrate the process of ocean acidification in a simple and memorable way. By blowing through a straw into water containing a pH indicator, the reaction of carbon dioxide with water to form carbonic acid could be dramatically witnessed. After a few seconds of blowing, the bright blue liquid turned vivid yellow!

Finally, I am delighted to have been appointed as Chairman of the Scottish Coastal Forum recently. The Forum brings together many of the organisations with an interest in the marine environment at national level as well as helping to link the grass roots work of the local Partnerships with the policy makers. Having a foot in each camp benefits the work of both the Scottish Coastal Forum and Solway Firth Partnership.

I hope you enjoy the summer out and about on the Solway coast and sea.

Gordon Mann OBE Chairman, Solway Firth Partnership



Front cover: View of Ardwall Island and Fleet Bay from Carrick shore; part of the Fleet Valley National Scenic Area; Keith Kirk.

Disclaimer

Tidelines is the newsletter of the Solway Firth Partnership. Although all due care is taken regarding the information published in Tidelines, Solway Firth Partnership cannot be held responsible for any errors or inaccuracies contained in Tidelines. Tidelines may include links to websites for information, but Solway Firth Partnership has no responsibility for the content of these links. Please note that the views and opinions expressed in Tidelines are not necessarily those of the Solway Firth Partnership.

Departures and Arrivals

at Solway Firth Partnership

A change for Alastair...

The Partnership has seen many changes since its inception sixteen years ago but a very welcome constant has been Alastair McNeill's support. In 1994, the Solway River Purification Board (SRPB) nominated Alastair as a member of the Partnership with early work focusing on development of the substantial volume, The Solway Firth Review. Published in 1996, the Review is a comprehensive report on all things Solway and, though now dated, is still a well used reference document.

The SRPB later became the Scottish Environment Protection Agency (SEPA) with Alastair taking up the lead post of Area Manager. Alastair continued to play a pivotal role in the Partnership's development, as a member of management groups, a regular contributor to Tidelines and speaker at annual conferences. For the past five years, Alastair has chaired the Partnership's Working

Group – the 'engine' of the organisation which provides a steer on the detailed work programme. In this capacity Alastair has brought a great deal of enthusiasm, expertise and encouragement to the organisation which has been greatly appreciated.

His recent retirement from SEPA marks a change in Alastair's role with the Partnership and though stepping down from the Working Group we are delighted that Alastair has indicated a willingness to be considered for appointment to the Solway Firth Partnership Board of Trustees. Formal consideration will need to be deferred until the next AGM but Alastair has kindly agreed to stay in contact in an advisory capacity meanwhile.

On behalf of everyone at the Partnership, we would like to sincerely thank Alastair for all his help and support over the years and wish him a very happy and well earned break.

And welcome to June and Billy...

Meanwhile, we are delighted to welcome June Lochhead and Dr Billy Sinclair who have recently joined the Partnership's Board bringing us up to a full complement of twelve Trustees for the first time.

June is a founding Member and Secretary of the Galloway Static Gear Fishermen's Association. The Association comprises around twelve full-time static gear fishermen working in the Wigtown Bay, Luce Bay and west coast of the Rhins of Galloway areas catching lobster, crab and whelk. The Association has been actively involved with Solway Firth Partnership over many years attending fisheries events, consultations and conferences. GSGFA has also been a welcome participant in World Oceans Week for several years with fishermen providing mature live lobsters, edible crabs and other marine life for display tanks as well as attending to provide information about local fisheries and folklore.

Goodbye to Sue...



fter two and a half Ayears of sterling service, Sue Hall has decided to move on from her post as Project Officer to pastures new and will be taking up full time study for an MSc in Carbon Management from September with the University of Glasgow at the Crichton Campus. Sue has been a tremendous asset to the Partnership and, with a background in scientific research, brought a new set of skills to the organisation.

Sue says, "It is with great regret that I will be leaving the Partnership in September to continue with my studies in environmental science. I have had a fantastic time with the Partnership, experiencing a huge range of marine issues and challenges. It's been a lot of fun and I hope to stay in touch with the Partnership during my studies. I have met some great people during my time here and I wish everyone luck for the future, especially the Partnership in the exciting times ahead!"

We would like to say a big thank you to Sue for all her hard work and wish her the very best of luck with her studies.

Top Photo: Sue in action (third from right)

Dr Billy Sinclair started working with the Partnership more recently, providing a very useful link with the academic world in his capacity as Senior Lecturer with the University of Cumbria Faculty of Wildlife and Conservation. Billy has eighteen years of marine research experience including time spent working on the Barrier Reef in Australia and is author of a wide range of scientific publications. Billy is Chair of the Clyde Inshore Fisheries Group as well as being a keen recreational fisherman and diver.

We are delighted to welcome both June and Billy to the Board.

Gordon Mann Chairman Pam Taylor Project Manager

The Marine Acts - What happens next?

he UK Marine and Coastal Access Act was passed in November 2009 and the Marine (Scotland) Act in March 2010 and both pieces of legislation share the broad aim of balancing competing demands on the sea. The Acts intend to support clean, healthy, safe, productive and biologically diverse seas as well as boosting the economic potential of the marine and coastal environment. This is to be achieved through a new system of marine planning, streamlined licensing arrangements and new marine conservation designations. The bodies at the centre of implementing this work will be the UK Marine Management Organisation (MMO) and Marine Scotland.

The Marine Management Organisation (MMO)

The MMO is a new executive nondepartmental public body (NDPB) established and given powers under the Marine and Coastal Access Act. Established in April 2010, the MMO has incorporated the work of the Marine and Fisheries Agency (MFA) and acquired several new roles including functions previously associated with the Department of Energy and Climate Change (DECC) and the Department for Transport (DfT). The MMO has responsibility for preparing marine plans for the English inshore and offshore regions and, with others, will have a duty to take decisions about proposed developments in accordance with marine plans, unless relevant considerations indicate otherwise.

In English waters, the MMO will:

- be the national champion of sustainable development in the marine and coastal area
- implement a new marine planning system
- implement a new marine licensing regime that is easier for everyone to use
- streamline the management and regulation of England's fisheries
- work with Natural England and the Joint Nature Conservation Committee (JNCC) to create and manage a network of protected areas, marine conservation zones (MCZs), designed to preserve vulnerable habitats and species
- respond to marine emergencies with other agencies.

Marine Scotland

Marine Scotland was established in 2009 and is a division of the Scottish Government bringing together a range of functions including the former Scottish Government Marine Directorate, Fisheries Research Services (now Marine Scotland Science) and Scottish Fisheries Protection Agency (now Marine Scotland Compliance). Marine Scotland is the lead marine management organisation in Scotland and

aims to act as a champion of Scotland's seas, sustainably managing the marine environment for the use and enjoyment of future generations.

Marine Scotland is divided into six areas:

- Marine Planning, Policy and Renewables: Responsible for ensuring that decisions about marine developments and activities are collaborative, open and transparent.
- Aquaculture, Freshwater Fisheries and Licensing Policy: Responsible for promoting sustainable, profitable and well managed fisheries and aquaculture industries in Scotland.
- Compliance: Responsible for deterring and detecting illegitimate activities through effective compliance and enforcement arrangements.
- Science: Responsible for providing science and research that is respected, relevant and responsive.
- Sea Fisheries Policy: Responsible for promoting sustainable, profitable and well managed fisheries in Scotland.
- Performance: Responsible for supporting all parts of Marine Scotland in carrying out its functions.

The Marine Policy Statement

Marine plans for all UK administrations are expected to be led by a common Marine Policy Statement and this will be subject to wide consultation. The Marine Policy Statement will set out the policy objectives that will contribute to the achievement of sustainable development in the United Kingdom marine area and is expected to be place by November



2011 at the latest. It will create the framework for consistent and evidence based decision making, offering certainty about government policy intentions in the marine environment.

Marine Plan Areas in the English inshore and English offshore marine regions

To enable marine planning to be carried out at appropriate scales, the seas around the UK are being divided into marine plan areas. To the south of the national boundary in the Solway Firth, there is likely to be a North West Marine Plan Area extending right down to the border with Wales and including all English inshore and offshore waters in the Irish Sea. The UK MMO will have responsibility for marine planning in the southern part of the Solway Firth. Solway Firth Partnership submitted a response to the Consultation on English Plan Areas which closed in February, with some of the key points raised including the need for close alignment between planning and management for the north and south Solway and the need for meaningful consultation with local people around the Solway Firth.

Scottish Marine Regions

Consultation on Scottish Marine Regions is expected to commence around June and Solway Firth Partnership will be supporting arrangements to enable local people to contribute to this process. More information will be available on our website and in local press in early summer. Plans for Scottish Marine Regions will be developed and implemented by Marine Planning Partnerships and consultation on the structure and operation of these Partnerships is likely to follow later in the

year. Regional Plans will be guided by a National Marine Plan for Scotland which will be developed over the course of the next year.



Common sea urchin: Laurie Campbell

Planning in the Solway Firth

Marine plans for north and south Solway must align closely in accordance with the joint ministerial agreement on cross border marine planning and management which was secured last year. While the legal position requires two separate plans for the Solway Firth, both the UK and Scottish administrations have committed to a single planning process and the details of how this will be achieved will be developed further in the coming months. There is no legal requirement for alignment of planning timescales for the north and south Solway but this is a practical approach which would support the principles of the ministerial agreement. There is a legislative requirement that all reasonable steps are taken to achieve compatibility between adjacent plans and English and Scottish administrations are committed to co-operation so that closely-related plans are effectively joined up.

Marine designations

Work to establish new Marine Conservation Zones (MCZs) under the UK Marine and Coastal Access Act and Marine Protected Areas (MPAs) under the Marine Scotland Act is underway. Both initiatives aim to meet the requirements of international marine nature conservation commitments including the Marine Strategy Framework Directive (MSFD). The MSFD outlines a framework for an ecosystem based approach to the management of human activities based on principles of sustainability. The overarching goal of the Directive is to achieve 'Good Environmental Status' (GES) by 2020 across Europe's marine environment.

