

Forth Sight

Issue No. 31
September 2018



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- Forth and Tay Estuary Fora Annual Conference

Welcome From The Chair, Ruth Briggs



Thank you for having me! In my final Chair intro please allow me to indulge in a little look back, a little commentary, and a little look forward.

I've been involved with Forum since its early days. I became a director in 2002 and was appointed its independent chair in 2008. It's now time for a change, for the Forum to have the benefit of new leadership at board level, and for me to contribute more to grass roots support and activities.

It's been a good 10 years! Our Forum, supported by the Scottish Government, has always been a key member of the suite of local partnerships established over 20 years ago to bring together all those with interests in the use, management and care of the internationally important Scottish firths. Viewing the Firth of Forth as a single entity, the last decade has seen us build on the Forum's early strategy and flagship projects through enhanced communications, more events and topic-led workshops, significant reviews and sharing of knowledge about development plans and potential conflicts of interest. We have contributed to the preparation of wider marine and coastal management measures as well as facilitated local actions and discussions.

In recent, and arguably too many, years we have also sought to help the Scottish Government, through Marine Scotland, in delivery of the Marine Planning Partnership proposed in the Marine (Scotland) Act 2010. We welcomed the National Marine Plan. Personally, I hoped that by now it might have been possible for the Forth & Tay Scottish Marine Region (which actually extends some considerable distance both north and south of those Firths) to be clearly defined and meaningful, and for our Forum's role within it to be confirmed. The options are all on the table and should be progressed. We enjoy ever closer links with our neighbour the Tay Estuary Forum. Come to the conference for more on this.

So to look forward. Most importantly the Forum must continue to be just that, to act as a forum and promote the best possible communications between our partners and members in respect of the needs and interests of the Forth. Our Management Group meetings (of official bodies), our topic workshops, member events, conferences, newsletter, online presence and support of local initiatives are key to this. Projects such as a proposed resource mapping and strategic 'State of the Coast' study currently under discussion and which would underpin the rationale for a Scottish Marine Region and associated Regional Marine Plan should, funds permitting, proceed. The Forum must acquire more certainty of its future role in the statutory context. Continued funding from Marine Scotland and other member bodies is vital. With all this we will be able to look forward with confidence and know that the Forth and all about it is being sustained.

In my role as chair I work most closely with our staff, Chris and Sharon; our directors: Ian, Derek, Iain, Tom and Ian and with our Management Group members (you know who you are!). It's been great! I remain in touch and in support.



Management Group: City of Edinburgh Council *Julie Dewar & Ken Tippen (Planning)*, The Crown Estate *Paul Bancks*, Fife Council *Johanna Willi (Biodiversity)*, Forth Estuary Forum *Christopher Cutts*, Forth Ports Ltd *Derek McGlashan & Gary O'Brien*, RSPB *David Anderson*, RYA Scotland *Graham Russell*, Scottish Natural Heritage *Malcolm Fraser*, Scottish Power *Lisa Moir*, Marine Scotland *Ian Black*, Scottish Coastal Forum *Rhona Fairgrieve & Isobel Glasgow*.

Directors: Ruth Briggs *Chair*, Derek McGlashan, Iain Rennick, Ian Howarth, Ian Angus, Tom Brock.

'Forth Sight' view

Forum Manager, Christopher Cutts



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'Forth Sight' is a bi-annual publication on all matters concerning the work of the Forth Estuary Forum and sustainable development of the Firth of Forth.

The next edition is due out in Spring 2019. News, reviews and articles are welcome - as too are sponsorships.

Contact staff for copy deadline.

Are you on our mailing list? Make sure that you receive 'Forth Sight' and our regular eNews Bulletins directly to your inbox. Contact us as below.

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The views in this newsletter represent those of the authors and not necessarily those of the Forum.

**Cover: The Reaper,
courtesy of the Scottish
Fisheries Museum (page
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Welcome to our latest issue of 'Forthsight'.

In keeping with the theme of our upcoming joint conference with the Tay Estuary Forum on community approaches to marine planning, this issue concentrates on voluntary initiatives and engagement up and down the Forth and into the Borders. The projects in the following pages would not have been so successful without all the man-hours put in by volunteers, whether they are e.g. large scale projects like the Inner Forth Landscape Initiative and the Voluntary Marine Reserve, or enabling community composting or finding crew for the *Reaper*. It is this enormous resource of community interest and action which will help inform statutory regional marine planning in the future.

