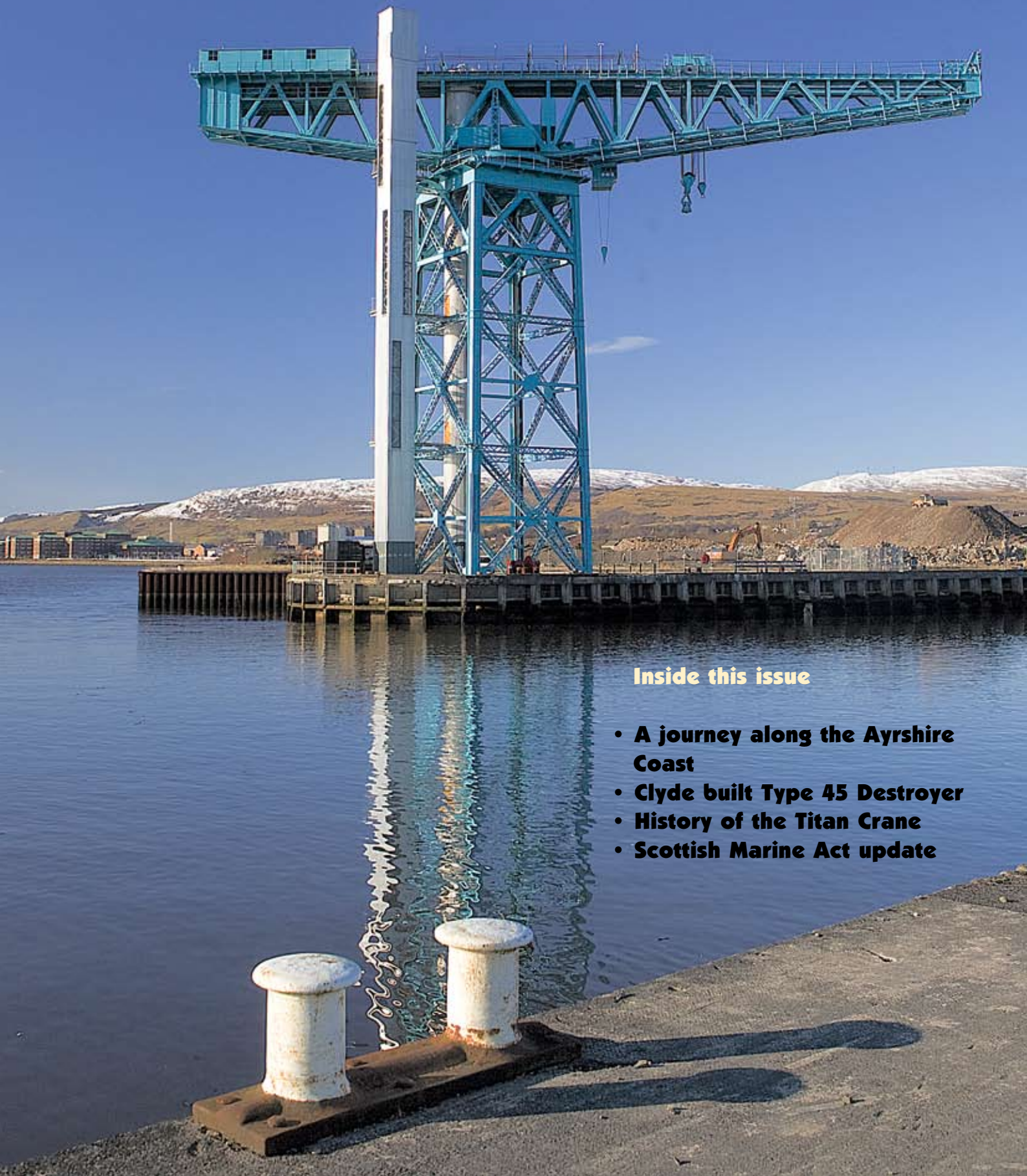
A partnership to care for the Clyde: its environment, its people and its visitors

Clyde Breakers

FIRTH OF CLYDE FORUM NEWSLETTER

Firth of Clyde FORUM

Summer 2010 Issue 11



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Front cover photograph: Titan Crane © Peter Sandground

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Firth of Clyde Forum Update

Welcome to the Summer 2010 edition of Clyde Breakers! Since our last one there have been further changes to the Forum personnel; congratulations to Fiona Mills, our former project manager, who is now the proud mother of a baby boy, Euan. She is currently on maternity leave, but will be returning early next year. In the meantime, we have a new project manager, Kirstie Dyson, who started in March. She has recent project management experience at the Centre of Ecology and Hydrology and gained a Ph.D in Marine Ecology at St. Andrews University.