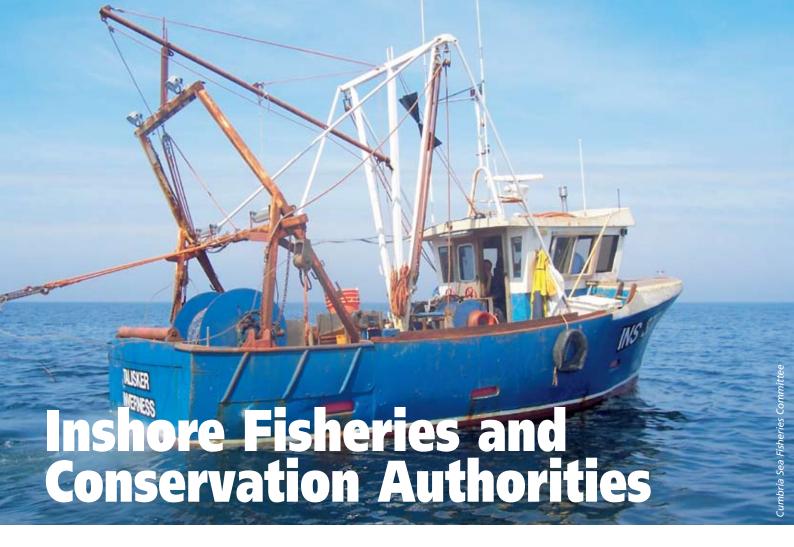
Locally, Solway Firth European Marine Site is already designated both as a Special Protection Area (SPA) under the European Birds Directive and a Special Area of Conservation (SAC) under the European Habitats Directive. Further west, Luce Bay and Sands is designated as a Special Area of Conservation (SAC) for its seabed habitats.

Marine Conservation Zones (MCZs) and Marine Protected Areas (MPAs) are intended to complement other designated marine sites including SPAs and SACs to create an ecologically coherent and well managed network of marine protected areas that is well understood and supported by all sea users.

For more information: The Marine Management Organisation - www. marinemanagement.org.uk

Marine Scotland - www.scotland.gov.uk/ About/Directorates/Wealthier-and-Fairer/ marine-scotland

Background Photo Robin Rigg: E-ON Climate and Renewables



Inshore fisheries management in England and Wales is currently the primary responsibility of Sea Fisheries Committees (SFCs). The Marine and Coastal Access Act 2009 provides for measures to reform inshore fisheries management and the protection of the marine environment.

ne aspect of this is provision for the replacement of SFCs in England with inshore fisheries and conservation authorities (IFCAs) and districts. On 1 April 2011, ten IFCAs will be established one of which will be the North Western IFCA extending from the Welsh administrative boundary in the south, to the border with Scotland in the north. This new district is a merger of the current Cumbria and North West SFCs. Ministers have agreed that the vision for IFCAs is one where "Inshore fisheries and conservation authorities will lead, champion and manage a sustainable marine environment and inshore



fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry."

Each IFCA will have a governing committee made up of:

committee made up of:
one seat each for representatives from
the MMO, the Environment Agency and
Natural England elected representatives
of the constituent county and unitary
local authorities making up the district
members acquainted with the
needs and opinions of the local
fishing community, and those with
knowledge of, or expertise in, marine
environmental matters. These members
will be appointed by the MMO.
The success criteria by which delivery
of this vision can be judged include the
following:

- IFCAs support and promote the sustainable management of the marine environment.
- IFCAs make the best use of evidence to deliver their objectives.
- Evidence-based, appropriate and timely byelaws are used to manage the exploitation of sea fisheries resources within the district.
- A fair, effective and proportionate enforcement regime is in place.
- IFCAs work in partnership and are engaged with their stakeholders.
- IFCAs have sound governance and staff are motivated and respected.
- IFCAs are recognised and heard.

For more information about the IFCA programme visit:

http://www.defra.gov.uk/foodfarm/fisheries/wwo/ifca/index.htm

For more information about establishment of the North Western IFCA please contact David Dobson, Chief Fisheries Officer, Cumbria SFC on 01946 693047

email: dtd@cumbriasfc.fsnet.co.uk website: http://www.cumbriasfc.org.uk/ index.aspx

Photos Top & Centre - Cumbria Sea Fisheries Committee

Inshore Fisheries Groups

Inshore Fisheries Groups (IFGs) in Scotland aim to offer an innovative, partnership-led and locally specific approach to fisheries management. They are designed to allow inshore fishing operators, other fishing interests and wider stakeholders to shape the management of local fisheries.

FGs aim to involve commercial fishermen on an open and transparent basis, balancing the interests of small and large operators, along with environmental, socio-economic and community development objectives. In doing so, they aim to give the commercial fishing sector a strong voice in both the local management of inshore fisheries out to six nautical miles as well as wider marine management.

The first three pilot IFGs (in the Outer Hebrides, the Clyde and the South-East of Scotland) were established in January 2009, with a further three added later

in the year covering the North West, Small Isles and Mull, and Moray Firth. Each IFG has an Executive Committee made up of commercial fishing interests drawn from Fishermen's Associations, and a spokesperson for non affiliated fishermen. Fishermen, therefore, sit at the very heart of IFGs, and it is their knowledge and ideas that drive the Groups' work.

Each IFG also has an Advisory Group comprising Marine Scotland, Scottish Natural Heritage and other relevant bodies. The Groups are therefore directly linked with all those with an interest in fisheries management and the marine environment. The IFGs aim to communicate as effectively as possible with the local fishing community.

Having each appointed a Chair and a Local Coordinator, the six pilot IFGs are making progress in developing Management Plans for their areas. Whilst plans will reflect specific and localised priorities, they will also fit with wider strategic national goals such as sustainable stocks, a healthy

marine environment and a profitable fishing sector that supports strong coastal communities. Other issues include spatial management initiatives, voluntary agreements to improve working relationships amongst different types of fisheries, and proposals for funding priorities for an area's fisheries and communities.

Outwith these six pilot IFG areas there has been significant interest in setting up further IFGs, and there is the potential to have up to 12 throughout Scotland. To help inform establishment of further IFGs, the Marine Scotland Sea Fisheries has commissioned a review and policy appraisal to be carried out by Homarus Ltd. This work will consider the economic benefits of IFGs, potential alternative funding models, and will take stock of early lessons. Other fisheries management models will also be considered when assessing how the IFGs will fit within the proposals for new Scottish Marine Regions. The review will be completed during the summer and this should enable decisions to be taken about additional IFGs by the end of 2010.





Commercial scallop fishing has taken place from Solway and North Irish Sea ports for half a Century or more, mainly from the port of Kirkcudbright but also from many of the smaller local ports.

Scallop fishing has been an important local industry since the 1960s, however come the 1970s things very much

stepped up a gear both afloat and ashore, an expansion very much driven by the enterprising John King.

By the early 1970s as many as 24 large scallop boats were based in Kirkcudbright. Many directly related businesses had been formed to deal with both the catch and to service the fleet. These ranged from shellfish processing factories to fishing gear manufacturers, and the many other businesses required to attend to the fleet's needs. Also seeing great benefits from the fishing fleet were many other local

companies and the community as a whole, ranging from the butchers to the local grocer shop and many others in between. Prolonged spells of poor weather keeping the fleet in port were felt by many in the community apart from the fishermen themselves. It is often said that there are many more jobs ashore which depend on commercial fishing than there are jobs actually afloat; this has certainly been the case with the local scallop industry. With the recent closure of the town's other major employer these jobs will be more important than ever to the town's future prosperity. Local Solway scallop fishers have always been at the forefront of developments within the sector and have very often led the way. Automated and refrigerated trawlers are commonplace among the local fleet, helping to deliver the top quality product which the modern shellfish market demands. Self-funded gear developments to lessen seabed impact are ongoing within the fleet and have been for many years. Ever increasing shellfish catches and better quantities of other

species on the Irish Sea grounds can only be a good sign for the future. Not only are the scallop catches obviously sustainable, they are actually increasing in leaps and bounds. Whether this is down to technical developments, more stock, or other reasons entirely is unclear, but for whatever reason it can only be a good sign for the future. Unfortunately depressed scallop prices (partly due to the world economy) are a concern.

Fishing vessel technology has changed tremendously over the decades. Possibly the biggest developments have been seen in

the electronic side of things, or "electrickery" as it is jokingly known. Modern scallop fishing is undertaken with pin point accuracy, the days of targeting the species almost blindly being long gone. Many scallop boats now have 3D seabed mapping systems fitted; these bring ever improving 3D seabed imagery





The King Challenger at sea by David R Collin

with incredible detail into the wheelhouse of most modern scallop fishers. As well as benefiting scallop targeting it also makes it fairly easy to avoid features and seabed ground types which one would wish to avoid. Catch handling developments are always ongoing as is quality control of the catch.

On the processing side, developments have more than kept pace with those of the fleet. The West Coast Sea Products processing operation in Kirkcudbright is a state of the art facility, however the actual king scallop meat removal process (shucking) is normally still undertaken by the Mark 1 human being. The rest of the process around the scallop shucker has however moved to an entire new world from those early days. The queen scallop shucking process is slightly different and a degree of automation has been introduced but there are still occasions when the human touch is required. Once processed, the product can quickly find its way to anywhere from a local Kirkcudbright hotel to a top class restaurant in the South of France, and many other locations in between.

A working harbour is always the focus of any town. There are few pictures or postcards of Kirkcudbright which do not feature the harbour and fishing boats in some form. Kirkcudbright harbour is very much a working harbour,



The King Explorer in heavy seas: West Coast Sea Products

but it is also the focus of much tourist attention, which can make it seem incredibly crowded at times. Whether a local harbour user or a passing tourist, everyone seems to get along quite happily - a 5 year old child fishing for crabs with Dad often sharing quay space with an 80 foot scallop boat. Many a curious tourist has been surprised that busy fishermen are more than happy to take the time to explain their trade. The ones who have timed it right when the boats are actually landing often find themselves inheriting a couple of dozen fresh scallops for tea. I always look upon it as good product promotion. The working harbour and vibrant industry is a source of great pride to many in the town; the linked leisure marina is also rightly proud of its status as the only Blue Flag marina in Scotland.

Safety is a huge issue in modern commercial fishing, and something the local industry takes very seriously. West of Scotland Seafish Training Association (WOSSTA) is based in the Isle of Whithorn and they carry out and administer all Seafish training courses from the Central Belt down to the Scottish Border. A new course recently introduced is a voluntary under 16.5 metres skipper's qualification which has seen keen interest and uptake from local fishermen.