Speaking of selfless voluntary dedication, this will be the last Forum newsletter with Ruth Briggs as chair. Ruth became chair at the end of 2008, shortly before my first stint as Forum Manager, so has managed myself, our administrator and the Forum for an entire decade with all the challenges that has brought. I would like to thank her now on behalf of the whole Forum membership for her dedication and hard work. Ruth will continue as a director, so hasn't escaped completely! We are currently advertising for a new chair.

As mentioned above, our next joint annual conference is on 28th September at the National Museum of Scotland, Lothian St., Edinburgh with a theme of 'community approaches to coastal and marine planning', so I do encourage you to attend what will be very interesting day; details for booking are available on our website.

As ever, we will keep you informed of issues and upcoming events through our twitter feed @forthestuary, our website, Facebook page, eNews Bulletins, workshops, conferences and this newsletter.

Best wishes to everyone with an interest in the Forth.



The Edinburgh Shoreline



Since the first humans arrived and discarded their empty seashells around Cramond nearly 10,000 years ago, people have lived beside the Forth and made their living from it. In the last two centuries we have reshaped the land almost beyond recognition to meet the needs of people and industry. We have fished the estuary dry and used it as a dump for our waste. Nature is squeezed into an ever narrower strip between engineered sea defences and new developments. If you explore the shoreline for yourself nature's capacity to survive is apparent with some good rock pooling, exceptional wading bird communities feeding on the mud-flats and plants reclaiming derelict ground now full of bees and butterflies. Streets and buildings reflect Edinburgh's rich maritime past. Much has been lost - like the huge Forth oyster beds - but wildlife does have a capacity to exploit new environments and survive in the remaining wilder areas. In the context of climate change and potential sea level rise and intense development pressure now is the time to create a Shoreline which the capital city can be proud of. Schools, community groups and individuals who care about the local environment and heritage are being invited to explore and regenerate natural habitats along Edinburgh's 27km coastline from Port Edgar to Joppa. Here are some examples of community engagement so far:

Knit the Shoreline

Volunteers have been creating a textile tribute to Edinburgh's shoreline working with textile artist Madeleine Shepherd who is leading the project, sharing her design and technical skills with school and community groups and at public workshops. She has helped a range of people to develop new skills and discover coastal wildlife while having fun knitting fish and seaweeds, felting crabs and seabirds, crocheting shrimps and sea anemones and lots more, all of which will be displayed at the exhibition.

Habitat restoration

Working with the RBGE local volunteers have come up with a plan for habitat enhancement along the section of the Shoreline between Portobello and Seafield. This will include changing management of amenity grassland, planting of coastal plug plants including kidney vetch, thrift, birdsfoot trefoil, sea scurvy grass, sea campion and other salt tolerant species grown at the Granton Hub wildflower nursery, establishing areas of coastal scrub and creating a bee bank. Local enthusiasts are working on these projects with local businesses.

Invasive species

Japanese rose *Rosa rugosa* is spreading across extensive areas of coastal grassland at Cramond. Working in partnership with the City of Edinburgh Council Forestry and Natural Heritage team we are creating three trial areas to compare the success of vegetation reinstatement after removal of *Rosa rugosa* – one which will be planted up with native coastal species including sand sedge *Carex arenaria* and a whole range of plant species suited to

the locality, one which will be seeded with a coastal seed mix and one which will be left. Results will be compared to inform a best practice strategy.



Exploring mudflats

Working with Dr Alastair Lyndon from Heriot Watt University, a group of volunteers sieved the intertidal mud and counted lug worm casts in quadrats at Cramond to the east and west of the walkway to find out what species live there and in what abundance. We discovered a huge array of life including edible cockles *Cerastoderma edule*, mud shrimps *Corophium volutator*, lugworms *Arenicola marina* and cat worms *Nephtys* species. One of the volunteers said '*this is the best fun I've ever had in my walking boots*'.

Local improvements

Members of the Portobello and Seafield Communities are in the process of creating a mural to celebrate their local shoreline, landscape, ecology and culture on the 80ft long currently vandalised wall of the Edinburgh Dog & Cat Home beside Portobello Promenade. Studio N_NAME have been leading consultations in conjunction with the Home to decide what messages and images people most strongly want to convey about their shoreline to people walking along the promenade. The mural is partly funded by The Shoreline project.

A whole range of other events are planned so if you would like to be kept in touch please contact Charlotte Johnson – Shoreline Project Manager:

cjohnson@rbge.org.uk

Please come along to the exhibition running now until 23rd September 2018

The Shoreline project is supported by the Heritage Lottery Fund and the Green Infrastructure Community Engagement Fund, administered by Scottish Natural Heritage on behalf of the Scottish Government.

