

An aerial photograph of a wide, sandy beach. In the foreground, there are intricate sand art patterns consisting of concentric circles and spirals. The beach curves along the coast, with waves breaking on the right side. In the background, there are large, dark rock formations or cliffs. The sky is clear and blue.

# Marine Litter Watch

Newsletter  
Issue 15 - Summer 2023

*Credit - North Coast World Earth*



Department of  
**Agriculture, Environment  
and Rural Affairs**

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**INVESTORS  
IN PEOPLE**



## Hello & Welcome to the Summer 2023 edition of Marine Litter Watch

by Jenny Benham, Marine and Fisheries Division, DAERA

Welcome to the Summer 2023 Marine Litter Watch Newsletter, where you can expect to find information and updates about what is currently happening in the world of marine litter.

Sir David Attenborough estimates that there could potentially be more plastic than fish in the ocean by 2050. In this edition we have focused on measures to tackle the issue of plastic in the marine environment.

Thanks to everyone who has contributed to this edition by providing inspiration, articles, news items and photographs.

I am always happy to receive any updates, suggestions or feedback about what you might like to see in future publications. You can get in touch by emailing me at:

[Jenny.Benham@daera-ni.gov.uk](mailto:Jenny.Benham@daera-ni.gov.uk)

### Article Summary

Our first article is written by Catherine Hunter of Mid and East Antrim Borough Council, giving us an update of their project in producing a new anti-littering marine-themed educational video.

DAERA's Northern Ireland Ocean Literacy Survey results are in, with the key Marine Litter insights highlighted in our second article.

Next Pamela Hanna takes us through the efforts of Armagh City, Banbridge and Craigavon Borough Council in tackling cigarette butt litter.

And finally, Loreto College students share their waste-themed artwork with us.



Credit - Declan Doyle

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# Marine Litter Watch



## Meet the Team

There have been changes in the Marine Litter team so let's dive in with some introductions.



• James  
McKervey

### Tell us about your role?

I am the Marine Litter Team Leader for Northern Ireland and lead in our work with UK and local colleagues, like the environmental NGOs, local councils, the fish producer organisations and Northern Ireland Fishery Harbour Authority.

### What do you enjoy about your job?

The challenge of engaging with everyone to promote strategies for reducing litter in the marine environment.

### What one thing could we all do to reduce marine litter?

I want everyone to take ownership of their waste. Bag it, bin it, take it home and ensure it does not enter the natural environment.



• Jenny  
Benham

### Tell us about your role?

I have recently joined the Marine Litter team and am researching ways of addressing marine litter so we can update our Marine Litter Strategy.

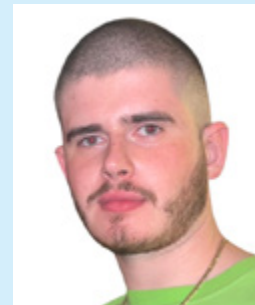
I co-ordinate the publication of the Marine Litter Watch Newsletter assisted by our Environmental Placement Student, Ewan.

### What do you enjoy about your job?

I am passionate about making our environment just that little bit better for us all to enjoy.

### What one thing could we all do to reduce marine litter?

Give single-use plastics a miss. If we all try to avoid buying and using items with unnecessary plastic wrappings (especially processed food/drinks) this will contribute greatly to preventing them ending up in the sea – and as a bonus may improve our health too.



• Ewan  
McVitty

### What are you enjoying about your placement in DAERA?

I am enjoying building relationships with professional individuals and applying my learning to a real-life workplace situation.

### What one thing could we all do to reduce marine litter?

How easy is it to pocket your rubbish for a few minutes until you see a bin? There is no excuse for dropping rubbish - even if you find yourself in a rainforest or a desert, carry your litter home!



# Marine Litter Watch



## Did you Know? Surprising things that contain plastic and what you can do about that

by Ewan McVitty, DAERA

We are aware of plastics in things we buy on a daily basis, but it goes deeper than you might think.

Did you know that food packaging, from boxes to coffee cups, contain a plastic lining? The plastic is there to help prevent leaks. This sounds great, until we learn that more than 500,000 coffee cups are littered every day in the UK alone!



### What can I do?

You can carry your own re-usable coffee cup. Many traders including butchers, fishmongers will be happy to use your own portable containers on request to dispense produce. This actually reduces their costs as well as use of single use plastics. Everyone wins!

