Scotland's Year of Coasts & Waters 2020 - GET INVOLVED!

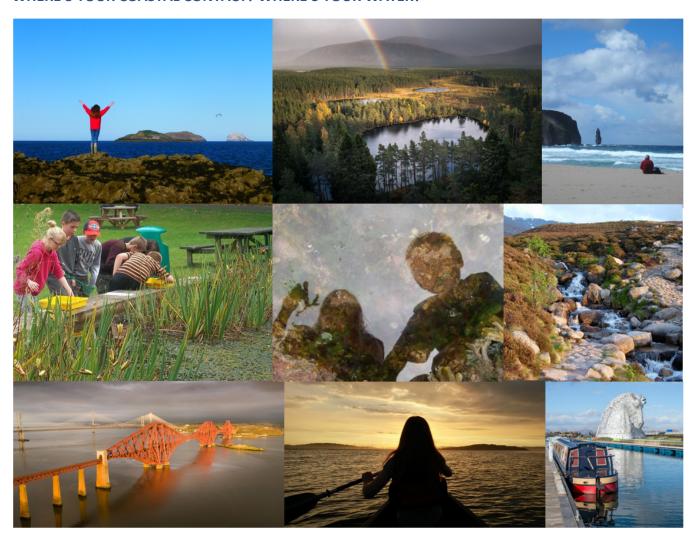
Year of Coasts and Waters 2020 celebrates Scotland's 10,000km of coastline, its 30,000-plus lochs and lochans and miles of rivers.

It's an opportunity to highlight the nature, history and culture of shores and waterways, their potential for learning and adventure, and their value as a resource and for aesthetic inspiration.

Coasts and Waters are places for people to feel good, to be healthy, to be curious, to be inspired and creative. They are places where we can think about bigger picture matters too, such as biodiversity, sustainability, climate, and our place in the world.

Here, you'll find **information**, **resources**, **organisations** and **activities** - ideas and links to help you get involved... They're not exhaustive, but offer starting points for finding out and doing things – dive in!

WHERE'S YOUR COASTAL CONTACT? WHERE'S YOUR WATER?



A Year of Coasts & Waters 2020 collaboration











2020

COASTS

& WATERS

INFORMATION - Year of Coasts & Waters 2020



See VisitScotland's Overview for a short film, safety information, and links to Lochs, Beaches, Food & Drink, Islands, Watersports.

There's a <u>Toolkit</u> with access to logos and a Digital Media Library, <u>top tips</u> for getting involved, <u>promotional</u> wording, and example social media posts.

<u>Sustainability & Responsible Engagement</u> are key factors when enjoying Scotland's coasts and waters. These are some of the organisations to use as a resource or source of information, along with some of the best practices to follow (including the Scottish Outdoor Access Code), when planning activity.

ACTIVITIES

Mission:Explore Water

Inside <u>Mission:Explore Water</u> you'll find 51 water-related missions, covering Rain, Rivers, Using Water, and Waste. Create a source to sea, or sea to source, story. Draw a map for a fish or river creature. Explore the high tide mark... It's free to download, along with a set of Teacher's Notes.

World Ocean Days for Schools

<u>Sign up</u> for free ocean learning stories, ideas and activities including <u>Oceans For Beginners</u>, <u>Blue Mind</u>, and <u>Plastic Free Schools</u>. And save the date – 20 June 2020!

Scottish Seabird Centre Marine Education Resources

The <u>Scottish Seabird Centre website</u> hosts free education resources including 'Adaptation of Birds' classroom activity and worksheet, 'Beach Scavenger Hunt' worksheet, an 'Ocean Food Web' worksheet and a 'Shell Guide for Beachcombing'.

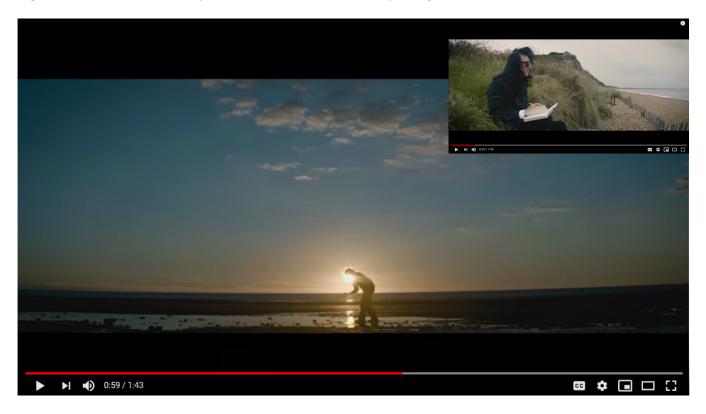
The website also contains information about the charity's 'Marine Loan Boxes' – these contain marine resources, books, activities and reference materials (supported with teacher's notes and curriculum links). The loan boxes are available for schools and community groups across Scotland to borrow free of charge to help raise awareness about UK seas.





