St Andrews Voices



SEA & SONG RESOURCE PACK

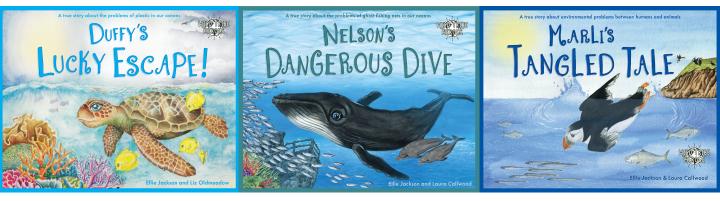




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ALBA | CHRUTHACHAIL

Welcome



Welcome to St Andrews Voices' 'Sea & Song Project'!

These resources will take you through our 10-part video series which have all been designed for very easy use in in the classroom at any point in your day. Our videos are aimed at primary school children aged 7+ but you can use these resources to create extra activities or cut down to initial concepts depending on the age of the children you are working with.

Throughout your participation in the project we would love to see what you get up to! Please share with us on Facebook, Twitter or Instagram @StAndrewsVoices or email <u>hello@standrewsvoices.com</u>

We hope that you enjoy being involved with our Sea Song Project – have fun!

Introduction



In our <u>first video</u> your class will have a short introduction to the festival, everything we do and then a quick introduction to our project.

Your class will also hear our project theme song for the first time. The theme song has been recorded by members of The Sixteen and we have a <u>song video</u> that your pupils can sing along to (as well as singing along at the start of each video!). The song features a 4-line chorus and a 4-line verse that we have written about our home town of St Andrews. We would love your pupils to have a go at writing their own verses to go into the song so that we can have Scotland's 'Song of the Sea' with verses from across the country.

<u>Chorus</u>

This is our song, the song of the sea, Here on the sand, a world just for me, Splashing and spraying and singing along, This is our home, the sea and its song. Learn the song!

Verse

Here in St Andrews, our historic town, From West Sands to the pier, Market Street we go down, Across the Swilken Bridge, meeting friends old and new, Hear the bells of Sallies, our town will welcome you.

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Writing your own verse

Get your class to think about important landmarks where you live, important moments of history, and what they like about where they live. These ideas and phrases can be used to fit in to their own verse to sing in the song.

Sometimes the phrases might not fit perfectly into the tune but you can use one syllable over two notes or quickly fit two syllables into one note if you need to!

If your pupils write their own verse please share it with us at <u>hello@standrewsvoices.com</u> and we will add it to our "Sea & Song of Scotland" map! Why not tag us on social media in a video with your class or school singing their own verse too?!

Example Verses

<u>Glasgow Verse</u> (by Festival Manager – Rufus) Here in Glasgow, on the River Clyde, The people make our city, all along the riverside. Merchant City to the southside, from the west end to the east, Stay here for a good time, come back at the very least.

Loch Lomond Verse (by Festival Director – Amanda) Here in Loch Lomond, Drymen to Balmaha, The bonnie, bonnie banks, stretching wide and very far, The West Highland Way, you can walk with your friends, Up and over Conic Hill and onwards to the Ben.

Introduction

Introduction to plastic pollution

Throughout our videos there will be discussion about plastic pollution, where it comes from, what damage it does to the natural world around us, and what we can do to help. These resources have some other ideas about things you can do to expand upon this if you would like to.

Challenge your pupils to try these to reduce their own plastic waste. You could even give each pupil their own challenge sheet to make it a competition.

possible92 Get a reusable water bottle13 Don't use plastic bags or drinkingstraws14 Use your own reusable containers andmugs15 Buy food without packaging or evengrow your own6 Don't use wet wipes	 8 Wear clothes made with natural fibres 9 Try to avoid glitter, or only use eco- friendly glitter in school 10 Talk to friends and family about how much plastic they use 11 Don't use products with microbeads in them (look out for polyethylene and polypropylene in ingredient lists) 12 Pick up your litter (and clean up your local beaches!) 13 Never flush plastics down the toilet
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You will discover more hints and tips that you can share with your class as well as other activities that can help educate your pupils on the importance of reducing plastic pollution and the ways that they can help in the classroom and out of it.

Share your class' plastic journey with us on social media or email us!

Song of the Sea



DUFFY'S LUCKY ESCAPE!

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Introduction to soundscapes

What do you need for the video?

- Old newspaper/magazines/scrap paper
- Spoons, pencils, water bottles, cans
- Percussion instruments (if you can access)

Remember to watch the <u>story video</u> first so your pupils can hear the story for the first time!

Aisling will lead you through our first video and you can build on this afterwards! You can use our warm-up at any point in your own activities – remember to do the actions as well!

<u>Duffy Book Song</u> Living in the deep blue sea, swimming round and round. Hello you, hello Duffy! Fish! Swish! Weeeee!

Making your own soundscape

Warm-up

Up to get a big breath of fresh air. Down to see if food might still be there. Munch, munch, munch, seagrass YUM! Back up to see the sun!

Aisling will also teach our book song for the first time. This song is very important and will be used in every video as well as featuring in the story telling at the end. If your pupils need a bit more time learning the song why not try an extra session with just the song learning section.

In the main section of the video, Aisling will introduce your class to soundscapes. They will make a soundscape with Aisling and Amanda that will be used in the storytelling. Soundscapes can be used to add an acoustic aesthetic to text, images or video. Now they have learned how to make a storm soundscape why not make your own soundscape ideas:

- Read a poem and create a soundscape that is inspired by the tone or mood.
- Show or describe an emotion that they can make into a soundscape.
- Show an image and ask your pupils to pick out sounds from the image.

When making your own soundscape you can use items around the classroom to make the sounds or even use your voices!