The fishing industry has always had good links with local



Maureen and Margaret sort scallops for fast freezing: West Coast Sea Products

schools, providing valuable information and "at sea" pictures for many school projects, together with guided tours of the boats, harbour, and processing facilities. WOSSTA are involved in a scheme with schools all across the region where pupils can opt to take the mandatory Seafish courses (sea survival, fire fighting, first aid and health & safety). Whether they choose a career at sea, as many have, or not, I am sure that such knowledge will be very useful in adult life. The two terrible fishing tragedies which we have endured in the Solway and North Irish Sea area stick long and hard in the memory. The way our communities pulled together when dealing with these horrific events made me proud and even prouder to be a member of the area's fishing community.

Please support your local fishing industry and wider communities - eat more seafood!

Steven Girgan *Scallop fisherman*

Come and join us at World Oceans Week 2010!



orld Oceans Week is back! Based on the globally celebrated World Oceans Day on 8th June each year, Dumfries and Galloway's World Oceans Week, WOW 2010, aims to promote the beautiful marine environment of the region, with a week of marine-themed activities for everyone. World Oceans Day was established to raise awareness of the world's seas and oceans, and this year the theme is 'Oceans of Life', which focuses on our ocean's great diversity of life and how we can all help in its conservation. And as 2010 is also International Year of Biodiversity it is a

very relevant theme!
More information
about World Oceans
Day can be found at
www.theoceanproject.
org/wod/wod_about.
php.

World Oceans Day
Celebrations held in
previous years in the
region have proved so
popular that in 2009

it was expan<mark>ded to a</mark> whole World Oceans

Week, and this year WOW 2010 runs again for a week from June 5th – June 13th 2010. As usual we have a great programme of events planned, featuring Celebration Days, guided walks, museum displays, beach blitzes and, new for this year, an interactive Beach Watch Day for schools using the Glow system, an intranet service for schools, on World Oceans Day, 8th June. The event will be run by representatives from Dumfries and Galloway's Eco-schools and Dumfries and Galloway's Ranger Service and is a really exciting development in the WOW schedule of events.

WOW 2010 gets off to a great start on Saturday 5th June with the first of the WOW Beach Blitz beach cleans at Rockcliffe. The WOW Beach Blitz is organised by National Scenic Area Communities Ranger Ian Brown, and will comprise a week of beach cleans by volunteers at beaches along the Dumfries and Galloway coast – why not come along and support a Beach Blitz? We'd love to have you along! More details are at the end of this article. And then on Sunday 6th June we have a World Oceans Day Celebration Day at Rockcliffe; a large marquee on the

beach will provide a great venue for marine-themed activities and demonstrations by organisations such as RSPB, Scottish Wildlife Trust, SEPA and many more, plus on the beach National Trust for Scotland and Dumfries and Galloway Council

Ranger services will be leading beach safaris and guided walks. Local ranger and wildlife photographer Keith Kirk will also be running a short beach wildlife photography course for anyone who wants to learn how to improve their photography skills, so remember to bring your camera, however small it is! E-ON Climate and Renewables will also be at Rockcliffe with their great new hands-on display bus for everyone to learn about wind energy. And this year, E-ON are sponsoring Outdoor Laser Quest on the beach, provided by Galloway Activity Centre – a great way for everyone to run around, get some

World Oceans Wee

All events and activities are free of charge. There will be a small charge for refreshments.

5TH - 13TH JUNE

Solway Sea Shells Exhibition. A week long exhibition at the Stewartry Museum

5th - 12th June

Beach Blitz! A week of Ranger-led beach cleans across Dumfries and Galloway Gloves and bags provided, everyone welcome. Ring NSA Communities Ranger lan Brown for more information 01387 260180.

Saturday 5th June at Rockcliffe, 10 am – 12 noon

Monday 7th June at Southerness 10 am – 12 noon

Tuesday 8th June at Mersehead 10 am – 12 noon

Tuesday 8th June at Carrick 2pm – 4pm

Thursday 10th June at Rascarrel 10am – 12 noon

6th June

World Oceans Day event at the Mull of Galloway RSPB Reserve.

6th June

World Oceans Day Celebration at Rockcliffe, 11am – 4pm

Friday 11th June – Wigtownshire/ Machars region, to be confirmed Saturday 12th June at Port William 10 am – 12 noon







ek 2010 Events list

7th - 11th June

World Oceans Week for Schools. A week of local Ranger-led marine and coastal themed events, including guided walks, presentations and other activities for Dumfries and Galloway schools. Rangers involved will be from the National Trust for Scotland, RSPB and Dumfries and Galloway Ranger Service.

8th June - World Oceans Day. The UN's officially designated World Oceans Day will be celebrated in Dumfries and Galloway schools by a live on-the-beach link-up by members of the Dumfries and Galloway Ranger Service in co-ordination with the Eco-Schools Officer and using the GLOW Scotland system

9th June - Explore the Seashore. 2.00pm - 3.30pm at Cardoness Estate, Gatehouse of Fleet. This is a guided walk with NSA Rangers and Volunteers and is open to everyone

12th June - Family Beach Art competition, RSPB Mersehead.

13th June - World Oceans Day Celebration at Port William, 11am – 4pm

WOW 2010 has been generously sponsored by E.ON Climate and Renewables; The Crown Estate; and Scottish Natural Heritage. It has been organised by Solway Firth Partnership with assistance from many organisations including the National Trust for Scotland.

WOW 2009 is now on YouTube! Search under Solway Firth for a great video of the 2009 Celebrations. exercise and have some fun! A cross between traditional indoor Laser Quest and paintball, Outdoor Laser Quest uses futuristic infra red technology maximising the fun for children and adults alike. And with refreshments provided by Cream O' Galloway ice cream and local cafes, there's certainly something for everyone at Rockcliffe! All activities and demonstrations are free of charge, but there will be a small cost for refreshments.

During the week, local Rangers from Dumfries and Galloway Council, National Trust for Scotland and RSPB will be talking to local schools and leading guided walks along the beautiful Dumfries and Galloway coastline. And new for WOW 2010 is a World Ocean's Day Interactive Classroom Event on Glow on 8th June, when the Dumfries and Galloway Eco-Schools co-ordinator, along with local rangers, will be on Dumfries and Galloway beaches for a live webcam link to all the schools in the area, with a chance for pupils to chat to the rangers and see for themselves the huge and varied numbers of mini beasts (and possibly not-so-mini beasts too!) that call the Solway shoreline 'home'.

Also running through WOW 2010 is a chance to learn about the Solway's marine and seashore inhabitants with a special display of Solway Sea Shells at the Stewartry museum in Kirkcudbright, where local marine biologist Jim Logan will be giving talks on Friday 11th June at 2pm and 4pm at the museum – why not bring your seashells along and let Jim identify them for you? And on Wednesday June 9th there will also be an Explore the Seashore guided walk with NSA Rangers and Volunteers, where everyone can come along and

learn about Solway shells, and their inhabitants, first hand.

Dumfries and Galloway's RSPB reserves will be supporting World Oceans
Week with a Family Beach Art Day at
Mersehead - create your own individual
piece of beach art with shells, driftwood,
in fact anything you find on the beach!
- on Saturday June 12th; and a World
Oceans Day Event at Mull of Galloway
Reserve on Sunday June 6th, where
visitors can whale watch, learn about
the ecology of the coastline, and join a
guided walk to look at the many species
of beautiful flowering plants that carpet
the Mull.

WOW 2010 finishes with a Celebration Day at Port William, where visitors can join a huge range of organisations in two marquees on the shore of Second Sands, plus enjoy guided walks and activities on the beach, including Outdoor Laser Quest from Galloway Activity Centre, sponsored by E-ON Climate and Renewables - a great way for all the family to have fun and enjoy the great outdoors! Or make friends with a lobster, explore the Port William Inshore Rescue Boat and meet its crew, learn about the sea shore, try rock pooling or just sit and enjoy the view with delicious Cream O' Galloway ice creams (sold in aid of Port William Inshore Life Boat), teas and coffees, or a fantastic beach barbeque (proceeds to local charities Heartstart and Port William First Response). There's also a free prize draw with some great prizes in fact, something for everyone to enjoy!

For more information about these events, see our web site at www. solwayfirthpartnership.co.uk, or phone 01387 702161.



Around 150 delegates convened at Easterbrook Hall in Dumfries for the rearranged event which featured Eric Robson as Keynote Speaker, and the launch of Solway Energy Gateway's Feasibility Study into the Solway as a potential source of renewable marine energy.

The day's proceedings began with the Partnership's AGM, chaired by Chairman Gordon Mann, when Mr. George Caldwell, Cllr. Alistair Geddes and Cllr. Jim Prince were re-elected to the Board of Trustees. Minutes of the 2008 AGM were accepted and copies of the Partnership's 2008 -2009 accounts were made available (the full accounts can be seen on the Downloads page of our web site). Following the AGM, Pam Taylor, Project Manager of the Partnership, gave a brief overview of the Partnership's huge range of activities over the past 12 months, including lobbying for effective integration of the UK and Scottish Marine Acts, supporting work on European Marine Sites and working with a wide range of partners on both sides of the Solway to support understanding and enjoyment of the area.

The Conference proper began with Eric Robson, the Keynote Speaker, giving a personal insight into the history and culture of the Solway, delivered with his trademark wit and dry humour. Eric described the Solway as a place of folklore, myth, history and landscape unique in the UK, with a north and south side riven by differences - despite being in very close proximity at points, and sharing a joint heritage shaped by the culture of many occupants including Romans, Vikings and warring Celtic tribes. The Solway region has always been a seemingly natural place for a regional or national boundary, from being the starting point of Hadrian's Wall at Bowness (to keep out the 'foul hordes of Picts and Scots' from the north), to becoming a part of the Debatable Lands, a region of lawlessness and violence ruled for 300 years by lowland clans such as the Armstrongs and the Grahams, before a French ambassador stepped in to finalise the site of the Scottish -English border by the erection of the Scot's Dyke through the region. Eric also pointed out that industry, in many guises, has

always been an important part of the Solway – not just now with Cumbria's 'Energy Coast', but also the shipbuilding yards of the past, fishing ports and harbours still active and thriving, and today, the 'real prize' of the tourism industry. Eric, who is Chairman of Cumbria Tourism, believes that the north and south, who do things differently, should work together to maximize the benefit of tourism to the region, promoting Solway-wide activities and attractions such as in the Saints and Sinners walk around the whole of the Solway, from St Bees to the Isle of Whithorn. A fund of entertaining anecdotes and facts was rounded off with a heartfelt plea not to spoil the tourism potential and natural beauty of the Solway seascape.