### Would you eat your own clothes?

In the UK, it is estimated that two-thirds of clothing is made from plastic like polyester, nylon, and acrylic. When washed, they shed tiny microplastic fibres which pass through wastewater treatment and reach the ocean via rivers. Marine life ingests these microplastics as food, we eat marine life and can end up ingesting the very fibres we wear!

### What can I do?

Ways to reduce shedding microplastics include using a washing machine filter, air-dry rather than tumble dry, and choose natural fibres over synthetic.

### A salty tale

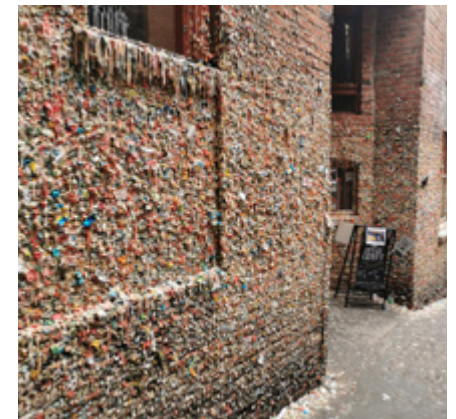
Researchers in South Korea found that up to 90% of table salt brands worldwide contain microplastics. The study estimates that an average adult consumes around 2000 microplastic particles yearly, just from eating table salt.

### What can I do?

Consider adding less salt to your food when cooking and consuming. Some salts such as Himalayan or Redmond come from ancient, unpolluted seabeds less likely to be contaminated by microplastics.

### All gummed up

Chewing gum and bubblegum contain plastic too. 6,000 years ago, people chewed gum but unlike today, it was derived from plants, grasses, and resins. Modern chewing gum is non-digestible, and water-insoluble, made from the same kind of synthetic material used to make car tyres. Gum will remain where it is dropped, until picked up and disposed of. The "gum wall" in Seattle started in the 1990's is an example of just how durable it can be.



Credit - Harry Benham

### What can I do?

There are a growing number of plastic-free chewing gum alternatives which are biodegradable and compostable.



# Marine Litter Watch



How exactly ingesting microplastics affects us remains unclear. However, one thing is for sure, that plastic is finding its way inside us through the everyday things we consume!

10 everyday items containing plastic!	
1	Chewing gum
2	Cigarette butts
3	Clothes
4	Salt
5	Glitter
6	Teabags
7	Disposable wipes
8	Food and drink packaging
9	Crisp bags
10	Coffee cups

## News Round Up!

### A new life for disused fishing gear



*Credit - Jenny Lau, NIFHA*

The DAERA Marine Litter Team have been collaborating with the Northern Ireland Fishery Harbour Authority (NIFHA) on finding a new lease of life for fishing gear.

The project involved stripping the disused fishing nets and ropes to gather material that is suitable for recycling. Fishing gear is a complex mix of plastics which can cause a danger to wildlife or vessels and contributes significantly to marine litter.

NIFHA has previously delivered a collection of nets to Denmark for recycling. However, NIFHA has recently engaged with a company in England who will be

able to recycle the fishing gear into plastic pellets or to use in creating a “toe puff” reinforcement layer in sports footwear. Using facilities closer to home helps to reduce costs and carbon footprint.

This is an exciting initiative and will help Northern Ireland understand how we can play our part in tackling the tackle sustainably!

### Butt Out

Dealing with waste containing plastic is an ever-increasing challenge.

As our “Did you know?” article outlines, there are many surprising items which contain plastic.

One of those items is cigarette butts. Most people would think these are paper or cotton but the filters on the end of cigarettes contain cellulose acetate, a type of plastic.

Estimates suggest 5.5 trillion cigarettes are consumed globally each year and 4.95 trillion are discarded in the environment.

Due to their relatively small size these can be difficult to eliminate, persisting even after a beach clean has taken place. Cigarette butts are hazardous to marine animals who might confuse them for a source of food and end up eating them.

# Marine Litter Watch



## News Round Up!

The cost of removing discarded cigarette butts from the environment can be substantial with one Catalan study estimating this to be £880m per year. As of 2023 cigarette manufacturers in Ireland and Spain will be required to contribute to clean-up costs.

Read on to find out more about how Armagh City, Banbridge and Craigavon Borough Council have been tackling this issue.