It will be a challenging but exciting year, with the usual work of the Forum and, in addition, the start of implementation of the Firth of Clyde Marine Spatial Plan. The Draft was completed by the Pilot Project team, John Donnelly and Kate Thompson, in consultation with stakeholders; it was pioneering work and congratulations to John and Kate for their achievement, they have now moved into new roles within SEPA and SNH.

The objectives of the Plan cannot be achieved by the Forum alone. There will be liaison and discussions with a wide range of stakeholders over the coming months to firm up on actions and set priorities that will contribute to a sustainable economy for the Firth of Clyde and an enhance quality of life for local communities.

And on the national scene, Scotland's Marine Bill received Royal Assent on 10th March 2010, a very exciting and much awaited day for Scotland's marine environment. An update form Marine Scotland can be found on page 4.

As always, there is a diverse range of interesting articles in this issue, and many thanks to all the contributors. If you have something you wish to contribute to the newsletter or the website, www.clydeforum.com, please get in touch.

Best wishes,

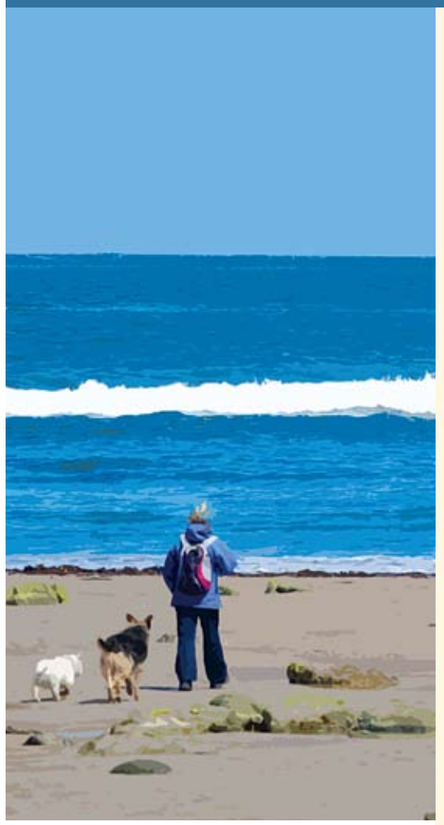
Isabel Glasgow

Firth of Clyde Forum Chair and;

Kirstie Dyson

Firth of Clyde Forum Project Manager

Firth of Clyde Forum Events Focus



The beach © Ian Boyter

The United Nations declared 2010 to be the International Year of Biodiversity. It is a celebration of life on earth and of the value of biodiversity for our lives. The world is invited to take action in 2010 to safeguard the variety of life on earth: biodiversity.

It will be celebrated with a national campaign to raise awareness on Biodiversity and to get more people involved in Biodiversity improvement. There will be lots of events going on so look out for them in your area.

2010 International Year of Biodiversity

Find out more about the year of biodiversity at www.cbd.int/2010/welcome/

big on the beach 2nd - 6th August 2010

12noon till 5pm Monday, Tuesday, Thursday
12noon till 8.30 on Friday

South Beach, Ardrossan

Find out more about big on the beach www.bigonthebeach.co.uk

To be part of the International Year of Biodiversity the Firth of Clyde Forum will be teaming up with North Ayrshire Council and Irvine Bay Regeneration Company at the **BIG BEACH BIOBLITZ: 1st - 6th August 2010**. The British Trust for Conservation Volunteers (BTCV) will be leading the bioblitz events over the course of the week with opportunities for everyone to get involved.

Lots of activities including dance workshops, sports activities, assault course, beach games, music, film & photography workshops and lots more. The event is aimed at families, is being funded by Irvine Bay Regeneration Company and will take place on 2nd - 6th August from 12-5pm each day (except Wednesday). On Friday 6th, the week will culminate with the Beach Party until 8.30pm!

Every day Activities include;

• Big Beach Bioblitz : Join us to celebrate the international year of biodiversity as we catch, count and conserve our local wildlife! Meet the experts daily as they highlight the wonders that live in our local area, from the very large to the very small, to the weird and wonderful. We also want your pictures, photos and poems of your favourite places in and around Irvine Bay - with a prize for the best on Friday!

• Film & photography workshops with experienced staff : learn how to take good photos and make your own films

• 3TFM : a daily roadshow with local DJs and music from 1960s, all hosted from the award winning beach hut, designed by St Matthew's Academy Standard Grade Art & Design student Scott Mitchell

• Climbing wall: Walk Rock offer an opportunity to experience this thrilling sport. There may be some height restrictions. Parental consent forms will be available at the event

• MYC: the Mobile Youth Centre will be onsite each day, full of information, inspiration and gaming for young people

• Maritime Museum: model boat building for children, then sail the boats onsite in our purpose-built pond. There will also be some raft building on the beach. Eat your heart out Lost! Model boat displays will also be ongoing, courtesy of Irvine Model Boat Club

• Beach volleyball: join in beach volleyball, led by Active Schools Co-ordinators – a chance to get some exercise and have fun at the same time!