British Divers Marine Life Rescue

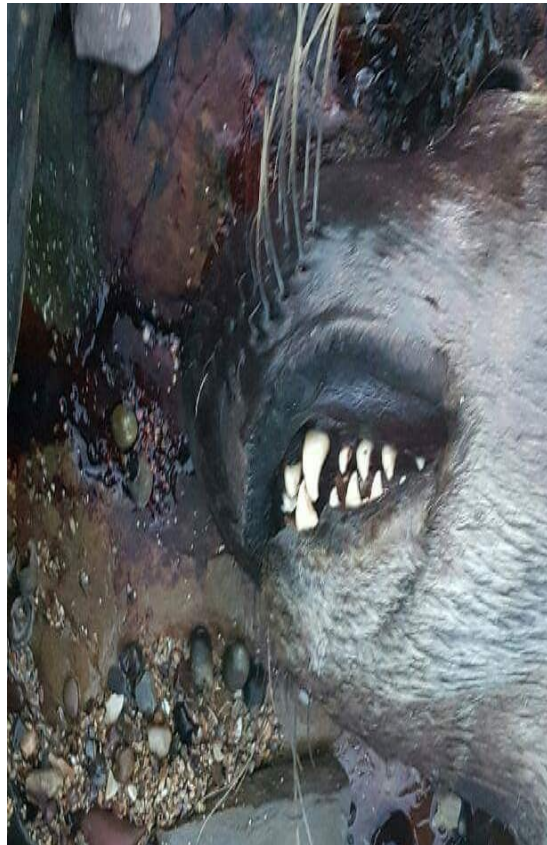
Imagine you are walking on a beach on the Forth and you come across a whale on the beach; after the initial shock you then think who do I call? The answer is simple: British Divers Marine Life Rescue (BDMLR). We are the primary responders to injured, distressed or entangled live marine mammals.

BDMLR started back in the late eighties when divers started to find a lot of ill or dead seals following an outbreak of phocine distemper virus PDV which devastated the seal populations. A charity was started and it developed a marine mammal medic course to train people to respond and deal with incidents involving marine mammals. We are now a large organised, internationally respected authority on this specialist rescue with teams throughout the UK and strategically placed rescue equipment along the coastal areas. Interestingly you don't have to be a diver to be in a team as most of our rescues are land based. We are entirely funded by public donations as a registered charity.

We deal with everything from the smallest seal pup to the largest whale. Most of our work involves dealing with seal pups in the breeding seasons when they become ill, abandoned, entangled or injured. Many people think seals are cute, placid, cuddly creatures but I can assure you they are very aggressive and their bite is extremely dangerous, after all they are the UK's apex marine predator.



An entangled grey seal at Crail 2018



Teeth of an adult seal

We also deal with cetaceans: everything from porpoises, dolphins and whales. You may well know that the Forth has its fair share of aquatic visitors with resident populations of Porpoise and Bottle Nose dolphins as well as regular annual visits of Minke whales, Hump-

back whales and some more irregular surprising species like Orca and Sperm whales. We have dealt with a number of incidents now on the Forth with both the Fife and Stirling teams and Edinburgh, Lothian and Borders teams very active on either side of the estuary. We have had a few incidents especially on the Fife side of the Forth with Minke whales as these are the commonest whale found in UK coastal waters. They are the smallest of the great baleen whales and are commonly seen in Scottish waters.



Fife Stirling team at a successful Minke whale rescue, 2017 at Lower Largo Fife

The reasons for strandings vary from species to species. Causes can be illness or disease, maternal separation of calves, entanglements, boat strikes, navigational errors, social reasons in the case of Pilot whales who tend to mass-strand due to family bonds. We can re-float whales using our inflatable pontoons as seen in the background of the picture above before being fitted to the animal. All rescues of cetaceans are supervised by a vet to ensure that animal welfare and treatments are administered to ensure the best outcome for the animal. Strandings are often protracted as they occur at high tide and by the time the animal is found and we arrive we have to wait for the next high tide to refloat. These incidents often involve other agencies like the Police, Coast Guard and RNLI; we can easily spend 12 hours plus on a stranding rescue due to tide cycles.

The reality of rescues is we cannot save them all but we do have a high success rate due to our ever increasing knowledge, improved techniques and equipment. The emotions involved in a rescue are a mixture of elation, sadness, pride, joy and a whole host of others as we work with some of the most majestic animals on the planet and all as trained volunteers.