Brian Morrell of WWT Caerlaverock then followed with 'The Incredible Journey', an account of the amazing journeys of the huge numbers of geese and swans who call the Solway 'home' in the winter months. The Solway is vitally important for migrating birds, as a staging post or as over-wintering grounds - the whole of the world's Svalbard geese population winter on the Solway's merse flats. Birds can undertake journeys of over 2000 miles and need to be in peak physical condition for these voyages. And now, modern technology in the form of tiny GPS units attached to the birds' backs can give invaluable information about their route, speeds and locations, as well as feeding and roosting information on the Solway. The project has also been a huge success in local schools, who have 'adopted' and named their own swans, including Supersonic Bill who lived up to his name by completing the journey from Iceland to Scotland in 13 hours, at speeds averaging 114 km per hour! The swans can be followed on their journeys at www.whooper.wwt.org.uk/whooper, or track the voyages of barnacle geese at www.wwt.org.uk/our-work/wetland-wildlife/ barnacle-geese

The Conference also saw the launch this year of new 'Pick 'n' Mix ' sessions, where Delegates could chose to attend one of three presentations run in parallel, and with an opportunity to provide feedback about the topic. This format appeared

to be hugely popular, with Delegates complaining that really they would like to attend all three presentations at the same time! The sessions, in 2 tranches of 3 presentations, included Marine planning implementation – Steve Collins, Defra Marine Planning and Coastal Implementation Irish Sea Marine Conservation Zones – Holly Deary, Liaison Officer, ISCZ Project

The Port of Kirkudbright: 800 years of trade, fishing and leisure – David R Collin, Kirkcudbright History Society The Crown Estate and offshore renewables – Alex Adrian, The Crown Estate

Heritage fisheries – Jim Henderson, Nith District Salmon Fisheries Board

Recreational sea angling – Ian Burrett, Scottish Sea Angling Conservation Network

An overview of the Pick n' Mix sessions is now available on our website. The full report, 'The Economic Impact of Recreational Sea Angling in Scotland', can be found at: http://www.scotland.gov.uk/Publications/2009/07/31154700/4

The final event of the day was the launch of the Feasibility Study into marine renewable energy in the Solway by Nigel Catterson of Solway Energy Gateway (SEG) and Sean Matthews of Halcrow. This study has elicited a huge amount of interest around the Solway, both because of its potential to provide renewable energy and jobs in the region, and also because of the possible impact of any renewable scheme on the ecology and environment of one of the UK's most highly designated regions. Nigel started the Launch by talking about the UK's future energy problems, and that as fossil fuels run out, the UK is in an unsustainable position, 'with nuclear and renewables as the only options'. SEG has been proposing, initially, a barrage across the Solway to generate renewable energy, but latterly this idea has been expanded to incorporate emerging new ideas in marine renewable energy technologies. Sean Matthews of Halcrow, the engineering company who led the consortium looking into the project, then gave a presentation on the findings of the Feasibility Study. The Solway is a dynamic, shallow and poorly defined cross-border region with a significant number

of environmentally protected areas, and is the second most powerful estuary in the UK. A barrage or other renewable energy technology could bring around 1000 jobs to the region, promote tourism, and contribute significantly to the ambitious CO₂ reduction targets set by both the Scottish and UK Governments.

The Study considered 20 renewable energy generating options, and after taking into account the available technology, cost, environmental impact and time taken for construction, the Study concluded that the best options would be from a short list of 4 barrages, 2 tidal lagoons and 3 tidal reefs

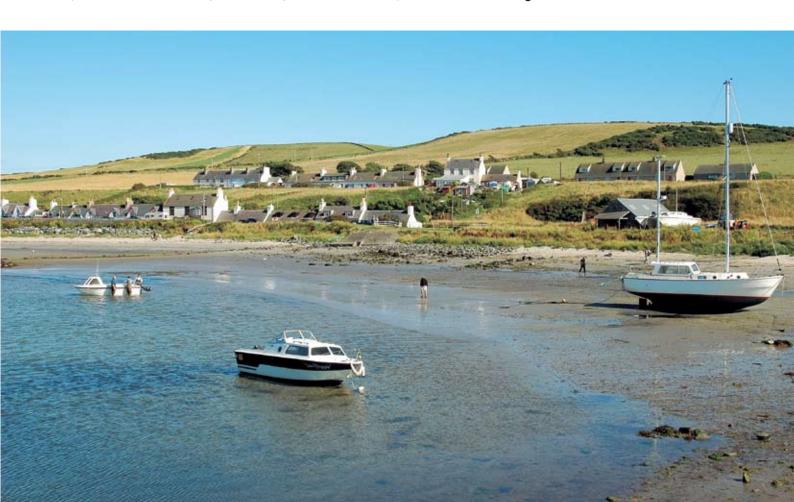
The overall conclusions of the Feasibility Study are that the Solway is a challenging, high risk and environmentally sensitive region and there are no simple or obvious ways forward for any marine renewable energy technology. Nigel Catterson concluded the presentation with a discussion of the future options for the project, including greater consultations, looking for ethical investors and keeping an eye open for new and innovative developments in marine renewable technologies, especially those which might have a lesser environmental impact on the Solway.

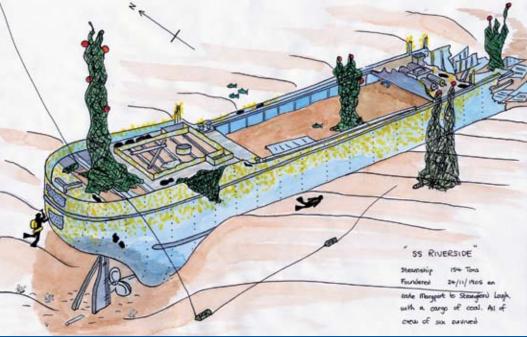
The Launch finished with a lively question and answer session which included Dave Watson of RSK Environment. The majority of comments reflected the concerns of the audience regarding the environmental impact of any development, and the loss of habitats and the effects on the Solway and its ecosystems.

The full report of the SEG Feasibility Study into marine renewable energy in the Solway and the executive summary are available from the Downloads section of our website at www.solwayfirthpartnership.co.uk. More information about Solway Energy Gateway can be found at www.solwayenergygateway.co.uk.

Photo Top Left: Geese at dawn over Caerlaverock WWT by Brian Morrell, who talked about 'The Incredible Journey' of the Solway's geese and swans at the Conference.

Photo Below: Port Logan: Keith Kirk







The Wreck of the SS Riverside

a discovery in the murky depths of Wigtown Bay

The S.S. Riverside was one of many small steamships which plied their trade around the Solway Coast in the early years of the 20th century. However on the 24th November 1905 en route from Maryport to Strangford Lough with a cargo of coal, she foundered in heavy seas somewhere off Burrow Head.

The ship lay undiscovered in Wigtown Bay until the late 1990s when members of our club were helping a local fisherman disentangle his nets from an underwater 'obstruction'. It was soon realised that this in fact was the missing Riverside. However, it was always felt to be a 'deep, dark and murky dive' and so the Riverside was only rarely visited by our club and the dive clubs in Dumfries. Eventually its location, a closely guarded secret, was forgotten by all but a few old sea dogs and the wreck faded from memory once again.

Then in 2008/9 our club made a concerted effort to rediscover and dive the wreck. What a pleasant surprise lay in store for us! The Riverside is located around 4 miles N.E. from the Isle of Whithorn on a sandy, silty seabed. It is in the path of the main outfall from the River Cree as it pours into Wigtown Bay, consequently it is subject to strong tidal currents of up to 4 knots on a spring tide. The result of all this means that the wreck is very much an oasis in a barren area for all kinds of filter feeders, and for those creatures which require holes to hide in. The wreck is not all that deep sitting at only 26 metres, and depending upon the amount of recent rainfall and consequent output from the River Cree it is true that it can be a

by Chris Harrison Newton Stewart Sub Agua Club

murky dive with the heavily sedimented water blocking out almost all sunlight below 15 metres. However, if the dive is planned carefully after periods of settled weather and timed at low water slack, when the clearer flood tide begins to stream over the wreck, then an excellent dive can be achieved.

The most prominent section of the wreck is the intact stern and this is usually where the divers' shot line is dropped. Here the tidal streams have scoured the silt from the area, and when you arrive at the seabed you can see the stern structure soaring up in front of you. It is completely covered in white, yellow and occasional orange dead men's fingers and plumose anemones giving the hard, rusting steel a soft 'cotton wool' appearance. Below the stern you can usually find schools of striped bib taking shelter around the rudder and propeller.

Swimming around to your left, the port side of the hull is also completely covered in dead men's fingers and plumose anemones feeding from the nutrient rich river water. Just visible amongst this life is the small hole where the bilge pump once drained out. This is now home to a tom pot blenny, who inquisitively looks out, only retreating when a diver with his camera gets too close for comfort.

Ascending up to the port gunwale it is interesting to explore the area where

the bridge once stood. This structure was made of wood and has now long since rotted away. However the steel footings are easily seen as is the funnel flange protruding up from the boiler beneath. To either side are the openings of what were two ladder wells down to the engine room. These are now badly filled with silt, but in this area every hole and crevice seems to be occupied by conger eels, lobsters or crabs. Towards the stern you can also see, towering above you, a large tangle of fishing nets held aloft by some of their attached buoys. This is something which divers have to carefully avoid since entanglement in these could be perilous.

Just forward of the bridge area flanked by pairs of bollards at each gunwale is the deck area surrounding the main hold. On our last dive on the wreck in October 2009, through a rotted hole in the plating in this area we were able to observe a small compartment containing seven large conger eels all crushed together side by side like huge sardines in a tin. We were puzzled at this communal behaviour of what we had always imagined to be solitary creatures.