• Giant Games: Children's Outreach Services will have a selection of games on hand every day. Have a go at giant jenga, hoop-a-peg, stepping stones, body knots and other beach games, such as swingball!

• Seven seater biker: yes, a 7-seater bike – can you try to co-ordinate your friends into a team to make it work? Have a conference bike ride, hilarious fun for everyone - come and have a go!

• Giant inflatables: giant slide, surf simulator, laser quest, assault course, gyroscope, giant suits and space hoppers

• K:A Leisure: Activator Bus health checks, giant Wii, assault course and portable soccer stadium every day onsite – with club golf, pre-school activities and beach soccer. Something for everyone!

• Beach fun: sandcastles, sand sculptures, sandman building – various beach activities each day. Weather dependent.

Scottish Marine Act – an update

Since the Marine (Scotland) Act 2010 gained Royal Assent in March 2010, Marine Scotland, the Scottish Government's marine management organisation, has been getting to grips with the challenge of turning the Act into reality.

The team that steered the Bill through the Scottish Parliament is now coping with the new elements introduced by the legislation, such as changes to the licensing regime and the introduction of marine planning at the national, international and regional levels. David Palmer, Head of the Marine Planning team, commented, "The next year or so is going to be extremely important in setting the framework for marine planning within Scotland. There is much to be done in this transitional period."

Heron © Peter Sandground

Marine Scotland will be undertaking further consultation on the division of the coastline into Scottish Marine Regions. This is scheduled for summer 2010, with decisions made by the end of the year and confirmed by secondary legislation by March 2011. The Scottish Local Coastal Partnerships, including the Firth of Clyde Forum, will be asked to run local events to ensure their stakeholders' views are represented back to the Marine Planning team.

Consultation on the guidance and secondary legislation necessary to implement the new marine licensing regime will also take place over the summer, covering exemptions, the application process, fees, appeals and consultees. The new system should be introduced on 1 April 2011 and will be implemented in Scotland at the same time as the new regime for the rest of the UK is also brought in. In parallel to all this activity will be the development of the draft National Marine Plan for Scotland. A recent workshop gave participants a taste of what marine planning might mean for different sectoral interests. Stakeholders were asked to identify the three key objectives for their industry or sector over the next ten years and then had to negotiate with other sectors about achieving accommodation of their respective goals. The discussions highlighted the potential competition for space between uses but also identified that in some cases there was greater conflict within sectors than between them. Competition for space within the 3 nautical mile zone was greatest, but that won't be news to anyone who has followed the development of the Clyde SSMEI pilot.

In summary, the work to turn Scotland's Marine Act into reality is only just beginning but this transitional year promises to be an exciting and dynamic few months as issues are raised and resolved. The future of some Local Coastal Partnerships should be clearer and we will have new systems in place that should streamline the consenting procedures for marine activities. And all of this is happening at the same time as the Marine Management Organisation (MMO) is gearing up to deliver marine planning, licensing and management for England and while the Welsh Assembly Government (WAG) is getting ready to plan for the Welsh coastline and territorial waters as well as a new fisheries zone in their offshore zone.

We are all definitely living in interesting times!

Seal near Isle of Arran © Peter Sandground

Clyde Inshore Fisheries Group

By Dr. Billy Sinclair, Clyde IFG Chair
& Alex Watson Crook, Clyde IFG Coordinator

Fishing vessels © Peter Sandground

BACKGROUND INFORMATION

Clyde-IFG is one of a network of new Inshore Fisheries Groups (IFG's) around Scotland. The aim of the network is to improve the management of Scotland's inshore fisheries out to 6 nautical miles and to give commercial inshore fishermen a strong voice in local fisheries management. Each Group consists of an Executive Committee comprised exclusively of local fishermen's representatives. The IFG Committee is supported by a Local Advisory Group (membership includes Scottish Natural Heritage, Marine Scotland Compliance and Science, Environmental LINK, Argyll & Bute Council, Scottish Environment Protection Agency) which provides a mechanism through which IFG management proposals and objectives take account of the requirements and concerns of others who are dependent on or interested in the seas covered by the IFG area. This group will provide the checks and balances necessary to ensure that the local objectives set by the IFG are both legitimate and functionally relevant to the Industry. The work of each IFG will be progressed in consultation with all those with a relevant interest in the best management of an area's fisheries and the wider marine environment.

The basis for IFGs was set out in the Strategic Marine Framework for Inshore Fishing in Scotland (Scottish Government 2005); the intention being that there would be a local fisheries input to the ongoing Scottish Government policy development and deployment in relation to inshore fisheries.