Within the organisation we have a specialist rescue team known as the Large Whale Disentanglement Team (LWDT). This team deals with whales that have become tangled in fishing gear, either ghost nets or creel lines within sea lochs or estuaries or in the open sea. This type of rescue is extremely dangerous for the team due to the nature of operations, we have to be up close to the animal to free it from the entanglement. We actually use an old whalers technique called a Nantucket Sleigh ride: instead of harpooning the whale we attach to the trailing whale entanglement with grapples in a small inflatable boat, then we are towed along by the animal whilst working to cut free the ropes or net around the animal. The risk of been flipped is ever present so training is key to a successful rescue. There have

been human fatalities in the world during this type of rescue as this is an international issue; unfortunately entanglements are global with teams active elsewhere in more tropical climates. We are the only LWDT in Europe and have been deployed abroad on the invite of the host government.



A Nantucket Sleigh ride with the LWDT

Our teams are entirely made up of trained volunteers and available 365 days a year 24 hours a day; we operate under licence to deal with marine mammals as they are protected under various wildlife laws and need special permissions to deal with them. The charity is based in Uckfield, East Sussex and has a board of directors and three paid members of staff at the office running the entire charity from funding to coordinating rescues. Each team has an area coordinator who manages the local team of medics and rescue equipment. All are volunteers. If you feel you can make a donation to keep the teams on the beach or out at sea then please contact head office.

We work closely with other organisations and agencies and are often consulted on policies and working groups to do with marine issues and wildlife. This type of rescue is specialist and requires training but is open to anyone to join a team following a training course. We have all types of people in the teams from various backgrounds but all have a common focus of wanting to help marine mammals around the UK coast line.

For LIVE marine mammal strandings contact British Divers Marine Life Rescue (BDMLR) 01825 765546. For more information go to our website www.bdmlr.org.uk

For DEAD marine mammals contact Scottish Marine Animal Stranding Scheme (SMASS) Phone/text: 07979 245893 or 01463 243030 or Email: strandings@sruc.ac.uk

Cutting litter, creating compost with Fidra



Every day seems to bring us more shocking images of packaging in the environment harming wildlife and the Firth of Forth is no exception.

Many of us now ask *what can I do to stop litter reaching the sea?* Reduce, reuse and recycle is a familiar refrain but what can we do about polystyrene takeaway packaging? Often it is only used once before being discarded and it can't be easily recycled. Businesses in the area are now leading the way in the search for alternatives, from composting coffee cups to fully recyclable packaging. Some are even finding it can save money and in June the Scottish Government announced funding for communities to help reduce plastic waste, so could we become a compostable community?



The problem with polystyrene

Expanded polystyrene (EPS) is used in fast food businesses as it's a cheap and insulating material, but it can cause a number of issues, like littering. Recent Scotland figures show that 80% of our streets are littered, with 60% of roadside litter recorded as food and packaging related, and 68% as drink containers. But it isn't just littering which harms the environment, it is the whole EPS lifecycle. Environmental impacts of EPS production include fossil fuel use and hazardous industrial waste, with evidence of styrene, a potential carcinogen, leaching during use and after disposal.

The low weight of EPS also makes it uneconomical to store and transport for recycling purposes so few facilities exist. Food contamination is an issue where recycling facilities do exist, as only clean and grease-free EPS can be recycled. Paper and plastic also need to be clean and grease-free in order to be recycled, so how can we avoid food contaminated packaging becoming litter or landfill? Compostable packaging seems a straightforward answer, as it can be put into food waste without the need to be clean, and any remaining food in it is also composted.

Fidra is looking into replacements for EPS takeaway food packaging and has concluded the best solution is likely to be compostable packaging. "Based in North Berwick, we hope our home town can become compostable and demonstrate the benefits to the community, the environment and local businesses" states Dr Clare Cavers, Senior Project Manager at Fidra. To make this happen, infrastructure, incentives and innovation are needed and over the last 12 months it looks like this has all come together. Edinburgh based food packaging company Vegware launched their 'Close the Loop' system in September 2017, and set up collection systems for compostable packaging as a registered waste broker. Originally on a trial basis in Edinburgh, it has been extended to East Lothian and taken up by two local businesses, long-standing users of compostable packaging Steampunk and The Walled Garden at Archerfield. Elly Douglas-Hamilton, Director of Archerfield Estates Ltd, comments: "We have learnt a lot about how we control our waste in the last 6 months and have a long way to go, however some great achievements have been



made. Working together with other local businesses like Steampunk means that we can share information and ideas and start translating these ideas into practical reality. I hope this is something we can encourage other businesses in doing and help us all to realise that perceived barriers are perhaps not as great as they seem.”