### Let's stick together



Plastic caps on many drinks bottles are often suitable for recycling. However, these frequently get discarded and end up as litter. Several manufacturers have addressed this by having caps tethered to the neck of the bottle.

Coca Cola is the latest company to introduce tethered caps on some products. Designed to stay on the bottle when opened and while in use, making it easier to collect and recycle the whole package together.

### Single-Use Plastics

Single-Use Plastics are items designed to be used once and then disposed of. Plastic is made from fossil fuels and poses a particular threat in the marine environment. Items discarded or lost on land can be carried by rivers, drains, sewage systems or by wind into our marine environment.

Progress has been made recently in attempting to change behaviours of both organisations and individuals to reduce production, design alternatives or eliminate use entirely.

England will introduce a ban on plastic plates, trays, bowls, cutlery, balloon sticks and certain types of polystyrene cups and food containers later this year following similar moves by Scotland and Wales.

Northern Irish businesses are encouraged to tackle plastic waste in the workplace helping them to be business-ready for future legislation on the banning or reduction of single-use plastic. The Northern Ireland Civil Service has led the way with



a mandatory ban on single use plastics on the government estate.

### "#Refillution"



*Credit - NI Water*

NI Water estimates that Northern Ireland uses 145 million single use plastic bottles every year. Across the UK, 7.7 billion plastic water bottles are used each year with the average person using more than 3 a week.

# Marine Litter Watch



## News Round Up!

If not disposed of correctly, these can end up littering our river and marine environments.

By refilling 1 in 10 bottles once a week, it would save around 340 million plastic bottles a year.

NI Water, local councils and businesses have joined together to provide locations where you can refill a reusable water bottle when out and about.

Councils have provided refill fountains at various locations and NI Water have a [“Taps on the Map”](#) website page where you can find details of the businesses participating in the scheme in each council area.

### Whales hungry for plastic?

A sperm whale carcass washed up on the shore of a reef in Hawaii in January 2023. The 17-metre-long animal weighed a whopping 60,000kg.

The whale had ingested huge amounts of fishing traps, plastic bags, nets, and other marine litter. It is thought that the items were most likely blocking the animal’s stomach contributing to its death.

### Northern Irish litter

Marine litter from around the world has washed up on Dumfries and Galloway’s beaches. A project

called the Solway Firth Partnership aims to identify where beach litter may originate from. Items found include a buoy with markings from Guernsey, a lobster bait jar from Newfoundland and a fishing float covered with goose barnacles suggesting time spent in tropical seas.

Plastic finds from Northern Ireland include a milk crate, and a street sign from Belfast. A balloon with branding from Queen’s Arcade, Belfast and a sliotar ball, used in hurling, has also washed up perhaps suggesting it has travelled from Ireland to the Scottish coast.

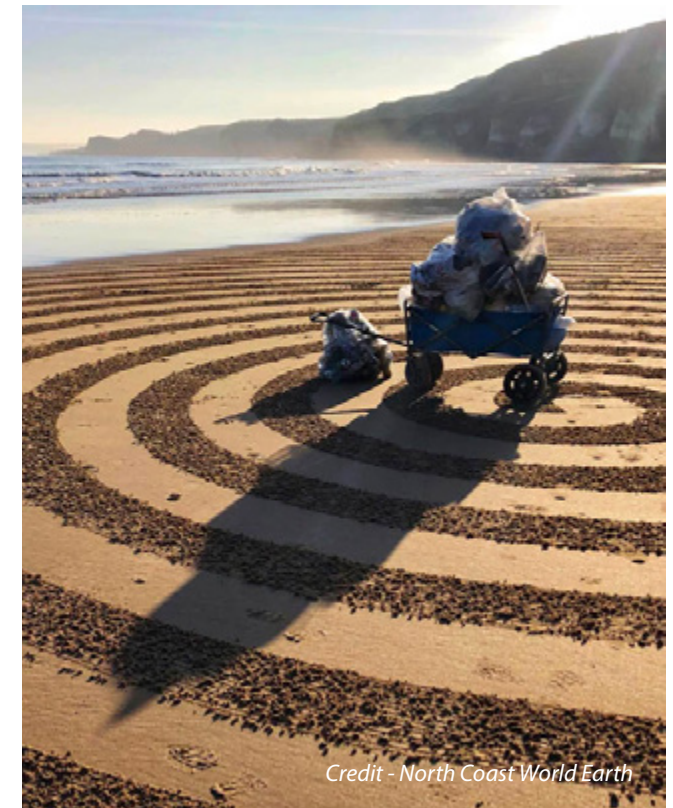
Although it can be hard to tell how long litter has been around, a recent find of an advertising poster for a 2015 Dublin panto underlines litter’s potential persistence.