Please share your soundscapes with us!

Introduction to seagrass ecosystems, turtles and plastic pollution

For this project we have partnered with the Marine Conservation Society who have collaborated with us on our resource pack and in our videos. We have also collaborated with Project Seagrass for this particular section of our resources.

This video takes an initial look at the seagrass ecosystems we find all across the coasts of Scotland and the world. Then Tara from MCS looks at the world of turtle and how plastic pollution can affect them. Definitions from this video 'Extinction': is when all individuals from a species are believed to have died. Famous examples include the dinosaurs that went extinct about 65 million years ago (!) and the dodo which went extinct in 1662 after excessive human hunting.

We have added some resources from MCS and Project Seagrass into this pack. If you would like to find more information and resources to take learning of seagrass, turtles or plastic pollution even further please visit their websites:

Marine Conservation Society https://www.mcsuk.org/ Project Seagrass https://www.projectseagrass.org/

In the video, Tara challenges the pupils to think about single-use plastics they might be able to use less of. Here are some examples from us:

- Plastic water bottles
- Plastic straws
- Cling film
- Crisp packets
- Take away containers

What other single-use plastics did your class think of? Share them with us!



Understanding Turtles

Turtle Physiology

Turtles have a shell, known as the carapace, which is smooth and streamlined. Their elegant and muscular oar-like flippers allow them to swim swiftly and gracefully through the ocean.

Marine turtles spend most of their lives at sea, but have lungs so they need to surface regularly to breathe, although they are able to sleep for several hours underwater wedged into caves or crevices. Most marine turtle species are cold-blooded and thrive in warmer climates, basking in the morning sun to raise their body temperature.

Turtles don't have teeth, instead they have beak-like jaws that are specially adapted to their diet, and they drink seawater. To get rid of the excess salt they accumulate from their diet, turtles constantly cry salty tears from special glands in their eyes. These tears are particularly noticeable in female turtles when they come ashore to nest.



Turtle Lifecycle

While they are well adapted to marine life, turtles must come ashore to breed usually in the tropics or in warm temperate regions such as the Mediterranean. Male turtles spend all their lives at sea, and during the nesting season they migrate to traditional nesting beaches (rookeries) where they wait offshore to mate with the females. Female turtles then crawl ashore, dig nests and lay their eggs at night under cover of darkness. After they have covered their eggs with sand they return to the sea without caring for their young.

The sex of hatchling turtles is dependent on the temperature, at which the eggs were incubated, with higher temperatures producing female turtles and lower temperatures producing males. About two months after the eggs are laid, they begin to hatch in the nest, with most eggs hatching over a couple of days. The hatchlings then dig upwards together to get to the sand surface. They emerge from the nest at night and run down to the sea as quickly as possible to avoid the many predators that await them. The hatchlings then swim for about 24 hours without stopping, until they are carried out into the open ocean by marine currents, a behaviour known as juvenile frenzy, but many are eaten by fish and sharks on the way.

Meet the Leatherback turtle

The leatherback is the largest of the marine turtles and gets its name from the black, leathery skin that covers its carapace (shell). They are unique amongst reptiles in that they have some internal control of their own body temperature, so can forage in temperatures lower than 5 degrees centigrade and dive to depths of over 1km.



How big?

Usually about 2m long and weighing around 600 kgs. The biggest turtle ever recorded was a male leatherback, known as the Harlech Turtle, that washed up dead at Harlech, North Wales in the UK in 1988. It had drowned after entangling in fishing gear and weighed 916 kg!

What's on the menu?

Jellyfish and other small, soft-bodied, floating sea creatures. Leatherbacks often mistake litter, such as plastic bags and balloons, for jellyfish and eat them. Plastic can block a turtle's gut, causing death by starvation. Please dispose of your litter responsibly.

Where do they live?

They are found in all ocean basins, and have been recorded at sea north of Norway and south of New Zealand! Important rookeries are found on the coasts of Central and South America, as well as West and South Africa. In summer, leatherbacks visit UK waters where they feed on jellyfish.

Endangered?

Leatherback turtles are considered to be globally vulnerable by the International Union for the Conservation of Nature (IUCN), although a number of breeding subpopulations are still considered critically endangered. In some places, nesting females are killed for their meat and their eggs are harvested. At sea leatherbacks seem to be particularly vulnerable to entanglement in fishing gear, especially long lines and gill nets.



fellyfish ID Guide

While some jellyfish are harmless or have a very mild sting, others have a painful and even dangerous sting. MCS would therefore recommend that, for your own safety, you do not touch jellyfish.





Barrel jellyfish

Aurelia aurita Up to 40cm in diameter.

Transparent, umbrella-shaped bell edged with short hairlike tentacles. Recognised by the four distinct pale purple gonad rings in the bell. Manubrium (mouth and arms, underside and centre of bell) bears 4 short, frilled arms. Mild sting.

Cyanea capillata

This jellyfish stings. Large, usually 50cm but can reach 2m in diameter. Large reddish brown, umbrellashaped bell with a mass of long, thin hair-like tentacles as well as short, thick, frilled and folded arms.

Rhizostoma octopus

Up to 1m in diameter. Robust with a spherical, solid rubbery bell, which can be white or pale pink, blue or yellow and fringed with purple markings. The bell lacks tentacles but eight thick, frilled arms hang from the manubrium. Mild sting.

Velella velella

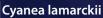
Not a jellyfish but a floating, solitary hydranth. Up to 10cm long and blue-purple in colour. Upright sail and chitinous float are diagnostic, with a mass of small tentacles surrounding the mouth on the underside. Occurs in vast swarms.