"That's where the sea comes in"

A 2015 collaboration between poet John Cooper Clarke and the National Trust celebrates Britain's coastlines. Watch <u>Nation's Ode to the Coast</u>, collect a vivid memory from each person in your class or group, and knit it together to create a collective poem. Read it aloud, individually or together.



Creative Star

Practical ideas about <u>water-related learning and playing outdoors</u> written and/or curated by Juliet Robertson. See the extensive <u>index</u> too.

Seachange

Ocean literacy <u>resources</u> to help everyone make a SeaChange in their life.

The Lost Words

Find Coast- and Water-related nature words - kingfisher, otter, newt, heron... - and a wide range of associated activities in The Lost Words Explorer's Guide.

Ocean Lines

<u>Select</u> an ocean- (or water-) inspired quote – and create a collection of your own for Year of Coasts & Waters.

"The sea, once it casts its spell, holds one in its net of wonder forever." Jacques Yves Cousteau



ACTION - Do things to look after and improve Coasts & Waters

Link actions with Citizen Science, STEM learning/#STEMByNature, Learning for Sustainability, Social Action/#IWill4Nature and the Conserve part of a John Muir Award.

Beachwatch The Marine Conservation Society's national beach cleaning & litter survey programme invites people from all around the UK to care for their coastline. The <u>Great British Beach Clean</u> is 20 - 23 September.

Nurdle Hunt An easy, fun and addictive Citizen Science project you can do at any beach, all year round.

<u>SOS Puffin & The Wildline Project</u> The Scottish Seabird Centre is looking for volunteers to undertake practical conservation tasks along the East Lothian coastline throughout 2020. See the <u>website</u> or email <u>info@seabird.org</u>.

Mini Beach Clean Guidance from Surfers Against Sewage.

#2minutebeachclean Help remove plastic from the marine environment.

Take 3 for the Sea Marine litter campaign.

#BinTheButt Keep Britain Tidy's national campaign to end cigarette litter.

<u>SCRAPbook</u> Use the map of aerial photographs to analyse and highlight Scotland's coastal litter problem. Link with Beachwatch, and help access harder to reach parts of the coastline.

Beach Track Contribute to one of the most extensive datasets on marine strandings and beach health.

<u>The Big Seaweed Search</u> Record living seaweeds to help the Natural History Museum monitor effects of climate change and invasive species on the seashore.

<u>The Shore Thing</u> Monitor rocky shores for climate change indicators and non-native species.

<u>Marine Conservation Society Sea Champions</u> Take part in marine animal surveys, beach cleans and litter surveys and various campaigns to help save our seas, shores and wildlife.

<u>Capturing Our Coast</u> Help research breeding cycles of key species, survey non-native invasive species and count barnacles. Use the <u>CoastXplore app</u> as a monitoring tool.

<u>Scotland Environment Web project finder</u> Find an activity you'd like to get involved in. A brilliant wide-ranging list of Citizen Science & Action projects e.g. Big Spawn Count, Rainfall Observers, Bog Squad...

<u>10k Raingardens for Scotland</u> Increase the number of raingardens - areas of plants and vegetation designed to absorb water and reduce the likelihood or severity of flooding - and help to protect our rivers and waterways.

<u>Freshwater Habitats Trust</u> <u>Surveys</u>, <u>pond creation toolkit</u>, and much more.



WHO OFFERS WHAT?

Scottish Seabird Centre The Scottish Seabird Centre is an education and conservation charity that inspires and educates people to care for Scotland's marine environment and support conservation efforts to protect it. Its stunning coastal location of North Berwick, East Lothian, overlooking the Firth of Forth islands, gives unparalleled access to the sea, coast and local beaches. The Centre - with newly refurbished classroom, café and Discovery Experience, interactive exhibitions and live wildlife cameras – will host a series of events throughout 2020 including Marine Fest in June.



FSC Scotland FSC Scotland brings nature, science and sustainability together. It has all Coasts and Waters bases covered - from coastal adventure residentials and river explorations to specialist courses on marine biology and fresh water studies - making links to STEM By Nature, Citizen Science, Learning for Sustainability, literacy and numeracy. <u>FSC Millport Field Centre</u> on the Isle of Cumbrae is home to the Robertson Aquarium and Museum and hosts marine-themed public events such as the Millport Marine Symposium and an Annual Bioblitz.