Fish © Peter Sandground

IFG FISHERIES MANAGEMENT PLANS

An initial objective for the IFG's are the development of Management Plans, drawn up on an inclusive, transparent and consensual basis, for their area's fisheries. Whilst IFG Management Plans reflect specific, localised priorities, they 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.

NEXT STEPS

Clyde Inshore Fisheries Group (Clyde IFG) has now been fully operation for over a year. Clyde IFG considers that the process so far has been a success, with local fishing interests exhibiting high levels of engagement within their respective IFG's and a genuine desire to drive forward the work of the IFG's is clearly evident.

It is expected that the first draft of the Clyde IFG Management Plan will be released by the end of September 2010 and Plan implementation will begin following sign-off by Scottish Ministers.

The development of IFG's around Scotland's coast represents a new initiative to allow inshore fishermen to have a say in the management and governance of their Industry and to proactively work toward achieving local goals and objectives.

Clyde built Type 45 Destroyer

BAE Systems' yards at Govan and Scotstoun on the Clyde are a hub of activity as its workers forge ahead with the ambitious programme to deliver six Type 45 anti air-warfare destroyers to the Royal Navy. The Clyde workers are rightly proud of their role in keeping the long heritage of shipbuilding on the river alive with the design and build of the most advanced surface warship ever and in doing so, firmly marking the Glasgow shipyards on the global map.

Dauntless on sea trials © BAE Systems

The company is over half way through the Type 45 programme and is building the vessels in modular sections, making best use of its facilities and expertise across its yards in Govan, Scotstoun, Filton and Portsmouth. The ships are then assembled on the berth and launched at Govan before sailing down the river to Scotstoun for commissioning and the final outfit.

The first of class HMS Daring was handed over to the Royal Navy in December 2008, with her sister Dauntless following in December 2009. Both ships are now residing in their home port of Portsmouth and recently conducted their first ever joint sea trials.

Meanwhile, work continues on the remaining ships in the class at the Clyde yards. Third of class, Diamond, has just embarked on her second stage sea trials and is on track to be handed over to the Royal Navy in September, whilst the fourth of class, Dragon, will undertake sea trials towards the end of the year. The fifth vessel, Defender, was launched at the Govan yard in October 2009, with outfitting continuing on the ship at Scotstoun. Duncan, the sixth and final vessel, is currently taking shape on the berth at Govan, with launch set to take place on 11 October.

David Connolly, ship manager of Duncan, commented: "Previously I was ship manager of Dauntless and was fortunate enough to work on her from the ship's first steel cut back in 2004, right through to her handover to the Royal Navy at the end of last year. I'm now working on Duncan, the sixth and final vessel, and it is a real honour to continue to be part of the team who are delivering the Type 45 destroyer programme."

At 7,500 tonnes each, the Type 45 destroyers are the largest and most advanced ships of their kind to be built since the Second World War. The Type 45 is also the first front-line warship in the world to be powered by a fully integrated electric propulsion system, making it 45% more economical than the Type 42 destroyers which they replace.

Once in service, the fleet will provide the backbone of the UK's naval air defences for the next 30 years and beyond. The Type 45s will be capable of carrying out a wide range of operations, from anti-piracy and anti-smuggling activities, to disaster-relief work and surveillance operations. Each destroyer will be able to engage a large number of targets simultaneously, and defend aircraft carriers or groups of ships against the strongest future threats from the air.

The Type 45s are the first element of the modern Royal Navy and are setting the standard that other capabilities will follow. The Queen Elizabeth Class aircraft carriers are rapidly taking shape, with two of the superblocks under construction at Govan and another at the business' Portsmouth site. The company has also recently been awarded a four year contract by the Ministry of Defence to take forward the programme to develop a new generation of combat ships (Type 26) for the Royal Navy. These programmes, along with the company's work in overseas markets, will ensure BAE Systems remains at the forefront of the maritime industry for many years to come.

Duncan under construction on the berth at Govan © BAE Systems

HMS Defender Launch © BAE Systems

A history of Titan Crane

The Titan Crane Clydebank is the oldest of four cranes still standing on the River Clyde built by Sir William Arrol for the Clyde shipyards. It is Clydebank's only "A" listed structure in the town and is an iconic symbol of the industrial heritage of the area.

The world renowned John Brown's shipyard of Clydebank is synonymous with luxury Cunard liners and powerful battleships alike. From its small beginnings in the 1840's on the banks of the River Clyde by brothers James and George Thomson, the yard was known worldwide as the hub of Scottish industry and manufacturing for most of the 20th century. As this new yard, The Clyde Bank Foundry grew, so too did the settlements around it, subsequently giving the town its name some fifty years later. Following the American Civil War, family feuds and the deaths of the brothers, the Yard eventually came under the ownership of Sheffield steel makers John Brown & Co. Under this new company the yard flourished and commissioned the building of the first ever giant cantilever crane on the Clyde in 1906. The Titan Crane was one of 60 built in the world and one of 13 which can be seen today.