What next? There is a ground swell towards more sustainable lifestyles. Groups like Plastic Free North Berwick and Sustaining Dunbar are empowering communities and Zero Waste Scotland has several initiatives aimed at reducing waste, including Resource Efficient Scotland which offers free bespoke consultancy to SMEs to reduce waste and cut costs.

Scottish recycling, composting and re-use of waste from all sources increased past 60% for the first time in 2016, and food recycling and anaerobic digestion increased 20% from 2015.

With the involvement of more businesses and the community, North Berwick could become one of a number ‘compostable towns’ on the Firth of Forth. By using clearly branded compostable packaging and prominent collection points, Close the Loop can make a substantial difference to the contents of street litter bins, which in North Berwick are believed to have the region’s highest proportion of takeaway food packaging.

Could community composting with food waste and compostable packaging from sports centres and schools also play a part? Recently on the market, the Hotbin, a small-scale composter, can process many brands of compostable packaging including those used by some local takeaways. Placed in strategic sites, Hotbins could provide compost for the likes of North Berwick in Bloom, local parks and school grounds, and even the community as a whole. There are an increasing number of manufacturers and suppliers of compostable packaging, which is made from a variety of waste materials, commonly from processing corn or potatoes. Could this also be a new line of business for some of our East Lothian farmers or food processors? With these exciting times ahead, Fidra is organising an information event for local SMEs in and around North Berwick this autumn. **Businesses will be contacted directly, but if you would like to be involved or know more, please contact info@fidra.org.uk.**

Fidra is a Scottish registered charity and SCIO no SC043895, based in East Lothian, Scotland. It seeks to engage local concerns over current and emerging environmental issues, and use this to contribute to a wider dialogue at national and international levels.
www.fidra.org.uk

Contact

Dr Clare Cavers: Senior Project Manager; t: 01620 895677 or 07799417975
e: clare.cavers@fidra.org.uk

The Inner Forth Landscape Initiative



The Inner Forth landscape defies the rules. Spectacular flocks of waders and wildfowl feed against a backdrop of steel towers and chimneys. Ancient castles gaze down on factories and warehouses, while the relics of past industries are now surrounded by woodlands and wildflowers. Sadly, until recently, many people only saw the industry and commerce, while the area's rich natural, cultural and historic heritage was often overlooked or neglected.

The Inner Forth Landscape Initiative was brought together to try to restore local pride in the landscape, and to celebrate, protect and improve the natural, cultural and historical landscape of the Inner Forth estuary.

It was a four-year project, with a value of approximately £4m, running from 2014-2018, funded by the National Lottery through the Heritage Lottery Fund. Our vision was of an Inner Forth where local people and visitors alike value, protect and celebrate this unique landscape in the heart of Scotland.

Eight organisations made up the Initiative. Led by RSPB Scotland, they were Clackmannanshire, Falkirk and Stirling Councils, Scottish Natural Heritage, Historic Environment Scotland, Sustrans and Central Scotland Green Network Trust. The Partnership worked together, and with a range of other organisations and community groups, to deliver 54 inspiring and intrinsically-linked projects. These included Buglife, Butterfly Conservation Scotland, Scottish Wildlife Trust, The Scape Trust, Clackmannanshire Field Studies Society, West Fife Woodlands, Falkirk Community Trust, and Forth Environment Link. These projects aimed to bring lasting and positive change for the Inner Forth landscape and the people who live and work here.



Through these projects we aimed to:

- Turn negative perceptions of the Inner Forth around and help more people to feel proud of where they live;
- Put back together the jigsaw of habitats that make up the Inner Forth to create a landscape flourishing with wildlife;
- Celebrate, protect and improve people's access to special historical and natural places;
- Train and support committed and motivated local community groups, individuals and organisations to take action to conserve their area's heritage.

The scheme covered an area of 202 km² including the river, estuary and inter-tidal zone; the floodplain and coastal margins; and the settlements on both sides of the Forth from the his-

toric Old Stirling Bridge to Blackness and Rosyth. The Forth, including IFLI's area, is of European significance for supporting internationally important wintering and migratory waterfowl, with many designations including Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), and Ramsar site, which acknowledges the global importance of its wetlands.



Throughout history, the society and economy of the Inner Forth has been closely connected to the river and the landscape's wealth of natural resources. You can find the remains of the former industries that relied on these resources throughout the landscape, including disused salt pans, limekilns, coal mines, whisky distilleries and infrastructure associated with the ship-building and trade, such as piers, harbours and jetties. This trade made some families very wealthy,

and the evidence remains in the estates and designed landscapes that border the river. Many of the buildings and settlements in the area have fascinating stories to tell, being associated with important people and events, but also increasingly forgotten cultural and historical associations.