Marine Conservation Society Overross House, Ross Park, Ross-on-Wye, Herefordshire HR9 7US Tel 01989 566017 Www.mcsuk.org Ff facebook.com/mcsuk y twitter.com/mcsuk

 Marine Conservation Society (MCS) 2016. Registered charity no:1004005 (England & Wales); SC037480 (Scotland). Company limited by guarantee no: 2550966. Registered in England VAT no: 489 1505 17. venbysuosed

Chrysaora hysoscella This jellyfish stings.

Typically up to 30cm. Colour variable, but usually has pale umbrella-shaped bell with diagnostic brownish V-shaped markings, 32 marginal lobes and 24 long, thin tentacles, four long, thick, frilled arms hang from the manubrium.



Up to 30cm, similar shape to C. capillata but smaller with a blue bell through which radial lines can be seen. Mild sting.

Pelagia noctiluca This jellyfish stings.

Up to 10cm. Has a deep bell with pink or mauve warts, 16 marginal lobes and eight marginal, hair-like tentacles. Manubrium bears four longer frilled arms with tiny pink spots.

Physalia physalis This animal stings.

Not a jellyfish, but a floating colony of hydrozoans. The ovalshaped, transparent float with crest is characteristic. Blue-purple in colour, with many hanging 'fishing polyps' below that may be tens of metres long. Extremely dangerous to humans due to their powerful sting. Rare in the UK but if found in numbers should be reported to the local authorities.

Protecting our seas, shores and wildlife





Discovering seagrass

Seagrass isn't seaweed, but a group of flowering plants that live in shallow sheltered areas along our coastline. With bright green leaves and waterproof pollen, they form large dense green meadows under the sea hosting many animals of different shapes, colours and sizes. Because of where they grow they are highly vulnerable to damage from humans and are now a protected species. In the 1930's we lost over 50% of our seagrass to a wasting disease so protecting what's left is vital.



Why is seagrass important?

Seagrass plays an important role in the areas where it grows for both humans and sea creatures alike.

- Seagrass can provide a natural sea defence by trapping sediment and slowing down currents and waves
- Seagrass provides a nursery ground for many commercial fish like Cod, Plaice and Pollack
- Seagrass absorbs and stores large amounts of the carbon dioxide we produce, vital in the fight against climate change
- Seagrass produces the oxygen we breather
- Seagrass can support tourism
- Seagrass increases biodiversity by providing food and shelter for other important marine life
- Seagrass is home to many colourful and charismatic species, big and small like seahorse, pipefish, sea anemones, dogfish and more.

In the UK seagrass is under threat from anchoring and moorings, as well as litter, pollution and waste which can all smother the plants and reduce their growth.

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Plastic Ocean Info Sheet

Nelson's Dangerous Dive

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Introduction to ensembles

Aisling will again lead you through our music making for this session. The format for the session is very similar to the Duffy series. There will be a warm-up and a book song for your pupils to learn and join in with. Please use these in the classroom yourself as much as you would like!

<u>Warm-up</u>

Up like a great big humpback whale, Down, down, down, to find the ocean trail, Swim swim swim splish splash splosh Hello world! Look! I'm free!

<u>Nelson Book Song</u> My name is Nelson and I'm a humpback whale, I swim round the world, swishing my big tail Swish. Swish. Look fish! Fish! Now up to say hello to the world! Our song learning will also be available in a separate video if you would like to have a bit longer with your class on this. We would love to see the progress your class make with our warm-up or songs!

Making music in an ensemble

Aisling will lead your pupils through a series of activities to make music. The end goal for the activities is to give your pupils an experience of making music together and responding to each other as any ensemble would. Aisling will be leading this music making but after the video, why not try this yourselves after the video. The pupils will already have music to make so they can try putting all the components of their ensemble together themselves and see what the outcome is!

If you want to take this even further, get your pupils to write some more musical ideas that represent either a story local to your school or perhaps one of the soundscapes that you tried with your pupils.

Nelson's Dangerous Dive

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Introduction to coral reef ecosystems, cetaceans and beach cleans

We teamed up with Tara from the Marine Conservation Society again who takes us through some basics about whales as well as introducing some more information about plastic pollution including how you and your pupils can get involved with beach cleans. As well as that, we take an initial look at coral reefs, the animals that live there and how artificial reefs can help.

We have added some more resources from MCS into this pack to help further the learning with your pupils. If you would like to find more information and resources to take learning of coral reefs, cetaceans or plastic pollution even further please visit the MCS website!



Definitions from this video

'Cetaceans': are marine mammals split between two groups: toothed whales (including dolphins, killer whales and sperm whales) and baleen whales (including humpback whales and blue whales).

'Baleen': is a filter feeding system in the mouth of some whales. It is made from keratin (which also makes our finger nails and hair!) and acts as a sieve for feeding whales.

Tara introduced a new scheme that is coming into place in Scotland: the Deposit Return Scheme. You can find out more about this scheme <u>here</u> and perhaps you could try your own scheme offering rewards for children who bring their empty bottles to school for recycling?

In the last video we tackled single-use plastic. But there is so much more plastic out there. Why not get your pupils to brainstorm how many different things there are in the classroom that are made with plastic and whether any of these can be replaced with non-plastic alternatives! They might find anything from wires and computers to pen pots and trays. With all plastics the most important thing is the correct disposal.

Ocean giants

cetaceans. Cetaceans are a group of animals that Some of the biggest animals in our oceans are What on earth is a cetacean?

includes the whales, dolphins, and porpoises.