The Titan was used in the fitting out of all of the vessels built in the yard until it closure as a ship yard in 1972. It continued to function when the yard, under the ownership of Marathon to build oil platforms until the closure of the yard completely in 1999.

The Crane stood derelict until Clydebank re-built, Scotland's pathfinder Urban Regeneration Company took ownership of it. Following community consultation about what should be done with the magnificent structure, the resounding answer was the local people wanted to see it restored and accessible for all. Opened in 2007 as Scotland's most unique visitor attraction, it offers tourists and local visitors the chance to take in breathtaking views of Glasgow, Erskine and beyond while learning about the industrial significance of the site. Taking the short lift ride to the top of the Crane, visitors get a true sense of the power and history of this amazing tower of engineering which has dominated the skyline for over 100 years. Inside the wheelhouse see the original crane workings and marvel at the illustrious history of the shipyard.

Bus journey to Titan © Clydebank Rebuilt

A computer based system generates a nightly lighting scheme which ensures the Titan Crane shines like a beacon, paying homage to our industrial past while signalling our dynamic future.

School Children at Clydebank Titan © Clydebank Rebuilt

In 2009, the Heritage Lottery Fund granted the Titan Crane a grant towards their first ever education and community outreach programme. A part time Heritage Officer was employed to create an interactive programme which encouraged visitors of all ages to engage with the Titan. So far this has brought schools from all over Scotland to the site, and also provided schools with a free 100 page resource pack for them to use within the new curriculum for excellence. This is available for Primary and Secondary schools and Colleges on request from the Heritage Officer on 0141 951 3420 or emma.baxter@clydebankrebuilt.co.uk.

The new season opens on Saturday the 1st of May 2010 and runs until the 4th of October 2010. Throughout the season, the Titan is open from 10am-4pm on Fridays, Saturdays, Sundays and Mondays. However, new for this year, the Titan will be open every day in July and August. Tickets cost £4.50 per adult and £3 per concession.

Guided walking tours have also been introduced this year which offers visitors the chance to walk around the site with one of our Heritage Guides and hear more in depth information about the site than is offered within the normal tour. This is included within the normal ticket price and more details can be found on our website www.titanclydebank.com.

On the 8th of May 2010, a VE Day themed family fun day will take place at the Crane, with costumed guides, free arts activities and demonstrations from CAOS and the Clydebank Museum. This fun day is a first for the Titan and is guaranteed to be a fun filled day for all ages. Come on down and celebrate this historical milestone of British history and enjoy the activities on offer.

Observing Titan © Clydebank Rebuilt

Scottish Sail Tourism worth £101 million

A newly published Scottish Enterprise report shows that sail and power boat cruising tourism alone is worth £101 million per year in Scotland and supports a total of just over 2,700 jobs. Of this, £27 million is generated from non-Scottish boat owners supporting 724 jobs, and £53 million is the gross value added to the Scottish economy.

The research looked solely at sailing and powerboat cruising, and did not include dinghy or cruiser racing events, or other leisure marine activities such as kayaking, sea angling, diving and wildlife watching.

The report is based on new research commissioned by Scottish Enterprise, and is positive about future growth through the next decade. It is the first assessment on sail and power boat tourism of this scale to cover all of Scotland's boating waters, and points to opportunities both within and outside the dominant Clyde and West coast areas.

Largs Yacht Haven. Good marina facilities in all areas for resident and visiting craft are essential for continuing growth in the future.

The report divides the coast into four sections: Clyde; West; North (including the Northern Isles) and East, enabling interesting comparisons between the areas. Although these areas are unlikely to match the proposed Marine Regions proposed in the Marine (Scotland) Act, they will still be a useful source of information for these bodies.

It highlights the need for more and better infrastructure. Scotland has over 11,000 resident marina berths and moorings with occupancy of around 95%, and almost 1,700 more are available for visitors, with tourist boat nights approaching 167,000 and growing. The report identifies the potential for around 4,700 new marina berths and moorings by 2019, so the investment opportunities are there.

Growth, projected over 10 years shows a potential 44% increase in economic contribution from £101m to £145m, which a contribution from non-Scots marine tourists of £43m.

It is interesting that the number of non Scottish owned boats touring Scottish waters was 1,406 craft in 2009 (13.5% of total craft), and in the Clyde this figure was 954 craft (21.5%).

In all, almost half of visiting boats (44%) are from outside Scotland, providing a healthy contribution to Scotland's balance of payments.