Delivering the vision

Between 2014 and 2018 the eight members of the Inner Forth Landscape Initiative Partnership invested around £1,215,000 in the Initiative as a whole. This combined with a grant of £1.75m from the Heritage Lottery Fund, and match funding from a range of other funders, to provide almost £4m to be spent within the four years to achieve IFLI's vision to conserve, protect and celebrate the natural, historic and cultural heritage of the Inner Forth landscape. Over that time 54 projects have combined to deliver many improvements and benefits for the people, wildlife, heritage and landscape of the Inner Forth. Here are some of the statistics:

- **c1000** volunteers gave **3,680 days** of their time to work on projects;
- **Over 100 hectares** of new habitat were created – including **48ha** of woodland; **38ha** grasslands; **12.5ha** wetlands and reedbeds; **10ha** intertidal habitat; **9ha** wildflower meadows; **2ha** invasive scrub was removed;
- **514** events were held, engaging over **4000** people;
- **438** people received heritage training;
- **153** school sessions engaged over **700** schoolchildren;
- **15.7km** paths were created or improved;
- **Four** new community orchards were planted at Valleyfield, Kinneil, Cambuskenneth and



Kennetpans;

- **Four** historic buildings were consolidated, at Kinneil Kirk, Kennetpans, Clackmannan Tower and Charlestown Limekilns;
- Supported the creation and infrastructure for **one** new nature reserve at RSPB Black Devon Wetlands, near Alloa;
- Over **30** videos about the Inner Forth were created and shared on IFLI's You Tube channel;
- **One** IFLI website that carries a wealth of information and inspiration about the Inner Forth, including an interactive map, wildlife guide, art gallery and walking and cycling guide to the area, as well as information about all the projects and the Initiative.

By the end of the programme **seven** interpretive 'beacons', **11** 'markers', **one** 16pp booklet guide to the area and **one** 'Explore the Forth' app will be in place to help local people and visitors understand and appreciate the area's heritage, and to encourage them to visit new places within the Inner Forth landscape.

The programme and the projects have engaged people of all ages and all walks of life. Our HLF funding has allowed us to deliver our events and activities free of charge, which has made them accessible to a much wider range of people, whatever their means. This has included families with young children, primary and secondary school children, young people, those looking for opportunities to find work in the sector, amateurs and professionals looking to improve their natural or historic heritage skills, older people, and those with additional needs.



IFLI's legacy

IFLI will be leaving behind an impressive legacy. We know much more about the heritage of the Inner Forth than we did four years ago, many sites are in a better condition with a more secure future, it is easier to access the information, more local people are engaged with their local heritage and it is easier to access. Looking to the future, the IFLI partnership will continue to work together to ensure that all projects delivered through IFLI are maintained for the next ten years. After working so successfully over the past few years the partnership does not see the conclusion of IFLI as the end point and we are exploring funding avenues to build upon the work achieved over the past four years so we can continue to make the Inner Forth a better place.

By Sue Walker, IFLI Communications Officer, and Tom Churchyard, IFLI Programme Manager; Photographs courtesy of IFLI.

Scottish Fisheries Museum Update

Many people will be familiar with 'Reaper', the historic fishing boat of the Scottish Fisheries Museum but where is she now? A major refit had been on the cards for some time, amounting to the biggest refurbishment since she was launched in 1902. Her iconic nature was recognised by the Scottish Government who supported her refit with a major capital grant announced by Cabinet Secretary Fiona Hyslop MSP in August 2017. The subsequent tendering process was won by Babcock International at Rosyth and a timescale of November to June was set. Reaper is now residing within the Dockyard looking rather sad in the surrounding scaffolding which envelops her. Initial delays were caused by urgent naval contracts. In addition, as is often the case with historic vessels there were some fairly major unknowns until all the ballast and planking was removed.



Despite the detailed pre-survey by our Boatyard Manager it is not that surprising that new areas of rot have been discovered and new problems identified so now costs are escalating beyond £M1/2 and timescales slipping. Work will certainly not be completed in 2018 but we would hope to have her back, fully fitted out for our 50th anniversary year which starts from July 2019. We may have to embark on additional fund-raising activities in the meantime. We are also looking for potential skippers to take her out to maritime events in the future.