Striped dolphin (Stevela coeruleoaba)

They are not fish

and down, unlike fish that swim by by moving their muscular tail fin up called a blowhole. Cetaceans swim an opening on the top of their head and spend their whole lives in the moving their tails left and right. to breathe air. They breathe through so they have to come to the surface nurse their young and have lungs, just like us. They are warm blooded, sea, but they are actually mammals, These animals may look a bit like fish



Blue whale (Balaenoptera musculus be about 29 metres long - the height of a 9-story building, can sieve about tour This enormous animal, which grows to called krill, out of the sea every day tonnes of tiny shrimp-like creatures, That's like 8,000 boxes of cereal a day

fluke

marii





baleen

th or no

the water. The biggest animal ever to porpoises use their peg-like teeth to a baleen whale. have lived on earth, the blue whale, is in their mouths to strain food from but use special bristle-like structures baleen whales, that don't have teeth eat. There is another group, called the catch fish and other marine animals to Toothed whales, dolphins and

Close families

that lived to be 110 years old. social ties. Perhaps the strongest Scientists have found a blue whale calf. Whales can live a long time. bond is between a mother and pods and they have very strong Cetaceans live in social groups called

> whales to small harbour porpoises everything from massive humpback

The biggest animal EVER!

Scientists have recorded nearly 30 Cetaceans in the UK

in UK waters. Our seas are home to species of whale, dolphin and porpoise

1111 V 8.0

Plastic Ocean

Our oceans have no boundaries, and when it comes to rubbish in the sea, that means it's everyone's problem.



Washed up marine litter

Floating rubbish dumps

The North Pacific Gyre contains

the biggest rubbish dump on the

planet. Nicknamed the 'Great Pacific

Garbage Patch', it's estimated to

be almost twice the size of the

VK! In this area, there's 6 times

more plastic than plankton.

All caught up

Gyres are large rotating currents in our ocean where water spirals around. It's where much of the litter that is floating in the sea collects. The five main gyres across the globe collect man-made debris, especially plastic objects.

A plastic bottle dropped in Canada may end up on the Cornish coast. Marine litter really is a global issue.

> North Pacific Gyre

Indian Ocean Gyre

South Pacific Gvre

tlantic

Atlantic

You can make a difference Never drop litter, recycle more and reduce the amount of plastic you use.

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Marli's Tangled Tale

Introduction to Conducting

Warm-up

Up like a puffin fliying high in the sky. Down from the cliff edge. Oh me! Oh my! Dive swim. Dive swim fish. Back home, fly, fly, fly!

Aisling leads our final musical workshop this time based around Marli's Tangled Tale. This series comes with a new warm-up and song for your pupils to enjoy!

Just like the other books, the song learning video will also be made accessible so that you can make sure your class are confident with the

words and tune.

Marli Book Song

Musical Leadership

Up, up, up. Down, down, down. Marli is my name. Off to get some yummy food for us to eat at home.

Our final workshop focuses on musical leadership and conducting. In any ensemble the conductor is one of the most important people. They help keep everyone playing together. When your pupils are playing either the same sound or different sounds, a conductor can help make the music that extra bit special. Ask if one of your pupils would like to have a go at conducting the class. They can use their hands to make signals, just like Aisling, that tell groups when to start and stop; or when to get louder and softer; or when to get faster and slower.

Once your class has mastered these music making techniques they have the building blocks that any ensemble needs to make music together. Challenge them to continue making their own soundscapes, with different layers of sound and music, and with musical leadership controlling the sound.

If your class makes any music together please send any photos, videos or recordings that we can share on social media. We want to show Scotland singing and making music together!

Marli's Tangled Tale

Introduction to bird colonies, seabirds, and more plastic pollution

Rufus and Tara introduce bird colonies and some of the amazing birds that we have living on our coasts in Scotland.

<u>Definitions from this video</u> '**Puffling**': A puffling is the very cute name for a puffin chick.

Bird nest in colonies for a variety of reasons. Sometimes they are packing together somewhere that has a really rich food supply. Sometimes they pack together in areas where there are no predators that could harm them or their chicks – often these are small islands! Birds like penguins pack together to help protect each other from the cold, harsh weather conditions. And sometimes they stick together in large groups so that there is more defense against predators.

Scotland has many species of seabird that can be found all around the coastline. Depending on where you are in the country you might have different seabirds that you can sea from your nearest coast. Share your seabird spots with us on social media or send us an email!

In these videos we have been looking specifically at puffins. In Scotland you can spot puffins all year round and there are a few specific locations if you want to spot a nesting Puffin colony. They nest in colonies between late March and August and you can see colonies at these locations:

- Isle of May
- St Kilda around 136,000 pairs!
- Bass Rock
- St Abbs Head
- Duncansby Head
- Faraid Head
- Lunga
- Sumburgh Head



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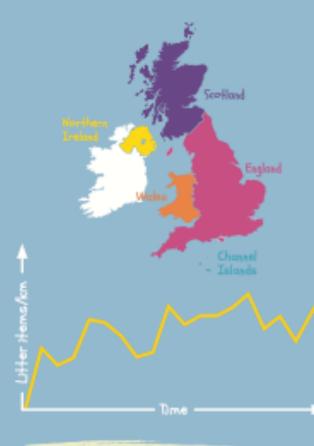


The amount of litter on UK beaches has been increasing for 20 years.

Most litter is made of plastic. Once it's in the environment, plastic never really goes away, it just breaks down into smaller and smaller pieces. Even these tiny pieces of plastic can be harmful to marine animals that mistake them for food.

Where does it come from?

The most common source of beach litter is the public, people like you and me. Litter is either dropped on purpose or left accidentally. It can be carried to the beach from any part of the country by the wind, drains and rivers.



How do we know this?

Every September, the Marine Conservation Society organises the Beachwatch Big Weekend. Thousands of volunteers help us clean up hundreds of beaches around the country and do a survey to find out what types of litter are on our beaches.



Marli's Tangled Tale

Meet the puffin



How old can they live until?

Puffins can live for 20 years! They reach a breeding age around 5-6 years old.