The hold itself is still filled with the cargo of coal covered in a layer of silt but hiding around the edges and under fallen plates and girders are numerous lobsters and edible crabs. The occasional snagged lobster pots show that local fishermen know that this is a good if risky place to lay their pots. In the middle of the hold and also off to the starboard side are more suspended fishing nets showing that the wreck is

very much an isolated obstacle in an otherwise flat seabed and still a hazard to fishermen.

In this middle section the hull is very much intact. Often on wrecks of this age the weight of the corroding hull plates causes them to peel away and fall to the seabed. Here though the silt has built up on both sides of the wreck, well above the rubbing strake, and along with the in situ cargo of coal, the hull has been supported and so remains intact.

Only once you reach the bow and swim past the cargo winches, where more

congers lurk in crevices, does the vessel begin to break apart. This area may have been weakened when the sinking vessel hit the seabed, but again a profusion of nets around the fallen hull plates and ribs show that snagged trawl nets may have been instrumental in its collapse. This area is again home to creatures that like to lurk in holes and it was in this area that I identified a Yarrel's blenny on my last dive. It was also here on the fallen hull plates that we found the brass letters which meant we could conclusively identify the wreck. R.I.V.E.R.S.D.E. were all easily found but the missing 'I' took a number of dives to locate. Its screws had rotted and the letter had slipped between two hull plates. This name lovingly cleaned, polished and mounted on a teak board is now on display at the Isle of Whithorn.

To finish the dive on this very scenic and atmospheric wreck you have to carefully swim back over the vessel to the stern. As you drift along with the current you will see numerous large Pollock which use the wreck for shelter swimming always just ahead of you and beneath you the pale dead men's fingers and plumose anemones giving the wreck an almost ghostly appearance. Happily though this is just an illusion since, as the newspaper article indicates, all the crew survived the shipwreck!

Philip Henry Gosse

(1810-1888) and the Scottish sea-anemones



Philip Henry Gosse, the Victorian naturalist, was famous for his 'popularising' of science, especially marine biology. He was born 200 years ago this April, and although he lived for most of his later life on the Devon coast, his work on sea-anemones led him to have close connections with Scotland and its shores.

Gosse was also the 'inventor' of the marine aquarium; to stock his tanks with marine organisms he spent many summers dredging from boats, wading in

rock-pools, and striding along the Devon and Dorset shores with his collecting basket and hand-lens. His marine shore classes and highly popular books such as The Marine Aquarium, Tenby, and A Naturalist's Rambles on the Sea-shore, triggered the Victorian craze for collecting sea-creatures. Soon he was in demand as a lecturer and, early in 1857, he gave a series of "chalk and talk" lectures in Edinburgh. Illustrated by freehand drawing on a blackboard, they were very well-received, apparently "full of charm", and "popular and attractive". He clearly made a great number of friends amongst the Scottish scientific community, and inspired many amateur naturalists.

"An anemone of medium size may be safely sent by post in a small tin-cannister, without water, but with a small tuft of damp sea-weed, rag, or blotting-paper, to maintain a moist atmosphere around the animal ..." When Gosse's request for help appeared, the Scottish anemonizers were galvanised into activity and soon small parcels "of a salt and oozy character" began to arrive at his house from all over Britain. The Actinologia Britannica, published in book form in 1860, contains detailed descriptions of the British sea-anemones ("actiniae") and corals, illustrated with engravings of his own beautiful drawings. He is meticulous in listing the collectors to whom he was "indebted": Mrs Murray Menzies of Oban, the Reverend William Gregor of Macduff ("pre-eminent in (his) contributions"), Miss J.C. Gloag of Queensferry ("who has long been a successful cultivator of Anemones"), and James MacDonald of Elgin. David Robertson and the Reverend David Landsborough, the Minister at Stevenston in Ayrshire, both sent sea-anemones collected from the 'Frith of Clyde' around Arran

and Cumbrae. The antiquarian and naturalist Sir John Graham Dalyell sent specimens from the Firth of Forth, but he didn't send "Granny": she (it) was a beadlet anemone who survived more than 20 years in his own aquarium and is thought to have lived for at least another twenty. However my favourite collector was the intrepid Anne B Church, who sent a species of anemone brought up by a "turbot dredge" from Loch Long. Dredging in those days was an uncomfortable and risky business, necessitating hanging over the side of small wooden boats that were powered by sail. Anne Church's descriptions are, however, delightfully feminine: the lips of the anemone's mouth are scarlet "like the nectary of the hoop-petticoat narcissus". Gosse named the new species after its finder – Stomphia churchiae, so Anne Church lives on in a specific name.

Almost a third of Actinologia's collectors sent specimens from Scotland; Gosse doesn't record any as sent from the Solway Firth, but perhaps any parcels that arrived were a little too "oozy". The Victorian craze for shore-collecting to stock their own aquaria swept parts of the English coast clear "as with a besom", but the Scottish shores were, and thankfully still are, "pretty good for Zoology".

Ann Lingard

Illustrations: An engraving from Gosse's Actinologia Britannica. Stomphia churchiae is bottom-left.

A Victorian aquarium (from The Book of the Aquarium, S. Hibberd, 1856)



Unusual shell found in Luce Bay

by Jim Logan

have been collecting seashells around the coast of Dumfries and Galloway since 2004 and recording the species I find. So I was excited when I received an email from Rena Peebles of the Kirkmaden Natural History Group to say that two members of the Group had been found an unusual shell on the beach at Luce Bay. Barbara Short and Sue Perkins were walking on the beach by Sandhead when they saw a number of strange brown shells washed up on the shore which were unlike any they had found before. They looked them up and identified them as Scaphander lignarius commonly known as the canoe shell. My wife and I drove over there and I was able to confirm the identification and visited the site with them where more of the S. lignarius shells were found. S. lignarius occurs



Scaphander lignarius by Jim Logan

around the north, south and west coasts of Britain burrowing in muddy sand in deep water. It is not very common but has been recorded previously in dredge samples from Luce Bay. Altogether members of the Kirkmaden Natural History Group have found over 20 canoe shells 30 – 53 mm long, some containing the recently dead animals.

On my visit to Sandhead we found a total of 45 different species of shells on the beach including eight species that I had not found in the Solway previously, five of which (Angulus squalida, Mysia undata, Spisula eliptica, Thracia phaseolina, Boreotrophen truncates) appear to have never been recorded

from the Solway before. Many of the new shells were "little white jobs" – the marine equivalent of the bird watchers "little brown jobs". However, one exception was *Musculus marmoratus*, a tiny green and brown mussel. This unusual bivalve lives inside sea squirts *Ascidiella aspersa*. Many of these were washed up on the shore but only two single valves of *M. marmoratus* were found.

This brings the total number of seashell species that I have found on the North Solway Coast to ninety two. This coast is particularly rich in marine molluscs because of the wide variety of habitats found here.

Invasive sea squirt arrives in Scottish waters

The carpet sea-squirt (Didemnum vexillum) is a highly invasive nonnative marine animal that could threaten conservation, fishing and the shellfish industry. A small colony has recently been found in the Firth of Clyde - the first report of this species in Scotland. It has previously been found in Wales, Ireland and the south coast of England.

The carpet sea squirt is thought to have originally come from Japan but has now spread to several countries worldwide. In Canada, New Zealand and Ireland it has caused economic and environmental problems. It can reproduce and spread rapidly and tends to smother other marine life growing on the seabed. It is especially good at growing over underwater man-made structures such as aquaculture equipment, boat hulls and pontoons. It does not pose any threat to human health.

The carpet sea squirt is most likely to spread by attaching itself to the hulls of boats. It is a distinctive mustard, pale orangey-yellow or beige colour and often appears as pale flat patches. Larger growths may look like wax dripping from artificial structures just



below water level. Its surface has leaflike veins with tiny pores and it has a spongy texture and a leathery feel to it.

Scottish Natural Heritage, Marine
Scotland and the Scottish Environment
Protection Agency are planning a

response to the arrival of this species in our waters. As with any marine non-native species, removal of the carpet sea squirt is difficult and costly. A recent eradication programme in Holyhead Harbour in Wales has had some success in removing this species, and it is hoped that a similar response in Scotland could prevent further spread of this species.

The carpet sea squirt has not yet been found in the Solway Firth and it is important to prevent its arrival. For more information about the carpet sea squirt, visit www.snh.org. uk/carpetseasquirt. If you think you have seen this species, please email carpetseaquirt@snh.gov.uk

Photo: Didemnum vexillum photographed at Largs, November 2009. (Photograph Scottish Natural Heritage/Scottish Association for Marine Science)



Permission has been granted by the UK Coal Authority to Clean Coal Ltd, a company specialising in Underground Coal Gasification technology, to examine the energy potential of coal seams located deep below the Solway Firth.

The process of Underground Coal Gasification (UCG) would then convert the coal into combustible gas used for power generation by the gassification of the coal in-situ. UCG basically involves burning a coal seam underground in controlled conditions, combining gassification and coal extraction into one step, and is a

process well suited to exploiting low quality, deep resources, including coal which is hard to mine through conventional methods. UCG results in a synthetic gas that can be processed to provide fuels for power generation, diesel fuels, jet fuels, hydrogen, fertilisers and chemical feed stocks. Clean Coal says a study it carried out in the region indicates there could be 100 million tonnes of coal in the area which, when turned into gas, could power Dumfries and Galloway and Cumbria for the next 30 years. The site where the exploration will take place is the Canonbie Offshore Area, which mainly covers the inner mouth of the Solway, stretching from the Dumfries and Galloway side to Cumbria.

Irish Sea Conservation Zones project wants your views!

The Irish Sea Conservation Zones (ISCZ) is a project which aims to help secure a healthy and productive future for the coast and waters of the Irish Sea. The ISCZ project area covers roughly 40% of the Irish Sea, approximately

18 000 square km, and includes the inshore waters of England, plus the offshore waters of Wales, Northern Ireland and the Isle of Man up to the territorial line with Ireland.

Over the next few years, parts of the Irish Sea will be given further environmental protection, with users and interest groups of the Irish Sea recommending which areas should be protected, what they should protect and what activities may be restricted, and what form that protection should take. If you have an interest in the Irish Sea, the ICCZ project would like to hear from you, whether you work in the fishing, oil and gas, shipping, wind energy or aggregates industries, or you are a diver, sailor or water sports enthusiast or have an interest in marine wildlife. It is likely that Marine Conservation Zones will restrict certain activities in some locations, so it's essential that you have your say about where they should be.