This survey of sail and power boaters found that the overwhelming majority considered scenery and quality of sailing waters to be the dominant reasons for sailing in Scotland, but also considered more and improved berthing facilities and shore attractions to be desirable. Striking the right balance between yachting services and Scotland's wilderness anchorages is vital. This report was commissioned by Scottish Enterprise and conducted by Glasgow based Tourism Research Company, with British Marine Federation providing key industry statistics and local market information.

The next task for the recreational boating and marine tourism industry is to fill the remaining data gaps, and therefore be able to present the Scottish Government, Marine Scotland, and the new Marine Regions with comprehensive data on the total economic worth of the sector, which was valued at £250m five years ago, and which, despite the recession, is probably worth more today.

The full report can be accessed at: http://www.scottish-enterprise.com/research-publications.htm

Scotland British Marine Federation

Clyde Panorama. A survey of sail and power boaters found that the overwhelming majority considered scenery and quality of sailing waters to be the dominant reasons for sailing in Scotland. Photo M Balmforth.

Raised beach panorama © SNH

Understanding the land

The landscape has always influenced where people live, work and travel. But are the reasons why always obvious? You can read about how the land was formed but nothing beats a close look and with a bit of help you can easily find some clues.

The Ayrshire coast forms the west edge of what geologists call the Midland Valley and lies between two important fault lines. The Highland boundary fault to the north is well-known and visible across Loch Lomond and crosses the edge of Argyll & Bute and into Arran. The Southern Uplands fault appears as Glen App in South Ayrshire. The oldest rocks in the valley were formed around 450 million years ago when Scotland and England were separated by a wide ocean. The collision of the two continental plates was both a destructive and constructive event and became the foundation of Central Scotland. Today, the remnants of the ocean floor can be found along the margins of the Midland Valley.

Over millions of years there was constant switching from shallow sea to swamp land which is reflected in a variety of sediments from limestone to coal. River systems flowed into the Midland Valley basin carrying boulders, gravel, sand and other sediment. So you will see outcrops of red sandstone and conglomerates and occasionally fossilised remains of plants and primitive animals. During the glacial periods the land sunk under the weight of ice and rebounded when it melted. These movements are evident in raised beaches along the Ayrshire coastline and its islands. Look out for shore platforms with a line of cliffs set further inland. These platforms contain roads, farmland and some of Scotland's most famous golf courses. The Clyde and other postglacial rivers (such as the River Irvine and River Ayr) inherited the landscape after it had been modified by the ice sheets.

Ways to travel

The Clyde coast has been popular for relaxation and recreation for many years, mainly because it is so accessible thanks to coastal towns and proximity to Glasgow. People have travelled to the coast for short breaks and longer holidays ever since the railway was expanded in the second half of the 19th century. Regular services go as far south as Stranraer and main roads hug the coastline.

Walkers and cyclists can follow the coast starting from West Ferry on the south bank of the River Clyde, opposite Dumbarton Rock. In Inverclyde the route keeps very close to the shoreline until you reach Inverkip. A short detour inland allows you to continue south using National Cycle Route 7 and the Ayrshire Coastal Path.

ACP waymarker © SNH

Both routes are well signed and occasionally use the same sections of path. The Coastal Path encourages you to devise your own route along the shore in places but keep an eye on the tides. Refer to the box opposite for sources of information about paths and geology.

Exploring

The journey starts in Inverclyde and moves south through North and South Ayrshire.

No matter how you get there make a point of visiting the classic viewpoint from the top of Lyle Hill (130m above sea level). It provides a panoramic view across the Clyde estuary which looks dramatic in all weathers. The view overlooks Gourock and the 'Tail of the Bank', an area of the River Clyde denoting the point at which the river becomes the Firth of Clyde. Looking towards Glasgow the tidal mudflats are designated the Inner Clyde Special Protection Area on account of the feeding opportunities for overwintering redshank.

Clyde Muirshiel Regional Park includes the upland areas of Inverclyde, North Ayrshire and Renfrewshire. Inland, a journey along the Greenock Cut will give you a changing panorama of the Firth of Clyde. The path follows an open channel (about 185m above sea level) that used to carry water from hill reservoirs to the towns below. Down at the shoreline, Lunderston Bay is a popular beach for day visitors. Make use of the train and Branchton station (for example) to devise a circular route that suits you.

North of Largs, the Knock is a well-known hill feature in the landscape reaching 217m which gives you outstanding views of

Gourock Firth of Clyde © SNH

Continued overleaf...

the Firth and its islands. A walk to the summit is described on the Ayrshire Paths website together with many other routes close to towns and villages.

South of Largs is the Kelburn Country Centre which includes the Kelburn Glen with its waterfalls and deep wooded gorges. The Long Glen Walk leads to spectacular views over the islands of the Firth of Clyde. Closer to the town on the road to Kilburnie there is the Haylie Brae viewpoint with good views of the Cumbraes. Great Cumbrae has a raised beach platform running round the island which is emphasised by the road – the best way to explore is on a bike.