Historic Environment Scotland Historic Environment Scotland is the lead public body that investigates, cares for and promotes Scotland's historic environment to ensure it makes a difference to people's lives. This includes marine heritage - harbours, lighthouses and remains of human settlements at the coastal fringe – as well as canals, rivers, lochs and bogs and their rich archaeology. A wide range of publications, advice and support, free visits, events and learning resources are available.



John Muir Trust The <u>John Muir Trust</u> is a conservation charity that encourages people to connect with, enjoy and care for our natural environment – from city centre riverbanks and canals to remote beaches and islands. The Trust believes that everyone should have opportunities to experience the benefits of wild places, and participate directly in caring for them. The Trust's main engagement initiative is the John Muir Award.



Glasgow Science Centre Discover a place where learning is awesome! There's an epic range of Coasts and Waters related learning experiences for you and your students to get stuck into with <u>Glasgow Science Centre</u> and our partnerships - from 'Under the Sea' to 'Clyde in Classroom'. We can even bring the fun to you – via our On Tour programme. There are amazing science resources to support educators, all aligned to the Curriculum for Excellence and National Qualifications Stages. Learning just got fun.



Cairngorms National Park The Cairngorms National Park is well known for its high mountain plateau - but areas of the park are named after the mighty rivers that have carved and shaped both its landscape and communities for generations – Strathspey, Royal Deeside, Strathdon, Glen Feshie. The impact and influence of these rivers and their vast catchments will be a focus during the Year of Coasts and Waters, with key resources available to help discover and explore the rivers and lochs of the Cairngorms.



Marine Conservation Society The Marine Conservation Society works to ensure our seas are healthy, pollution free and protected. Find out more about Scotland's magnificent seas and Beachwatch, the UK's biggest beach clean-up and survey where people all around the UK can care for their coastline.



Use Year of Coasts & Waters 2020 to MAKE LINKS WITH...

UN Sustainable Development Goals

Year of Coasts & Waters 2020 can be linked across a number of Global Goals. **Goal 14: Life Below Water**: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. "Healthy oceans and seas are essential to our existence. They cover 70% of our planet and we rely on them for food, energy and water."

<u>Goal 15: Life on Land</u>: Protect, restore and promote sustainable use of terrestrial ecosystems, including inland freshwater ecosystems, in particular forests, wetlands, mountains and drylands, and reduce the impact of invasive alien species. <u>Goal 6: Clean Water and Sanitation</u>: Ensure availability and sustainable management of water and sanitation for all.



Social Action - #IWill4Nature

<u>#IWill4Nature</u> is a campaign of the <u>#IWill movement in Scotland</u>, aiming to make participation in social action the norm for all young people – including mentoring, peer education, campaigning, activism, involvement in decision-making platforms, Citizen Science and fundraising.

Young people care passionately about the environment and want to see action taken to tackle current and future threats. YouthLink Scotland is championing partnerships between young people and cross-sector organisations to grow participation in high quality environmental youth social action:

"We want to see a continued legacy of Year of Young People 2018 and doors continued to be opened for young people to have the platform to make a difference within society and the environment."

Learning for Sustainability

<u>Learning for Sustainability</u> - an important component of Curriculum for Excellence, an entitlement for learners, and a core part of teachers' professional standards – is a crucial learning context for any Coasts and Waters activity. Learning for Sustainability is a cross-curricular approach to creating coherent, rewarding and transformative learning experiences. It's all about learners, educators, schools and their wider communities building a socially-just, sustainable and equitable society. It supports an effective whole-school and community approach by weaving together global citizenship, sustainable development education, and outdoor learning.

STEM, STEM By Nature

STEM learning - Science, Technology, Engineering, Maths subjects – offers huge opportunities to interact with Coasts and Waters for pupils, educators and practitioners across the curriculum and in youthwork settings. It's a Scottish Government priority, with a <u>STEM Education and Training Strategy</u>, a <u>Young STEM Leader</u> programme, and extensive opportunities to enhance professional learning.

'STEM By Nature' is an approach that embraces the rich potential of Citizen Science, outdoor settings and nature-based experiences to contribute to teacher confidence and learning outcomes.

Climate Awareness, Emergency and Action

Climate change can affect coastal areas and inland waters in a variety of ways. Coasts are sensitive to sea level rise, changes in the frequency and intensity of storms, increases in precipitation, and warmer ocean temperatures. Rising atmospheric concentrations of carbon dioxide (CO₂) are causing the oceans to absorb more of the gas and become more acidic, which can have significant impacts on coastal and marine ecosystems. Changing weather patterns impact land and rivers and their management.

Curriculum for Excellence provides many rich opportunities to learn about climate change and associated issues and is a prominent and popular context for learning in many educational settings. See Section 4. Curriculum provision in the <u>Climate Change and Education in Scotland</u> briefing and UN Sustainable Development <u>Goal 13:</u> <u>Climate Action</u> – 'Take urgent action to combat climate change and its impacts'.