### Art Inspires Action

North Coast World Earth is an educational and environmental awareness campaign in Causeway Coast and Glens. Their ‘eco art campaigns’ use sand art to raise awareness and inspire change.

Individuals, families, community groups, clubs, businesses, and schools can register to complete a litter survey. Data is then submitted via an app and then shared on the members page of their website.

So far 626 coastal and inland litter surveys, have been completed with 2.1k of litter collected in total.



*Credit - North Coast World Earth*

Find out how to get involved at: [www.northcoastworldearth.org](http://www.northcoastworldearth.org)



# Marine Litter Watch



## Catherine Hunter from Mid and East Antrim Council updates us on a new-anti-littering educational video project.

### Project Overview

We applied to the Marine Litter Capital Grant fund to create an anti-littering video. The 'star' of the video will be a plastic bottle, from point of purchase, as litter dropped and its journey to a local beach via a watercourse.

The plastic bottle will have its own personality creating an emotive response. The video will conclude as the bottle is recycled.

The video will be filmed at various locations in the Borough with the marine shots at Ballygally Beach near Larne. The finished video will be published on the Council's website and social media and distributed to schools and community groups too.

### Why are we doing this?

We have seen a marked increase in litter at our beaches over the last 2 years, especially during COVID lockdowns and peak tourism seasons.

Building on the Council's other anti-littering innovations, the aim of the video is to educate and raise awareness of the impacts of littering on the natural and marine environment. The end result of decreased litter will engender civic pride and promote health and wellbeing of communities.

Not only will this be educational in our borough, but we can share a non-branded version to other NI councils for use at a regional level.





# Marine Litter Watch



## Ocean Literacy Survey

by Jenny Benham, Marine and Fisheries Division, DAERA

DAERA commissioned the first Ocean Literacy survey in Northern Ireland as part a wider UK project in Understanding Ocean Literacy and Ocean Climate-related Behaviour Change.

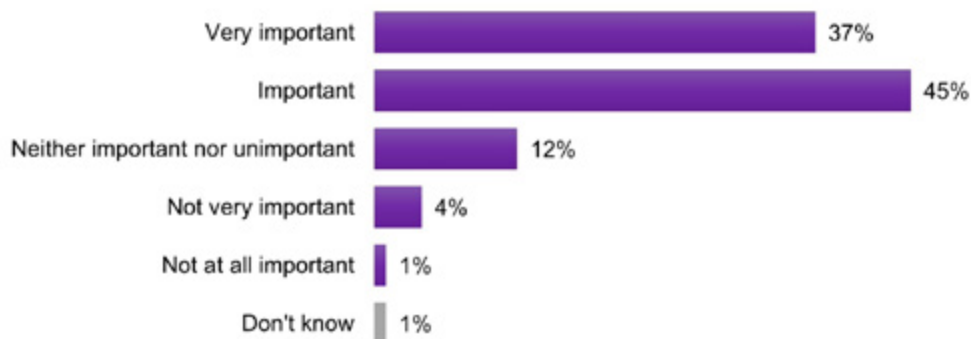
1081 people aged over 16 completed the online survey. It explored public awareness, knowledge, attitudes, communication, activism and behaviours related to the marine environment.

There were some encouraging insights as regards marine environment awareness and behaviours towards marine litter.

### Marine Environment Awareness and Actions

Eighty-two percent of respondents said that protecting the marine environment was very important or important to them personally.