As far as exhibitions at the Scottish Fisheries Museum in Anstruther, we currently have 'Harvest' by Mella Shaw until 23rd September. Mella is an artist using clay to make thought-provoking objects and site-specific installations. This work is an installation that addresses the topical global issue of plastic pollution in the oceans. It is a response to the alarming statistic that, unless something changes, by 2050 there will be a greater weight of plastic in the ocean than fish!

'Harvest' was first shown in Collect Open at the Saatchi Gallery. <http://www.mellashaw.co.uk>

This will be followed by our final temporary exhibition commemorating the anniversary of World War I. Called 'Lest We Forget: Personal Remembrances of World War I', it will address local stories and memories of how lives were touched by war and how our communities remember those lost.

Check out our website <http://www.scotfishmuseum.org> for details of events and the latest news on 'Reaper'.

St. Abbs and Eyemouth Voluntary Marine Reserve

We haven't managed to spend much time out in the St. Abbs and Eyemouth Voluntary Marine Reserve this winter because we've been very busy behind the scenes.



Gruelling funding applications and no central heating almost finished us off, but now it's summer, the sun is out and we are delighted to say we've got three new faces, a new office and some really exciting projects that we can't wait to share with you. If you've visited us recently you may have seen the the University of St. Andrews buzzing up and down the reserve in their survey boat, dragging a torpedo-like multi-beam side scan sonar along behind them. What are they up to? They're mapping the seabed and creating a high resolution 3D digital model for us!

Now we just have to wait as the data is being crunched, munched and stitched together. We are absolutely thrilled. This is a project 3 years in the making but it's also just the beginning. Mapping the seabed gives us a 'digital start point' from which we can launch many other projects. And we're looking for your ideas..

We want to work with fishermen, divers, residents, dog-walkers and many other people who enjoy and use the reserve, to help us map and monitor habitats and biotopes. We're also keen to strengthen organisational collaborations with other environmental groups in the area through this project.



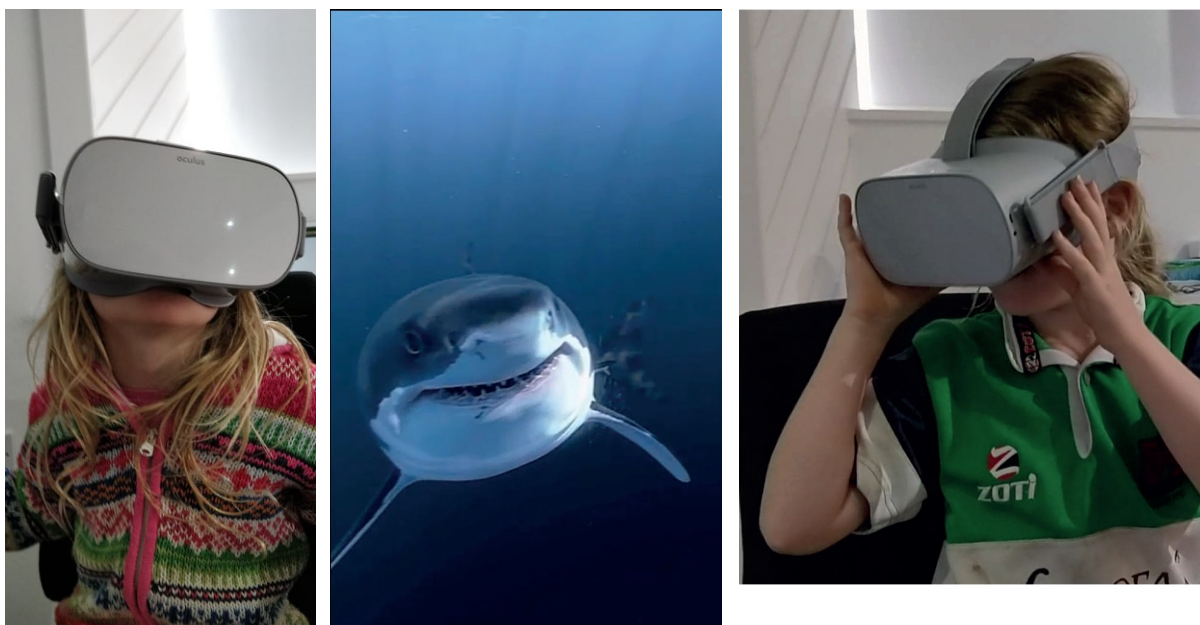
Together, all these players will contribute to building a real time picture of the reserve through the use of citizen science projects and the collection of robust and reliable datasets. We'll synthesise these datasets with historical ecological knowledge from local people who know this coast best, and continue to build this picture year after year in order to obtain a dataset that stretches across many decades.