How big do they grow?

They can have a wing span of 47-63cm and can be 26-29cm tall.

What do they eat?

Puffins love to eat fish! Their favourite fish are sandeels and puffins are often found where sandeels ae most abundant!

How do puffins breed?

Puffins mate for life and they will return to the same colony to breed. They lay one egg each season which they lay in their nests at the bottom of a burrow (usually an old rabbit burrow or something similar).

What threatens puffins?

Puffins are listed as Vulnerable on the IUCN Red List. They are so vulnerable because their population is concentrated into small areas so any small environmental change like over fishing reducing their food availability or pollution in the area.

Beach Cleans

Here are some top tips from Wild Tribe Heroes and the Marine Conservation Society for doing your own beach clean (either alone or in small groups)!

- Always go with an adult
- 2 3
- Make sure you plan your beach clean Never pick up anything that looks nasty or is dangerous
- Wear protecting gloves and bring a bag to put rubbish in 4
- 5 Watch out for and don't touch sharp items like glass
- 6 **BE SAFE NEAR WATER** – always follow safety signs
- 7 Keep and eye on the weather
- 8 Wear appropriate clothing and sun protection
- Put the rubbish in a bin or take it home to recycle 9
- Share your beach clean with us on social media 10

If you are able to take your pupils to the beach why not use MCS's "Teach on the beach" resource pack that you can find on our website or here.





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Wall Craft Project

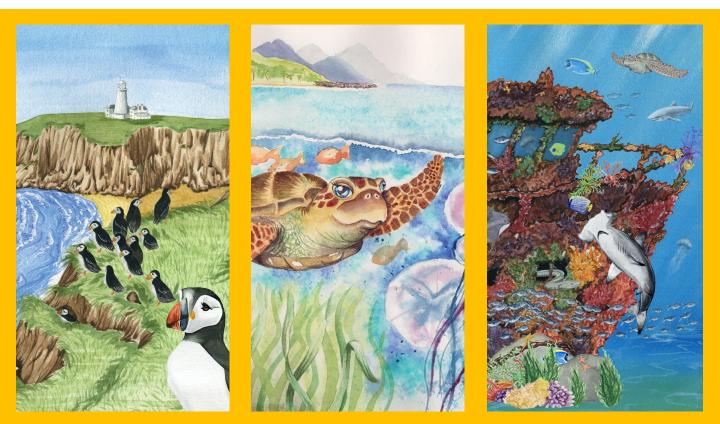
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Extra Classroom Activity!

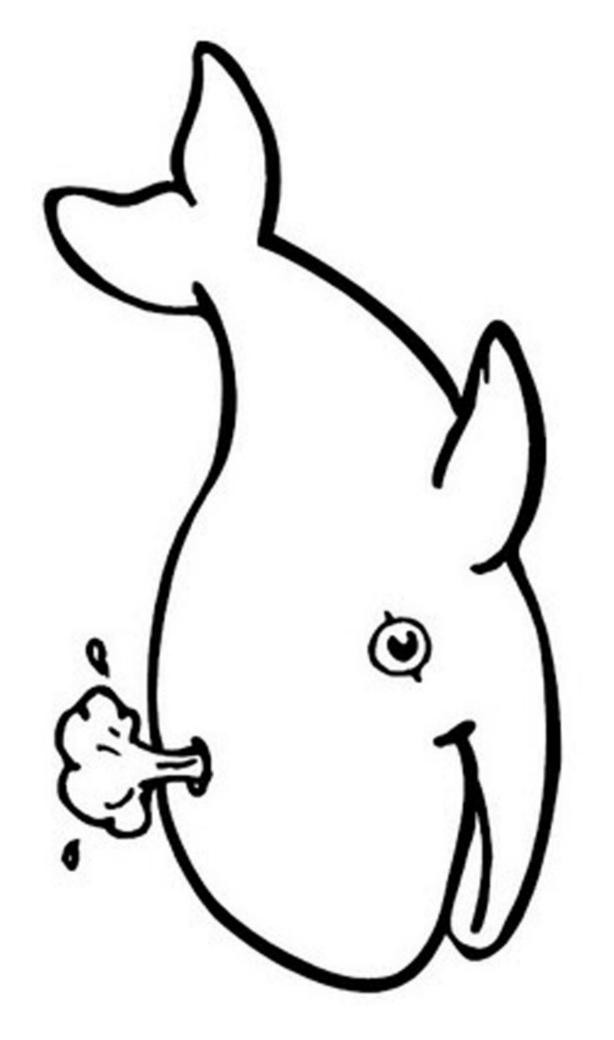
We have provided some pictures for your class to colour in and bring some of the stunning wildlife from the books into your classroom! We've put some reminders of the images below – maybe you could have all three side-by-side on the same wall?

You can add to these with things that your pupils remember learning from the videos! Perhaps they remember a musical term or something about the ecosystems.