The Portencross Coast around Hunterston provides a great variety of seashore habitats with interesting plants and extensive mud flats for wildfowl and waders. The geology comprises fine exposures of upper Old Red Sandstone ranging from large pebble conglomerate to sandstones, with striking outcrops of igneous intrusions and sediments. There is also a fine worn-out shore platform, caves and cliffs. Further south at Seamill the main rock platform extends inland beneath raised beach deposits to a prominent cliff line. Kirktonhall Glen is a popular woodland walk that leads from West Kilbride to Seamill.

From Ardrossan and Saltcoats to Ayr the coast is generally low but no less interesting for the variety of rock types and Arran dominates the views out to sea. The Site of Special Scientific Interest (SSSI) here includes a fault line that highlights the change from sandstones in the north to coal bearing rocks on the south side. Volcanic magma rose up and solidified in the cracks to form dyke intrusions. At Saltcoats the sedimentary rocks contain the fossil remains of tree stumps.

The sand dune system at Stevenston Beach is a local nature reserve set up to deal with the effects of human erosion. There are paths to help you enjoy this valuable habitat.

The golf courses at Troon are founded on a raised beach. The sand dunes on the foreshore, the grassland and scrub are botanically rich and diverse, and are the best example of this habitat type in the country. The sandy beach and rocky outcrops, some of which form islands at high tide, support the passage of over-wintering wildfowl and waders, particularly curlew.

The Heads of Ayr is famous! The headland is a major volcanic vent that was active over 300 million years ago and is easily examined if you enjoy rock formations. The vent has been found to contain rare nodules that may have come from the base of the earth's crust beneath the Midland Valley. The site has been important in the development of geological science. From Bracken Bay to Longhill Point a foreshore platform of sedimentary rocks and a backing cliff is clearly seen. Around the mouth of the River Doon are rich intertidal areas that are popular for birdwatching. For bigger views of the Firth of Clyde climb Brown Carrick (287m).

You don't have to be a geologist to enjoy the coastline between Heads of Ayr and Culzean although much of the shoreline is protected for its geological features. Dunure and Culzean Castle and Country Park provide historical interest and places to relax close to the sea. Here you will soon be able to connect with the Carrick Way, a walkers figure of eight route (about 160km) in development.

Turnberry golf course is also located on a raised beach. The nearby unbroken sandy beach backed by a large foredune ridge is important for insect conservation. Here is the most northerly known point in Britain for a number of insect species.

Dunure coast © SNH

Stone soup © SNH

Heads of Ayr © SNH

Byne Hill (214m) provides a fine viewpoint to the Firth and Ailsa Craig if you want to make a detour from the Ayrshire Coastal Path. If you stay on the hill and move south you will enter the Grey Hill Grasslands nature reserve managed by the Scottish Wildlife Trust. The serpentine rock beneath your feet is rare in Scotland but can also be found at the Lizard in Cornwall. Where there are grasslands the chances are you will find butterflies and Bennane Head is another location to explore during the summer months.

To the south of the small town of Ballantrae lies an important shingle beach. The shingle features, associated saltmarsh and fresh brackish water lagoons lie at the mouth of the River Stinchar. The more stable parts of the shingle are vegetated and this is a rare habitat in Britain. Higher up, the Glen App and Galloway Moors Special Protection Area provides a habitat for Hen Harrier.

This rapid 80 mile journey stops here but take time to explore this fascinating coast. For keen strollers a coastal route carries on into Dumfries and Galloway and finishes at Stranraer.

For further information

www.ayrshirepaths.org.uk
www.ayrshirecoastalpath.org
www.inverclyde.gov.uk
www.north-ayrshire.gov.uk
www.nts.org.uk
www.snh.org.uk including *Glasgow and Ayrshire - a landscape fashioned by geology*
www.south-ayrshire.gov.uk
www.sustrans.org.uk
www.swt.org.uk

Cotton buds

Each week for the past 15 years, The East Esplanade Protection Group (EEPG) have cleaned an area of the east bay beach in Helensburgh. For many years they have also participated in the Marine Conservation Society's (MCS) Annual Beachwater Survey. Notwithstanding the other detritus gathered, the group is constantly horrified at the number of plastic stemmed cotton bud sticks collected, given the constraints of time on the day of the survey, measured length of beach (the same length each year to provide a benchmark to compare the previous years findings) and the small number of volunteers on hand to collect and count the buds.