By visualising something which is usually hidden beneath the surface, we intend to engage our community in lively and self-reflective discussions and see stakeholders working to-

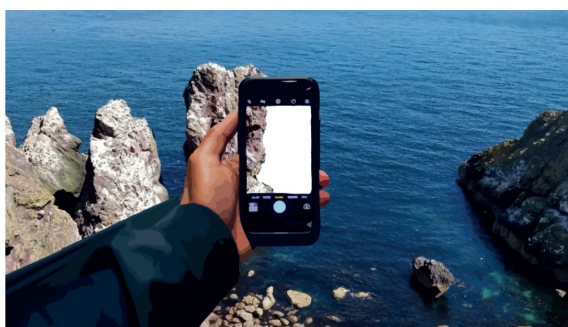
gether to make sure that people and nature are thriving together.

Mapping the seabed gives us the potential to re-engage with a demographic that seems to have lost interest in their marine environment. While our summer calendar was packed with rock pool rambles and squeals of excitement, we're seeing fewer and fewer teenagers out there getting their feet wet and exploring their coastline.

We're going to create a virtual visitor centre and we're targetting teens. We tried and tested virtual reality scuba dives during the Eyemouth Herring Queen Festival and it has been hilarious. When Great White Sharks are brushing up against you it's easy to forget you're in a room wearing a headset and not kick out in self-defence. So captivated and curious were young people that they queued up to experience life underwater for themselves. Very soon, we'll have 360 degree footage from the reserve. We can't wait to show everyone the incredible marine life that's on our doorstep.



The great thing about virtual tools is that you can take them with you. To help people visualise the caves, gullies and underwater terrain, we're creating an app that you can use at certain hotspots along the Berwickshire coast. Log into our app, hold your phone up in front of the sea, and watch as the water disappears to reveal what is underneath.



We're looking ahead to 2020, the Scottish Government's year of Coast and Waters, as a great opportunity to launch our virtual visitor centre and ride the wave of momentum created by the government's campaign and that of Blue Planet II. We look forward to catching up with many of you at the Forth Estuary Forum Conference in September and invite you all to stop by the Eyemouth Hippodrome, if you visit the Berwickshire coast.

Article by Mario Ray (Mario.ray@live.com). For further details, please go to <https://www.marine-reserve.uk/>.

Forth and Tay Estuary Fora Annual Conference



Tay Estuary Forum and Forth Estuary Forum Joint Annual Conference & Forth Estuary Forum AGM *Community Approaches to Coastal and Marine Planning*

Friday 28th September 2018
The Auditorium, National Museums Scotland
Lothian St.
Edinburgh EH1 1JF
Sponsored by Red Rock Power Ltd.

Draft Programme

09:15 Forth Estuary Forum Annual General Meeting (Members Only)

09:30 Conference registration and refreshments

CONFERENCE OPENING

10:00 Welcome Address Ruth Briggs, Chair, Forth Estuary Forum

SESSION 1: Communities at the heart of coastal / marine issues

Chair: tbc

10:10	Mario Ray, St. Abbs and Eyemouth Voluntary Marine Reserve	Real Relationships: the St. Abbs and Eyemouth Voluntary Marine Reserve
10:30	Sarah Archer, Fidra	Ways to engage local concerns over environmental issues
10:50	Catherine Lloyd, Tayside Biodiversity Partnership	The Angus Coastal Festival: Exploring Scotland's Undiscovered Coast
11:10	<i>Questions and discussion</i>	

BREAK

11:20 Refreshments, networking, displays and films

SESSION 2: Planning our Future Coasts

Chair: Derek McGlashan

11:50	Zoe McKay, Marine Management Organisation	Marine Planning in the North East of England
12:10	Lorna King/Morag Campbell, Marine Scotland	Scottish Marine Planning Update
12:30	FEF & TEF	The Future of the Forums
12:40	<i>Panel Discussion</i>	

LUNCH

13:10 Buffet lunch, networking, displays and films

SESSION 3: Forth and Tay Current Issues

Chair: tbc

14:15	Alan Munro, SEPA	What's New for Coastal Flood Risk Management?
14:35	Lynda Gairns, SEPA	Leven Water Quality
14:55	Tom Young, Red Rock Power Ltd (Event Sponsor)	Update on Inch Cape Wind Farm
15:15	<i>Questions and discussion</i>	
15:30	Soapbox Session - open to any delegate who wishes to talk briefly about events and projects around the Forth and Tay	Conference Delegates
16:00	Summing up and conference close	Prof. Rob Duck, Chair, Tay Estuary Forum