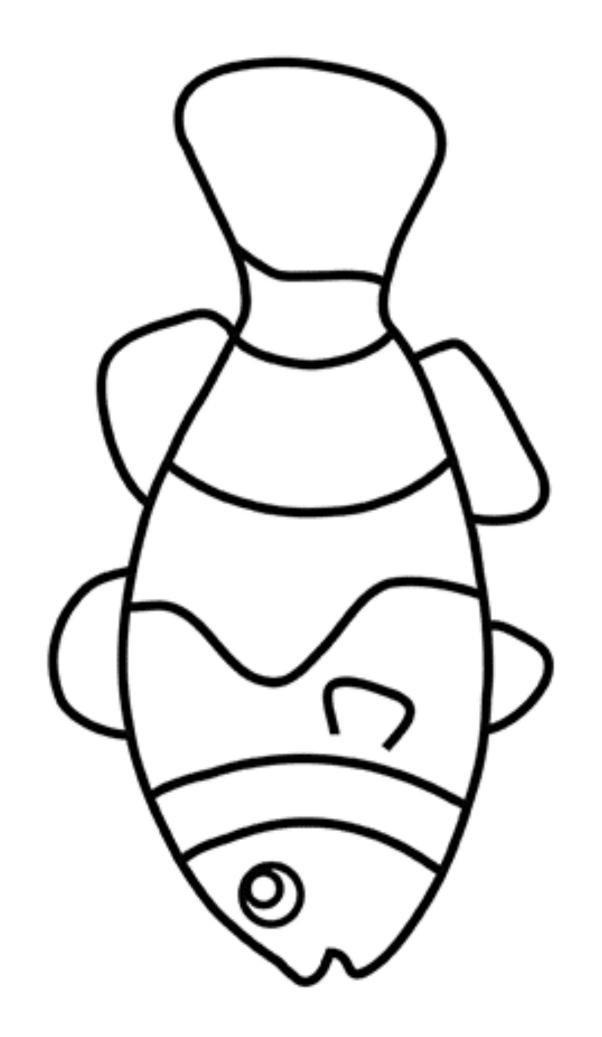
Share anything your class creates with us on social media!