Plastic cotton buds are not as innocuous as they appear. They present a twofold problem when disposed of via the WC:

- Firstly, is the impact in the sewage collection system. They can pass through or block the screens, act as a binding agent e.g. with fats blocking pipework, valves and pumps. The cost to the water authorities is substantial and is ultimately reflected in our utilities bills.
- Secondly, and perhaps more importantly, and more difficult to "mend", is the impact to the environment and bio-diversity.

The River Clyde and Estuary has many consented waste water treatment work (WWTW) outfalls and consented storm overflows giving rise to the thousands on the river/coast line. The MCS's survey records are evidence of the number of cotton buds previously collected at Bowling, Helensburgh and Clynder.

In the marine environment it is known that plastics can harden, absorb other toxins, abrade or fragment and enter the food chain of many lifeforms to their detriment.

Should we pursue the food chain upwards, by ultimately eating seafood, we could also be harmed.

The group considered these issues and initially contacted a West of Scotland MSP for advice on the possibility of the Scottish Government banning the sale of the plastic stemmed varieties in Scotland. The advice received was that this is not a devolved issue, a Westminster MP should be contacted and that public awareness and education was required. Subsequently, the EEPG wrote to other campaigning organisations, e.g. The MCS, Surfers Against Sewage (SAS), The Grab Trust, Firth of Clyde Forum, for advice and support with each responding very positively.

The group was heartened to learn that the MCS and the SAS have already pursued many supermarkets, other retailers and manufacturers to change the stems to cardboard or similar easily degradable material and/or put clear disposal instructions on the packaging, again with positive feedback from most contacted. The ultimate goal is to have all cotton bud stick stems manufactured from bio-degradable material from sustainable resources with the sale of plastic stemmed varieties banned from sale.

Cotton buds © Ian Boyter

Beach cleaning © Claire Pescod

Beach cleaning © Claire Pescod

St Mungo, the Water Witch

St Mungo on the Clyde © Kirstie Dyson

Here we bring you the fourth in our series of articles allowing you a glimpse into a day in the life of someone working in the Firth of Clyde area in a marine related field. I joined the crew of the Water Witch, St Mungo, to gain an idea of the wide variety of issues and challenges they face to keep the Inner Clyde estuary clean.

There is never a dull day for the crew of St Mungo, the Water Witch that cleans up the flotsam and jettison of the Inner Clyde Estuary. The boat patrols the waters from Clydebank to the tidal limits of the Glasgow Green weir, making sure there is safe passage for all river craft. The crew can never tell what the day might bring, however they have noticed that there are 'hotspots' within the estuary where debris collects and after particularly heavy rainfall

Many people assume that the huge amount of marine debris (which consists mostly of plastics) in our oceans comes from the sea (dumping from ships, fishing, etc) but 80% is land based. All those discarded Styrofoam cups, water bottles and cigarette lighters find their way into storm drains, rivers and other water courses, and eventually the ocean. The main problem is that often there is reluctance for any one authority or organisation to take responsibility for the cost of cleaning up, and once it reaches the ocean it is impossible task.

The St Mungo has a powerful arm for lifting debris out of the water. The arm can be fitted with two types of extensions, a pronged grab for lifting singular heavy items (e.g. trees, refrigerators) and a sieved grab for scooping out many floating items (e.g. plastic drinks bottles). A detachable barge carrying two skips is pushed in front of the main boat, this is detached and moored while the lifting arm is in operation.

The St Mungo also deals with all types of safety issues beyond the safe passage of seafarers these include collecting and replacing the lifebelts that are irresponsibly throw into the Clyde, the removal of toys to prevent children entering the water and this winter the St Mungo was used to break up dangerously thin ice to stop people from walking on it. The crew of the St Mungo are also in the Coast Guards and the boat can be used as an in-situ command station when dealing with incidents. She has been used many times for the Coast Guard and has helped safe many lives.

St Mungo at Clydebank Pontoon © Kirstie Dyson

Key facts

- Skipper: Ian Marshall
- Crew: Allan Swift and Malcolm McKay
- Debris collect: Average 4 skips per week
- Lifebelts collect: 2,500 per year
- Animals rescued: Seals, dogs, cats and a turtle

Tell Us What You Think...

Clyde Breakers is your newsletter; tell us what you think of this issue and what you would like to see in the future. Many thanks to those of you who contributed to this edition.

If you would like to become involved in the Forum and its work, contact us at the address below.

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The Firth of Clyde Forum has a broad membership base with representatives from industry, local authorities, community groups and charities. The opinions expressed by members within this issue are not necessarily the opinions of the Forum or its Core Group.

The Firth of Clyde Forum would like to thank the following organisations for their continued funding and support:

Scottish Natural Heritage
All of nature for all of Scotland

SEPA
Scottish Environment Protection Agency

THE CROWN ESTATE

GLASGOW AND THE CLYDE VALLEY STRUCTURE PLAN JOINT committee