ISCZ officers are happy to meet you, attend events or make presentations. For more information regarding ISCZ in Cumbria and Scotland contact Holly Deary on 07772 550127, or email h.deary@irishseaconservation.org.uk. More information about the ISCZ projects can be obtained from their web site at

www.irishseaconservation.org.uk

The Green Blue

by Sarah Brown

There is good news and not so good news. It has been a great first quarter for The Green Blue in Scotland as we get into our stride with the new funding from SNH. We have got off to a flying start with my diary already full to bursting with talks and events all around the country!

The not so good news is that we have a problem with invasive species on our doorstep. Non native invasive species are environmentally and economically a real problem. The latest unwanted invader, a carpet sea squirt, has probably come from Japan. It has no natural enemies and so spreads unhindered, smothering sea life and fisheries wherever it gets a foothold. The implications could be big, but hopefully we can minimise our role in its spread by following some simple guidelines:

Whilst boating:

- Don't run through water plants and seaweed if possible. They may get caught up on your boat and transferred to another area.
- Clean your anchor and dinghy of any silt, weed etc before leaving the anchorage.
- Use appropriate antifouling.
- The longer you are in the water the higher the risks of infection so, if possible, haul out the boat when not in use and always scrub down the hull before going long distances.
- Never use live bait taken from infested waters.
- Consider hiring a boat rather than taking your own.

REMEMBER – Do your best to drain ALL the water from your boat and remove weed, silt and dirt before moving to another area, drying out is the best treatment of all for invasive species.

To be totally sure of a clean boat use a highpressure hose or water above 104° F (40° C) to clean trailers, boats and equipment. You can often make arrangements with car washes and MOT cleaning stations for these services.

The Green Blue has a poster specifically about the carpet sea squirt and more general advice about invasive species on our website, www.thegreenblue.org.uk/youandyourboat/ alienspecies.asp or call me on 0844 556 6544 or you can email sarah.brown@thegreenblue.org.uk.



Marvellous Mersehead

- an experience of a lifetime!

by Robert Fraser-Binns

As I write this I am coming to the end of my volunteer placement at Mersehead, and boy, has it been a life changing experience.

Pressing up as an elf, being flooded in, being snowed out, working with School Groups, running the Visitor Centre, the list is endless and these are just some of things that have happened to me whilst I have been a People Engagement Volunteer at RSPB Mersehead.

My name is Robert Fraser-Binns and I am at the great old age of 19. I have been based at Mersehead since the middle of November 2009 and time has flown. Initially I was down for a months volunteering but as my the time drew closer and closer I didn't want to leave, so to put it simply I didn't!

I chose Mersehead because I had been on a weeks work placement here back in 2006 and when I decided to volunteer long term there was no doubt in my mind that I had to return to the Solway.

Since then I have been thrown into everything, people engagement-wise possible! We usually start at 9 o'clock in the morning and everyday has been different. There have been the more straighforward tasks, such as the day to

day running of the Visitor Centre and providing an information service to visitors that come to the reserve, to things such as dressing up as Santa's Little Helper on our Christmas Robin Day and standing in sub-zero temperatures in the middle of Dumfries to raise awareness of the RSPB. There has also been the setting up of the brand new RSPB Phoenix Group, this is a group of teenagers that come down to the reserve once a month to help with the land management and conservation work. So far, they have been planting hedgerows, taken part in a beach clean and helped us to improve the natterjack toad ponds. These are just some of the highlights, and if I was to list everything I had done, this article would be ten times longer!

One of the main things that stick in my memory the most is the staff and other volunteers at Mersehead. They have taken me under their wing (excuse the pun!) and shown me the ropes. This has made me come to realise that the RSPB is such a great charity and accomplishes such impressive work. The people that are part of the charity always have time

for you, whether it is something that they have asked you to do and you do not quiet understand or even if it is just a quick chat, they will do everything that they can. This has encouraged me to gain employment within the charity and as from the middle of April, I will be based up in Aberfoyle, near Stirling as the Central Scotland Information and Education Officer. This is a partnership project between The RSPB and the Forestry Commission mainly working with the Ospreys that breed there. As I drive away from the Solway in the next few days, there will be a sad tear in my eye because in the last few months I have come to call this place home.

Just one last thing; I would like to say a big thank you to Keeley Spate, Ben Mitchell, Dave Fairlamb, Eric Neilson, Ella McLellan, Jacqui Lamb, Kirsty Griffiths and everyone else at Mersehead for such a fantastic experience.

So, if anyone is thinking about volunteering with the RSPB, then I would highly recommend it!

Festival of the Solway Mosses

Sunday 8th August - Sunday 15th August

How special is it where you live?

Cumbria is indeed a rare and special place with the Solway being a jewel in its crown. We want to celebrate this with a week of fun and interesting talks, guides walks and family fun. There's something for everyone! So join us on one or more of our events running throughout the week. See individual events for full details.

Natural England, the Royal Society for the Protection of Birds, Cumbria Wildlfe Trust and the Solway Coast AONB are working together in the 'Peatlands for People' project to restore the natural wealth of Cumbria's economy and quality of life.

Events during the week are

SUNDAY 8TH AUGUST

Bogged down on Bowness Common

TUESDAY 10TH AUGUST

Lunchtime Lecture at Tullie House; Drumburgh Moss National Nature Reserve The Restoration – The Next Ten Years

THURSDAY 12TH AUGUST

Family Fun Day at Tullie House

SUNDAY 15TH AUGUST

Guided walk on Drumburgh Moss

For more information see our Dates for Your Diary section, and for booking or enquiries for all the above events and more, please contact the Natural England Office on 016973 50005.

Silloth AONB Unit.

The Fireworks of Shoulder O'Craig, Kirkcudbright

by Diana Turner

A round its picturesque harbour, Kirkcudbright nestles on the estuary of the River Dee at the north end of Kirkcudbright Bay and boasts many historical delights. MacLellan's Castle is a ruined tower house right in the centre of town dating from around 1580. In 1627 the Tollbooth was built and there still remains the old Merkat Cross where the "baddies" of the day were given their just deserves. The Town Hall and the Museum are grand buildings too, worthy of visiting, and nearby to the north you can visit the Tongland Dam and Hydroelectric Power Station. Everywhere there are other beautiful stone houses and walls, giving the whole area an aura of antiquity. It isn't hard to understand that people have been gathering rocks and shaping stone for

many hundreds of years but can you imagine how old these rocks really are and where they came from?

Rocks like, slate, sandstone, shale and granite are more likely to be the origin of the town's building blocks, quarried at places like Dalbeattie, Creetown, Locharbriggs and Craignair, and would have been emplaced at their current position between 510 and 290 million years ago. The Kirkcudbright landscape however also hides rocks like greywackes, siltstones, agglomerate, lamprophyre, basalt and breccia. Here sedimentary, or layered, rocks like the greywackes and siltstones were laid down in a time known as the Silurian Period. The volcanic

dykes, or tunnels, carrying the igneous rock from deep under volcanoes cut through these sedimentary rocks a bit later in that period and into the early Devonian Period around 405 million years ago, as the region's local Geological Society, GeoD,

(Geodiversity Dumfries and Galloway) discovered along the rugged coastline at Shoulder O'Craig.

A group of 20 members got together and drove south from Kirkcudbright along the A755 and B727 and parked at the picnic area at the picturesque Nun Mill Bay [grid reference NX658487]. Our walk took us along the coast about 1.5 kilometres northeast but after about 600 metres we came across our first exciting find; an agglomerate filled volcanic vent, or opening, cutting through the greywacke and siltstone layers. Over millions of years these layers, or beds, of sedimentary rocks have been subjected to pressure and uplift and have been moved from their original horizontal position to almost vertical. If you look at the rocks you can see lots of structures on the bottom of the beds that look like little flutes, flames, grooves or layers of different sized grains. These are the result of turbidity currents, or sediment and water slurries, settling on ocean floors over millions of years into turbidites, or deposits, of rocks like greywacke.

After these rocks were laid down volcanic gasses, steam and some molten liquid rock containing minerals was forced along dykes, or tunnels, which possibly travelled from many miles below the earth's crust, or surface, and exploded at the surface vent. The force of these gasses ripped the surrounding rock from the walls of the dyke into shattered pieces and these were dropped at the exit of the vent as the gasses escaped.

The mixture of shattered pieces and molten rock eventually cooled into the multicoloured rock we saw today.

A little further along the agglomerate we discovered dark basalt, or lava, which must have forced its way through the agglomerate and flowed out over the surface, possibly for miles. There are also traces of other smaller basalt flows throughout the agglomerate as well as some lamprophyre dykes. These dykes were also of molten rock of a different chemical composition which didn't reach the surface and all cooled at different rates, thus giving rocks like lamprophyre, porphyrite and granite their unique textures. The most spectacular of these dykes, at the northern point of the outcrop, is called the Loch Ness Monster because the pressure

was so volatile and fast it had to squirm its way through the solid agglomerate like a snake!

through its dyke

With the sun shining brightly over a tranquil shore we returned to our cars and drove back to Kirkcudbright later in the day to a quiet, peaceful, historic town. Mindful of the stately outcrops and colourful intrusions it's difficult to imagine the fireworks there must have been at Shoulder O'Craig all those millions of years ago.

If you would like to join Geo-D please contact Diana Turner at moffatdmt@hotmail.com or

telephone 07821621366 for further information.

Shattered conglomerate and smooth lamprophyre





As I enter my third year as liaison officer on the Mull of Galloway, a post supported

by Heritage Lottery Fund, Scottish Natural Heritage and RSPB Scotland through Sulwath Connections Landscape Project, I find myself looking back at the warm welcome that I received from the operators of the local tourist venues. I must say I did stumble through that first year and made a few mistakes but also made many friends in the local area.

With a few rough edges knocked off, my second year was great and with the help of the South Rhins Community Development Trust we managed to engage with a number of schools in Ayrshire in addition to some in the local area. I ran several events with Logan Botanic Garden, Kirkmaiden Natural History Group and the Caravan Club site at New England Bay.