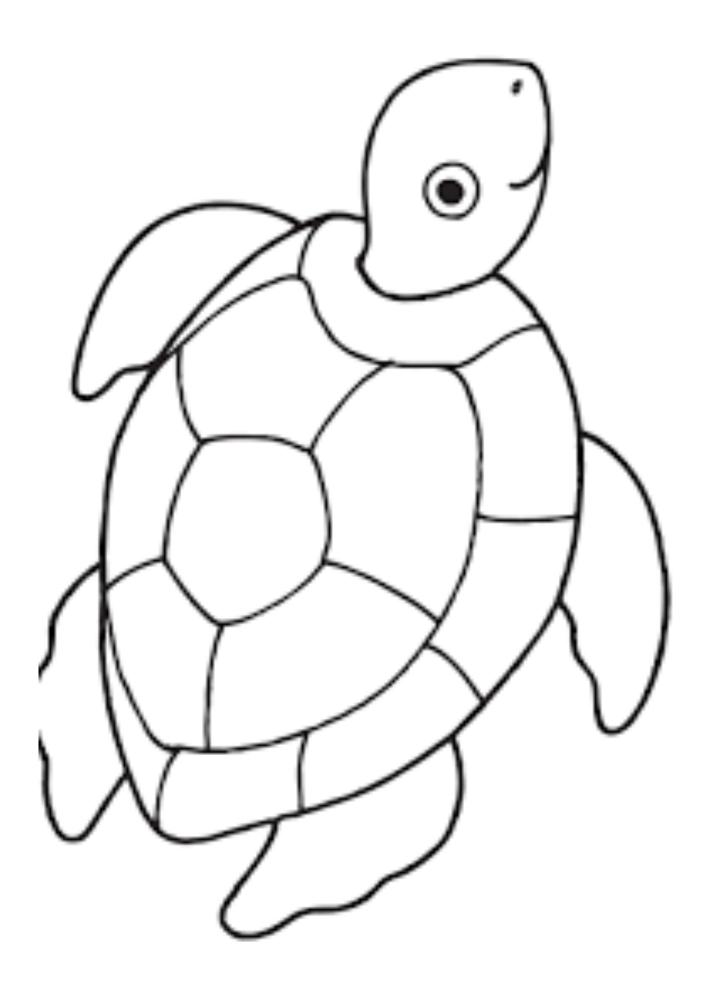


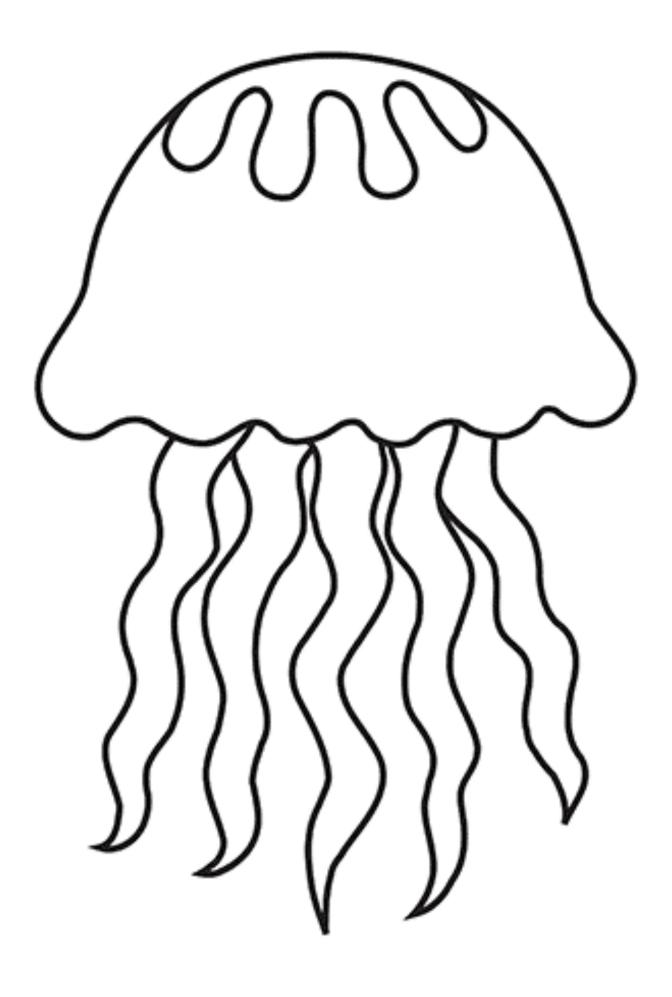
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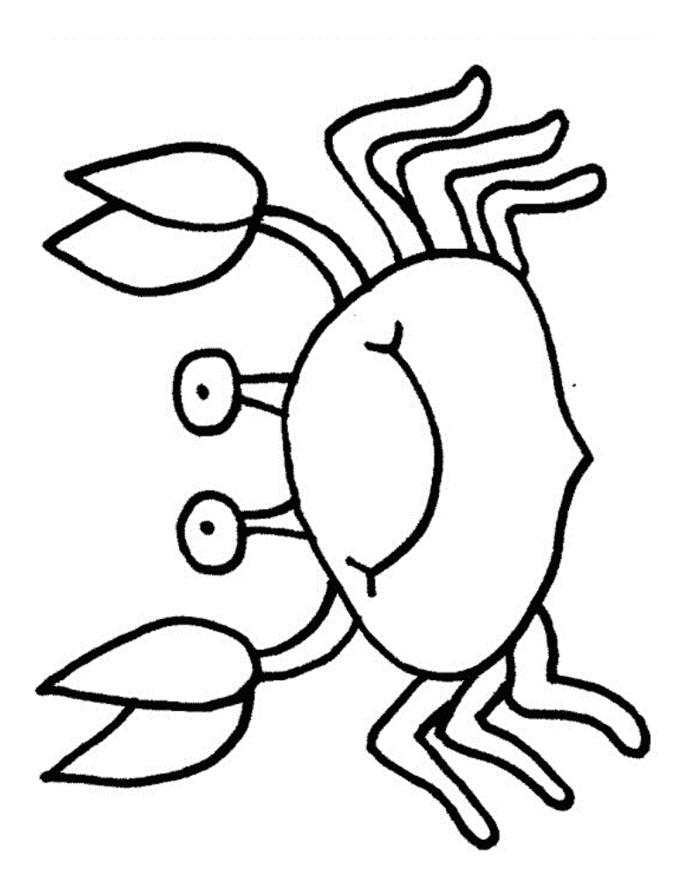