PUBLICATIONS

FSC Publications

Field Studies Council Publications fold out charts cover seabirds, seashells and seaweed.

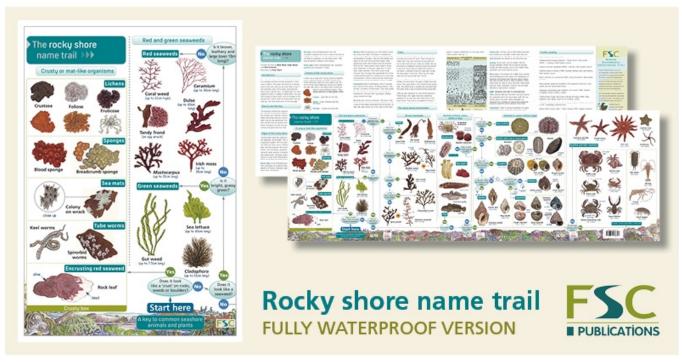
<u>FSC Freshwater Fish Identification Guide</u> covers all the freshwater fish likely to be seen in ponds, streams and rivers in Britain and Ireland.

<u>FSC Rocky Shore Name Trail</u> features the most common limpets, mussels, periwinkles, topshells, starfish, crabs, shore fishes and other animals you are likely to see, as well as seaweeds, lichens and encrusting sponges.

<u>FSC Freshwater Name Trail</u> – the simple yes/no format has been used by generations of visitors to FSC Field Centres (and many others) to identify the minibeasts of ponds and streams.

AIDGAP Crabs Identification Guide covers all of the crabs likely to be found in British coastal waters.

<u>AIDGAP Marine Invertebrates Identification Guide</u> is designed to enable non-specialists to put a name to the invertebrates encountered in marine habitats around the British Isles.



Canals

<u>Union Canal Unlocked</u> and <u>Glasgow's Canals Unlocked</u> give lots of points of interest and heritage information.

<u>Canal and River Trust</u> resources are all about "the different habitats you can find near rivers and canals - not just in the water but also on the edge of the water, in the hedges, the buildings and the towpaths".

<u>Maryhill Canal Classroom</u> has great ideas and activities for "using the canal IN the classroom and as a classroom".

Also

For coasts and waters-related fiction and non-fiction see the Scottish Book Trust Ocean Learning Resource and Authors4Oceans.

<u>How to Read Water: Clues & Patterns from Puddles to the Sea</u> by Tristan Gooley. <u>Ocean Literacy for All toolkit from UNESCO.</u>

Coasts & Waters 2020 EVENTS

An exciting array of <u>events</u> in 2020 put coasts and waters in the spotlight, including <u>Marine Fest</u> in June at the Scottish Seabird Centre and a FSC Scotland-hosted 4th Marine Symposium at Millport. There's the <u>Scottish Traditional Boat Festival</u> at Portsoy, <u>Crail Food Festival</u>, <u>The Fife Regatta</u>, and <u>Clydebuilt Festival</u>. <u>Edinburgh International Film Festival</u> presents Scotland's Shores, RSPB Scotland hosts <u>DolphinFest 2020</u> in Aberdeen, <u>Scotland's Boat Show</u> and Kip Marina create a <u>'River of Light'</u>, and The National Theatre of Scotland will deliver 'Ferry Tales' to celebrate Scotland's surrounding waters and the journeys over them made by thousands of residents and tourists.

Coasts & Waters 2020 STORIES - WE'RE INVOLVED!

Lots of different groups are taking the plunge, dipping their toes, and immersing themselves in all the opportunities offered by Year of Coasts and Waters 2020. A <u>unique collaboration</u> is creating, collating and sharing stories during 2020 of how the people they work with get involved – take a look, and add your own!

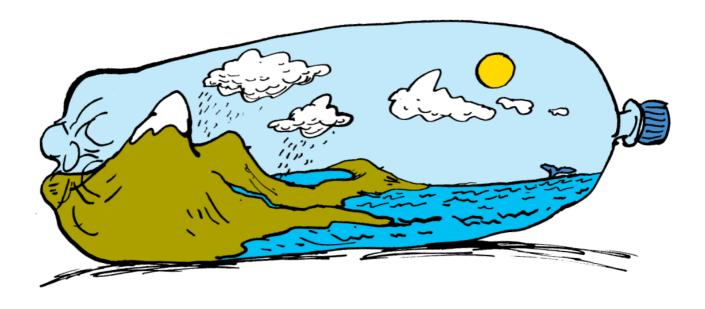


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