So what will 2010 bring? Well, a lot more of the same and a few new

and widened events to increase the appeal to tourist and locals alike. The RSPB Visitor Centre opened on 28th February this year and closes on 31st October. Most of our events will run during weekdays, allowing new visitors to get acclimatized to the area before committing to events, so our 'Sunday' walks have doubled and are to be held on Tuesdays and Thursdays instead, starting at 1pm and lasting about two hours, and looking at the whole of the Mull, not just the reserve. Then on alternate Wednesdays from June until September there will be beachcomber walks at New England Bay starting at 11am and taking an hour or so depending on what we find.

On Tuesdays from 1st June - 6th July we are replacing the afternoon walk with an event called "meet the seabirds and survey them" starting at 11am for about two hours. We will be identifying the nesting seabirds and then counting them and their chicks. On Sunday 6th of June as part of the World Oceans Week the Mull will be having a guided walk and display in the Visitor Centre as well as whale watching. From 9th to 13th August we are holding a week long event devoted to drawing attention to the plight of our sea life from pollution and global warming, with two walks on the Mull looking for whales, seals and basking sharks and a beachcombing walk looking at the flotsam and jetsam that is washed onto our beaches. Many of the RSPB Mull of Galloway events involving Logan Botanic Garden

will have been and gone by the time this is published, however with forward planning 2011 will see several bird box making sessions and dawn chorus events but this year, on 12th October there is a talk on Geese in Galloway at Logan Botanic Garden.

I do hope you can make time in your holiday or day off to visit us on this beautiful peninsular and perhaps take part in one of our events. As always our events are publicised in the Dumfries and Galloway Countryside events booklet and the Wildlife Festival leaflet but it is always best to ring the reserve on 01776 840539 for the latest information and weather conditions.

The RSPB Mull of Galloway Visitor Centre is open seven days a week from 10am until 5pm.



Spring squill – one of the many beautiful flowers which is found on the Mull of Galloway

Explore

the Solway Sea Shore!



hat makes the neat little holes in mussel shells? How does a crab change its shell? Is a barnacle related to a crab or a limpet? To find the answers to these questions and to find out more unusual facts about all of the wee beasties that live on the shore of the Solway why not come along on one of the ranger led beach walks this summer? Come down to the beach and find out about the animals that used to live in the seashells you find there and the creatures that live in the rock pools. NSA Ranger Ian Brown and marine biologist Jim Logan will introduce you to the animals and plants that live on the beach and describe how they cope with life on the shore as the tide rises and falls.

You can join Jim and Ian on the following walks:

Wednesday 9th June, 2.00pm – 3.30pm Gatehouse of Fleet Meet Cardoness Estate car park, Gatehouse of Fleet.: NX565537

Wednesday 18th August, 10.30am – 12.00pm Kirkcudbright Meet Nun Mill Bay, The Dhoon car park, Kirkcudbright, NX657486

Thursday 9th September, 2.00pm – 3.30pm, Borgue Meet Brighouse Bay car park, Borgue, NX635457

Wednesday 15th September, 10.30am – 12.00pm Gatehouse of Fleet Meet Knockbrex car park, Carrick, Gatehouse of Fleet, NX576501

For further information and to book a place on these fantastic guided walks (booking is essential) please contact Ian Brown (NSA Communities Ranger) on 01387 260180 or email Ian.Brown2@ dumgal.gov.uk

Jim Logan

Dates For Your Diary

May - October 2010

Whilst every effort is made to check the accuracy of the information in Dates for Your Diary, Solway Firth Partnership cannot be held responsible for any inaccuracies or wrong information contained here, and strongly recommend you confirm details/ arrangements beforehand.

MAY- JULY Mull of Galloway Guided walks

18TH - 27TH MAY: TUESDAYS AND THURSDAYS; then every Thursday till the 8th July.

Learn about the diverse flora and wildlife of this RSPB reserve with a 1-2 hour guided walk. Bring binoculars if you have them, suitable clothing and walking boots. Leave from the front gate at 1pm. Mull of Galloway RSPB Visitor Centre, Drummore, Stranraer DG9 9HP. NX155304. Members £1, non-Members £2.

JUNE - JULY New England Bay Beachcomber walk

WEDNESDAY 23RD JUNE, 7TH AND 21ST JULY

Meet at New England Bay car park (NX121421)on the Mull of Galloway at 11 am and join RSPB wardens to see what we can find along this beautiful stretch of shore. Bring binoculars if you have them. Members £1, non-Members £2.

Meet the seabirds and survey them

Every Tuesday from 1st June until 6th July at 11 am

Visit one of the Mull of Galloway seabird colonies, identify the birds and then record their numbers. Subject to weather conditions. Bring binoculars if you have them, suitable clothing and walking boots with good grip soles. Booking essential (limit of 6 on the walk), phone between 10 and 5 on 01776 840539. Members £1, non-Members £2. Mull of Galloway RSPB Visitor Centre, Drummore, Stranraer. DG9 9HP. NX155304

JULY - SEPTEMBER Whitehaven's Maritime Past at the Beacon.

17th July to 18th September

Maritime art by prominent artists from the 17th and 18th Centuries. Charges apply. The Beacon, West Strand, Whitehaven, Cumbria CA28 7LY. *Tel: 01946 592302*

June

SATURDAY 5TH JUNE Osprey Day

Come and celebrate the Caerlaverock ospreys with a day of walks and talks. Charge for event. *Phone Pam Mundy for more information 01387 770200.* WWT Caerlaverock Wetland Centre, Eastpark Farm, Caerlaverock, Dumfries DG1 4RS

WEDNESDAY 2ND JUNE Bird survey and walk from Allonby to Mawbray 10.30am – 2.30pm

Bring a pair of binoculars and warm clothing and join in with the AONB Unit's Solway bird survey. Learn more about identifying local and over wintering birds, and enjoy the stroll along the beach. Free of charge. *Booking essential, phone the AONB Unit on 016973 33055.* Meet at East End Car Park (Silloth end of Allonby).

SATURDAY 5TH JUNE – SUNDAY 13TH JUNE

WOW – it's World Oceans Week 2010!

Joinusforone of our many events to celebrate World Oceans Day and the stunning marine environment of Dumfries and Galloway. Visit www.solwayfirthpartnership.co.uk for more information and a full programme of events

SATURDAY 5TH JUNE SATURDAY 12TH JUNE

WOW BeachBlitz Week in Dumfries and Galloway

Help to make the beaches of Dumfries and Galloway clean and safe for wildlife and visitors! Gloves and bags provided, everyone welcome. Ring NSA Communities Ranger Ian Brown for more information 01387 260180.

Saturday 5th June at Rockcliffe,

10 am – 12 noon

Monday 7th June at Southerness

10 am – 12 noon

Tuesday 8th June at Mersehead

10 am – 12 noon

Tuesday 8th June at Carrick 2pm – 4pm

Thursday 10th June at Rascarrel

10am – 12 noon

Friday 11th June – Wigtownshire/Machars

region, to be confirmed

Saturday 12th June at Rockcliffe

10 am – 12 noon

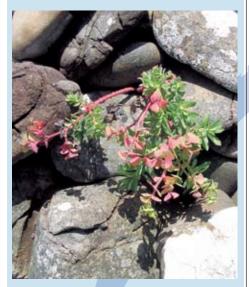
(Please ring Ian to confirm times, dates and details)

SUNDAY 6TH JUNE, 10AM - 6PM Mull of Galloway Open Day

Come and learn about the ecology, flora and marine life of this amazing area. Guided walk at 1pm. Wear suitable clothing and walking shoes/boots. Booking not essential. Ring Paul Tarling 01988 402130 for more information. Mull of Galloway RSPB Visitor Centre, Drummore, Stranraer DG9 9HP. NX155304.

SUNDAY 6TH JUNE, 11 AM – 4PM World Oceans Day Celebration at Rockcliffe

A great fun day out for all ages! Join a huge range of organisations for a day of activities, competitions and displays on the beach. Featuring guided walks, Laser Quest, Solway Sea Shells, bird spotting and much more! All activities free, small charge for refreshments. See www.solwayfirthpartnership.co.uk for more information.



WEDNESDAY 9TH JUNE, 2PM - 3.30PM

Explore the Seashore (Fleet Bay)
Join the NSA team and learn about the creatures that are found along the seashore.
Children must be accompanied by an adult. Booking essential, ring lan Brown 01387 260180 for more information. Meet Cardoness Estate car park, NX 565537

SATURDAY 12TH JUNE, 1PM - 3PM Family Beach Art Day, Mersehead Nature Reserve

Join our RSPB team on the beach and create your own artwork from whatever you can find on the beach! *Booking essential, ring Ella McLellan for more information 01387 780579.* Mersehead (RSPB) Nature Reserve, Southwick, Dumfries DG2 8AH

SUNDAY 13TH JUNE, 11AM - 4 PM World Oceans Day Celebration at Port William

A great fun day out for all ages! Join a huge range of organisations for a day of activities, competitions and displays on the beach. Featuring guided walks, Laser Quest, Solway Sea Shells, bird spotting and much more! All activities free, small charge for refreshments.

See www.solwayfirthpartnership.co.uk for more information.

WEDNESDAY 16TH JUNE, 2 PM - 4PM Walking at Wigtown bay

An easy stroll around the Bay with a Dumfries and Galloway Council Ranger, and chance to chat and look at what's around. Free of charge. **Booking not essential, ring Elizabeth Tindal for more information 01988 402401**. Meet at Wigtown Bay Visitor Centre.

WEDNESDAY 16TH JUNE 10.30 AM - 12.30AM

Guided wildflower walk on Mawbray Banks

Join in a pleasant ramble along Mawbray Banks to discover the wildflowers growing in the dune habitat. Wear suitable clothing and footwear. Free of charge. *Booking essential, phone the AONB Unit on 016973 33055.* Meet at Mawbray Yard car park, off the B5300 at Mawbray village (sea-ward side). All identification books welcome!