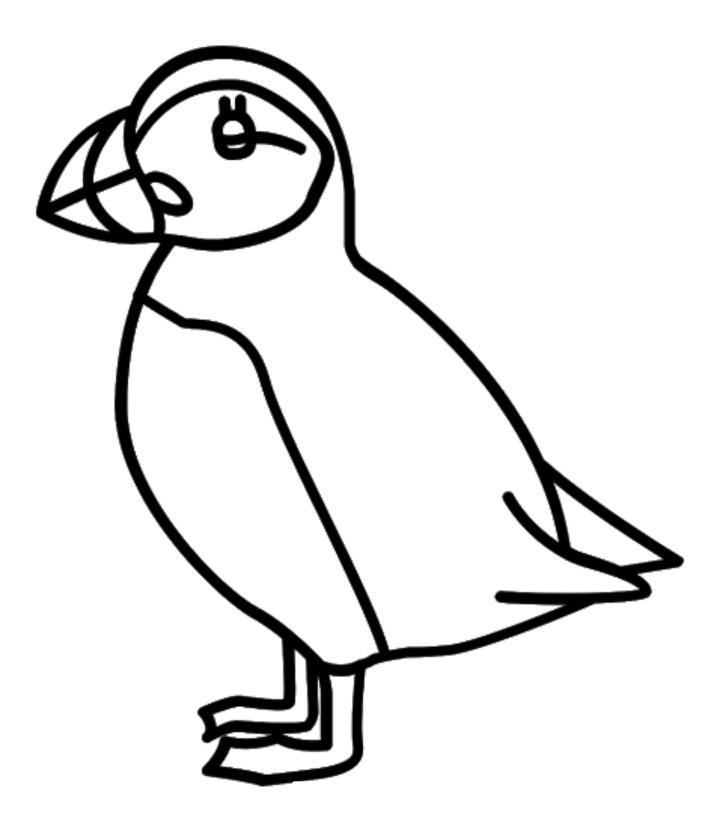


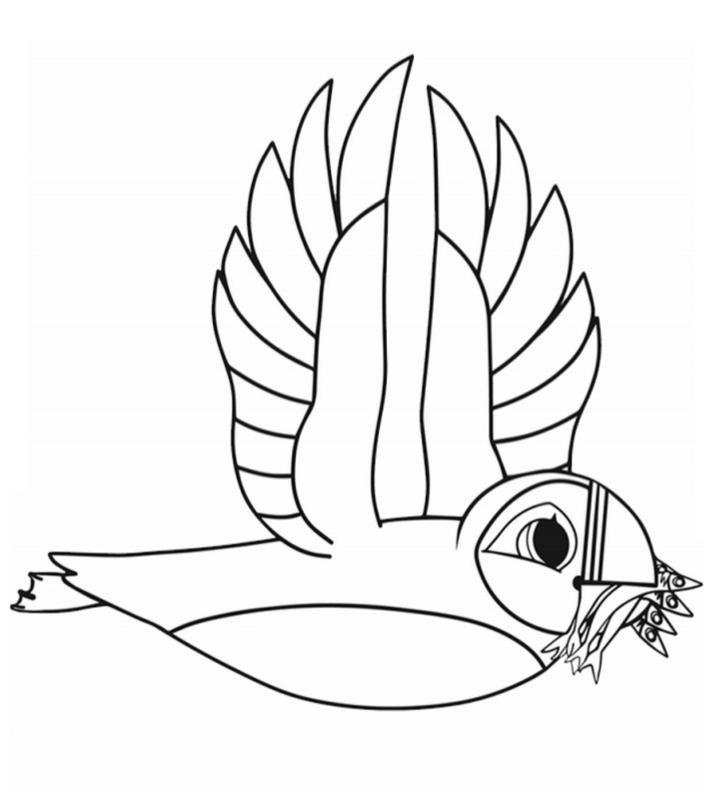


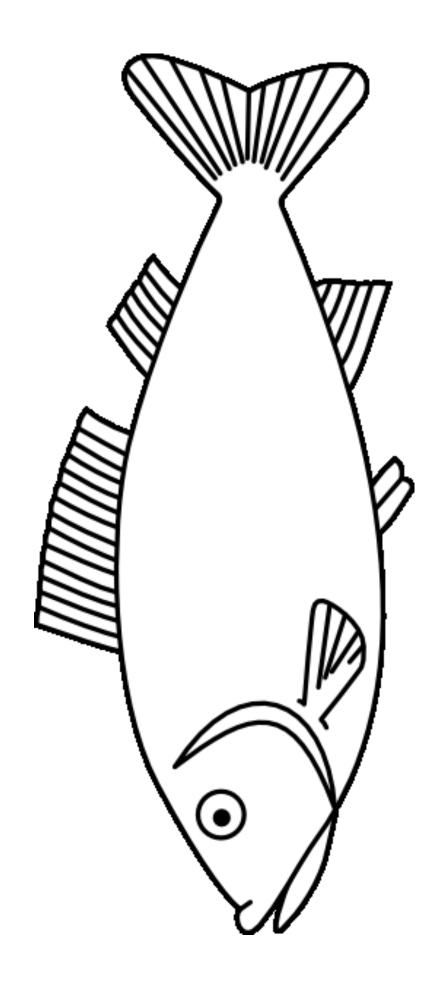












Biographies



Aisling O'Dea

Born in Dublin, Aisling began to play the violin at the age of nine. She went on to study at the Royal Academy of Music with Professor Maurice Hasson, with further study at the "Hans Eisler" Hochschule für Musik in Berlin with Professors Stefan Piacard and Michael Erxleben. Aisling lived and worked in Germany for 11 years, playing with both the Kammerphilharmonie, Bremen and Ensemble "Oriol", Berlin before becoming a member of the Radio Symphony Orchestra Frankfurt in 2000. She was appointed a position with the Scottish Chamber Orchestra in 2007.

Aisling is passionate about new music and working with different art forms. She is a founding member of Artisan Trio, whose five concert series 'Pendulum' (2013) presented new commissions from composers who studied and worked in Edinburgh, as well as annually performing Messiaen's 'Quartet for the End of Time' as part of Holocaust Memorial Day. She has also performed solo works such as Glass' 'Strung Out' as part of Nederlands Dans Theater 2 and 'Ouija' by Jeremy Thurlow, a partially improvised work with tape.

O'Dea is an active member of the SCO Vibe team and is actively involved in other areas of Creative Learning work including narration of children's stories and workshop leading.



Ellie Jackson is a teacher and mother of four young children who has written the true Wild Tribe Heroes series of books to help educate primary and preschool children about global environmental issues.

Ellie lives by the sea in Looe, Cornwall, and wrote her first book after living on Magnetic Island in the Great Barrier Reef in Australia, during which time, she and her young family saw a turtle called Duffy being released back into the ocean after a year of treatment for ingesting plastic. "My children and I were transfixed by the sight of this beautiful creature being set free, and subsequently visited a turtle hospital on the mainland to find out more. Once my children had made the link between plastics and turtles they were obsessed with clearing litter from beaches so that they could help protect turtles and other sea life."

In this way, Ellie, an environmental scientist who taught geography for six years, conceived her idea to use children's books as a way of educating young people about environmental threats to our planet. Her books now cover issues such as ocean plastics, balloon releases, ghost fishing nets, palm oil and climate change, bringing these important issues to life using gentle positive stories.

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Biographies



Andrews St Andrews Voices

St Andrews Voices is Scotland's only festival of vocal and choral music. It takes place each October in the magnificent setting of St Andrews. Launched in 2012, 'Voices' has established its place in the Scottish musical calendar and is admired for its diverse programming, presenting some of the finest singers from the UK and beyond. Since 2012, we have welcomed Ian Bostridge, Voces8, Roderick Williams, The Sixteen, King Creosote, I Fagolini, Tenebrae Choir, John Mark Ainsley, Scottish Opera, Patricia Hodge and Twelfth Day among others. Alongside the festival's programme the outreach programme forms a major part of the work of the festival ranging from school workshops to dementia song sessions to young artist development.



Marine Conservation Society

The Marine Conservation Society fights for the future of our ocean through peoplepowered action – with science on our side. Today, our ocean is in poor health because of human activity. We're determined to change this, working with communities, businesses and governments. For more than 30 years, we've been the voice of the sea, defending our coastal habitats and species. We work towards a cleaner, better-protected, healthier ocean. One we can all enjoy. Together, we can achieve our vision of seas full of life, where nature flourishes and people thrive.



Project Seagrass is an environmental charity devoted to the conservation of seagrass ecosystems through education, influence, research and action. The philosophy that Project Seagrass prides itself on being evolved independently in the minds of its 3 founders. While pursuing masters degrees at Swansea University, Benjamin Jones and Richard 'RJ' Lilley each developed a passion for seagrass meadows and guickly realised that these ecosystems were under threat and were ignored in conservation agendas. In May 2013 Ben created Project Seagrass, whilst at the same time, RJ, and Unsworth Richard supervisor at the time, Dr were their looking strengthen seagrass science in Wales and formed the Welsh Seagrass Network. Realising that they were all on a similar page, in July 2013, Project Seagrass was born, with the primary belief that education is key in the fight to conserve seagrass.

St Andrews Voices









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