FRIDAY 25TH JUNE, 10 AM Guided walk along Grune Point: natterjacks and birds

Find out more about the rare natterjack toad which can be found along the Solway Coast with the AONB Unit. Visit some breeding pools, and keep a look out for the birdlife on Grune Point. Booking essential, phone the AONB Unit on 016973 33055. Meet at the Discovery Centre, Silloth



THURSDAY 1ST JULY, 7.00PM AONB volunteer recruitment slide show and talk

Come along and meet the Solway Coast AONB Ranger and learn a little about the Solway Coast Area Of Outstanding Natural Beauty, also learn a little about some of the tasks the AONB Community Volunteer Group are involved in. Kirkbride Village Hall. Booking essential, phone the AONB Unit on 016973 33055.

SUNDAY 4TH JULY, 2 PM – 4.30 PM Merse Walk WWT

A guided walk with a WWT warden to explore the unique flora and fauna of the Caerlaverock merses. Charges apply. *Ring Pam Mundy for more information 01387 770200.* WWT Caerlaverock Wetland Centre, Eastpark Farm, Caerlaverock, Dumfries DG1 4RS

WEDNESDAY 7TH JULY, 10 AM - 4 PM From the Isle to the Glen

A 7 mile cliff top walk from the Isle of Whithorn to St Nianian's cave exploring the history and wildlife of the area. Minibus return to the Isle of Whithorn. Bring a packed lunch. Free of charge. Booking not essential, ring Clive Smith 01988 402673 for more information. Meet at the Harbour car park at the Isle of Whithorn.

THURSDAY 8TH JULY, 2PM – 4PM Yeuchy mud at Wigtown!

Get really muddy on this great walk exploring the mud of Wigtown Bay! Bring wellies and be prepared to get very muddy! Free of charge. Booking not essential, ring Elizabeth Tindal for more information 01988 402401. Meet Wigtown Harbour, NX428547

WEDNESDAY 14TH JULY, 10.30 AM - 2.30 PM

Peatlands walk, RSPB Campfield marsh reserve

Dave Blackledge, RSPB Officer, will lead a fascinating walk through the reserve, looking at the teaming wildlife that lives in the Solway Mosses. Please wear suitable clothing and footwear and bring a packed lunch. Meet at North Plain Farm, near Bowness on Solway. Booking essential, phone the AONB Unit on 016973 33055

WEDNESDAY 21ST JULY, 10 AM - 12.30PM Port to Port

A moderate grade cliff top walk from Port Morrich to Portpatrick, with a bus out and a walk back. Great sea watching opportunities as well as looking at Dunskey Castle and the old railway. Why not combine it with the Lighthouses and Shipwrecks walk? Free of charge. Booking not essential, ring Elizabeth Tindal for more information 01988 402401. Meet Dunskey Castle end of Portpatrick, NW999540.

WEDNESDAY 21ST JULY, 1 PM – 4 PM Lighthouses and Shipwrecks

A moderate grade walk from Kilantrigan Lighthouse to Portpatrick, with a bus out and a walk back. Learn about lighthouses and the wrecks of the region. Why not combine it with the morning's Port to Port walk? Free of charge. Booking not essential, ring Elizabeth Tindal for more information 01988 402401. Meet Dunskey Castle end of Portpatrick, NW999540.

WEDNESDAY 21ST JULY 1.30 PM – 4 PM Inner Solway Views

Explore this beautiful area with a moderate walk to promote the Annadale and Eskdale Sports Trust led by Dumfries and Galloway Council Rangers. Learn about the birds and natural history of this very special region of the Solway. Free of charge. Booking not essential. *Ring Ross Gemmell for more information 07834 5677983*

THURSDAY 22ND JULY, 10.30 AM - 3.30 PM

Rockcliffe to Sandyhills

A chance to walk along one of Galloway's best coastal paths led by the Dumfries and Galloway Council Ranger Service. Return tranpsort provided. Free of charge. Booking essential, ring D&G Council Ranger service for more information 01556 505479. Meet Rockcliffe top car park.

THURSDAY 22ND JULY, 2 PM - 4 PM Rough Island

Join the National Trust for Scotland Ranger service for an easy walk out to Rough Island, exploring the mud flats along the way. Charges apply. *Booking essential, for more information ring NTS Ranger service* 01556 503702. Meet Rockcliffe main car park NX852535

August

SUNDAY 1ST AUGUST, 2 PM – 4.30 PM Merse Walk WWT

A guided walk with a WWT warden to explore the unique flora and fauna of the Caerlaverock merses. Charges apply. Booking essential. *Ring Pam Mundy for more information 01387 770200.* WWT Caerlaverock Wetland Centre, Eastpark Farm, Caerlaverock, Dumfries DG1 4RS

THURSDAY 5TH AUGUST, 2 PM - 4 PM Rough Island

Join the National Trust for Scotland Ranger service for an easy walk out to Rough Island, exploring the mud flats along the way. Charges apply. *Booking essential, for more information ring NTS Ranger service 01556 503702.* Meet Rockcliffe main car park NX852535

SUNDAY 8TH AUGUST, 10 AM - 2 PM Porpoise Watch at Balcary Point

Join experts and the staff of the Dumfries and Galloway Environmental Resources Centre and learn about the different species of dolphins and porpoise found off the Dumfries and Galloway coast. Free of charge. Booking not essential, for more information ring Mark Pollit on 01387 249207. Meet Balcary Point on the coastal footpath, NX826490.

MONDAY 9TH - FRIDAY 13TH AUGUST, 10 AM - 5 PM

Marine Week at the Mull of Galloway

A week devoted to the seas around the Mull of Galloway. Displays and competitions, and guided walks on Tuesday and Thursday. Booking not essential. *For more information ring Paul Tarling 01776 840539*. Mull of Galloway RSPB Visitor Centre, Drummore, Stranraer DG9 9HP. NX155304.

SUNDAY 8TH AUGUST - SUNDAY 15TH AUGUST

Festival of the Solway Mosses

Some times are awaiting confirmation, and for booking and enquiries please contact Natural England for more information 016973 50005.

SUNDAY 8TH AUGUST Bogged down on Bowness Common

Join the Senior Reserves Manager for a tough grade, 8km trek on Bowness Common, enjoy great views and wildlife. Bring lunch, wellies and wet weather gear. Free of charge. Meet at North Plains Visitor Centre, Grid ref NY 197615. Follow the coastal road from Bowness on Solway.

TUESDAY 10TH AUGUST Drumburgh Moss National Nature Reserve – The Restoration – The Next Ten Years – a Lunchtime Lecture at Tullie House

Morag Angus, Cumbria Wildllife Trust, will be talking about the proposals for the next ten years, and their benefits to the mossland and its flora and fauna.

THURSDAY 12TH AUGUST Family Fun Day at Tullie House 10.00am – 3.00pm

Come along and enjoy some nature activities for younger children.

SUNDAY 15TH AUGUST Guided walk on Drumburgh Moss 10.30am – 13.00pm

Led by Morag Angus. Come and explore one of the South Solway's wild bogs, Drumburgh Moss, looking at what plants lurk on the ground and what birds and insects fly by.

WEDNESDAY 18TH AUGUST 10.30 AM Beach litter pick on Mawbray beach

Join the AONB Volunteer Group to help in a litter pick along the beach at Mawbray Banks Special Site of Scientific of Interest (SSSI).. All equipment will be provided but please wear suitable clothing and bring a packed lunch. Meet at Mawbray Yard Car Park (just off the B5300 on the seaward side in Mawbray village) Booking essential, phone the AONB Unit on 016973 33055

WEDNESDAY 18TH AUGUST 10 AM - 4 PM Mulberry Harbours to St Ninian

A 7.5 mile moderate grade cliff top walk looking at the war-time and natural history of the area. Bring a packed lunch. Free of charge. Meet Isle of Whithorn harbour car park. Booking not essential. For more information ring Clive Smith 01988 402673

WEDNESDAY 18TH AUGUST 10.30 AM - 3.30 PM

Balcary Coastal Walk

This is a lovely, moderate grade circular walk, with stunning views of the Solway to the Lake District. Bring a packed lunch and binoculars if you have them. Free of charge. Booking essential, ring Dumfries and Galloway Council Service 01556 505479. Meet Balcary car park off the A711.

WEDNESDAY 25TH AUGUST, 10.30 AM – 1.30 PM

Coastal walk from Maryport to Allonby

Come along and enjoy a picturesque coastal walk and meet people who enjoy the AONB, whatever the weather. Please bring a packed lunch and suitable clothing. Vehicles will be arranged for the return journey. A nice cup of something warm can be organised for the end of the walk! Meet at the car park on Maryport Promenade. *Booking essential, phone the AONB Unit on 016973 33055*

September

THURSDAY 9TH SEPTEMEBER, 2 PM – 3.30 PM

Explore the seashore

Join the NSA team to find out what creatures can be found along the seashore. Free of charge. **Booking essential, contact NSA Ranger 01387 260180 for more information.** Meet Brighouse Bay carpark NX635457

THURSDAY 30TH SEPTEMBER, 2 PM - 3.30 PM

Return of the wild geese at Caerlaverock

Be amongst the first to welcome the wild geese back to the Solway from their Arctic breeding grounds. Further details to be confirmed. *Ring Nick Gedge for more information 013877 70275*

October

WEDNESDAY OCTOBER 6TH 10.30 AM - 3.30 PM

Balcary Coastal Walk

This is a lovely, moderate grade circular walk, with stunning views of the Solway to the Lake District. Bring a packed lunch and binoculars if you have them. Free of charge. Booking essential, ring Dumfries and Galloway Council Service 01556 505479. Meet Balcary car park off the A711.

SUNDAY 10TH OCTOBER, 4 PM – 6 PM Dusk flight at WWT

Watch the barnacle geese flying out over the Solway mudflats. Charges apply. *Ring Pam Mundy for more information 01387 770200.* WWT Caerlaverock Wetland Centre, Eastpark Farm, Caerlaverock, Dumfries DG1 4RS

SUNDAY 17TH OCTOBER 6.45 AM - 9 AM Dawn Flight WWT,

Join the wardens at a special 'early doors' event to experience the wild geeses in flight against the dawn sky. Coffee shop also open for hot drinks and bacon rolls. Charges apply. *Ring Pam Mundy for more information 01387 770200.* WWT Caerlaverock Wetland Centre, Eastpark Farm, Caerlaverock, Dumfries DG1 4RS

November

Solway Firth Partnership Conference and AGM

Date, venue and details to be confirmed. See our web site for more information as it becomes available.