Figure 13: Importance of protecting the marine environment (weighted %)

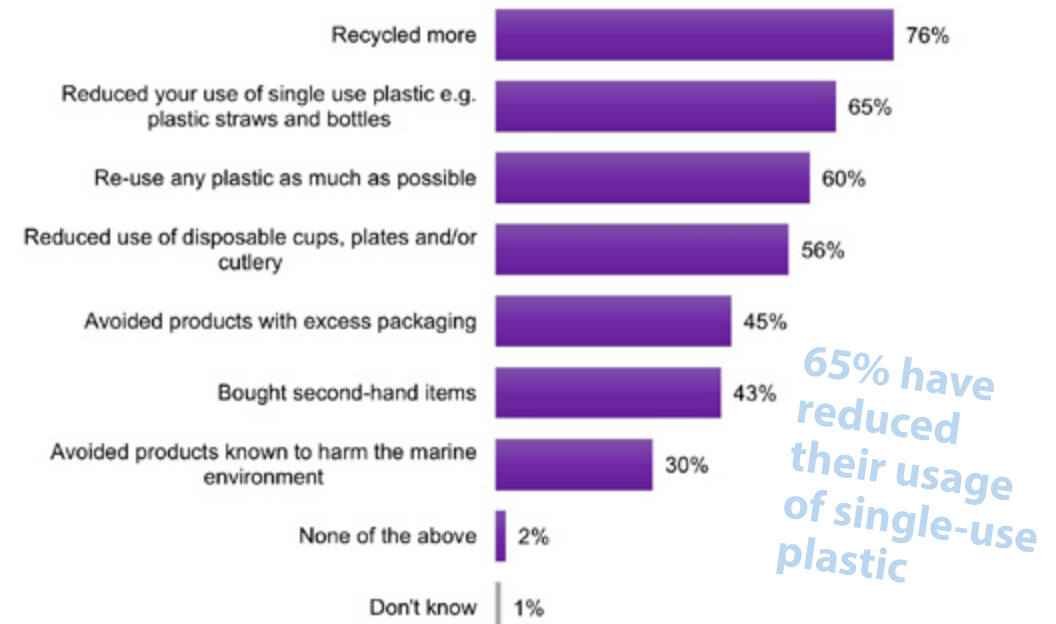


Respondents were asked what they thought posed the most threat to the marine environment in Northern Ireland. Marine litter and plastic pollution was the pressure most commonly chosen (59%).

In line with recognition of the challenge of plastic pollution, respondents said they had engaged in activities related to purchases and use of packaging in the last 12 months. Seventy-six percent were recycling more and sixty-five percent had reduced their usage of single-use plastic.

Similar refusing, reusing and reducing actions also scored quite highly (Figure 24).

Figure 24: Activities done in the last 12 months in relation to purchases and use of packaging (weighted %)

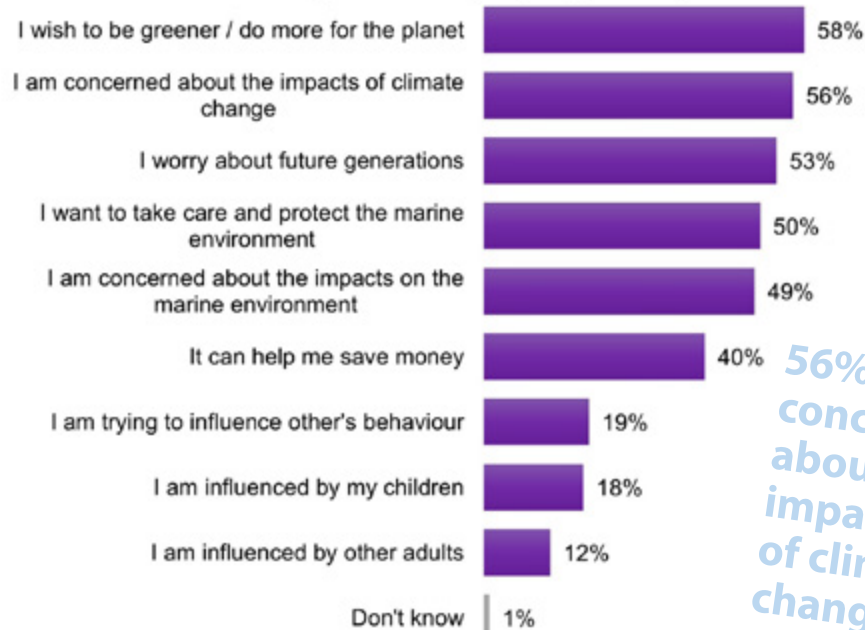


# Marine Litter Watch



Not only have people already made changes, but responses suggested there is strong motivation for making or planning lifestyle changes to help protect the marine environment. Some of the reasons for this include wanting to do more for the planet alongside a desire to protect future generations.

**Figure 22: Reasons for making or planning to make changes to lifestyle (weighted %)**



*56% are concerned about the impacts of climate change*

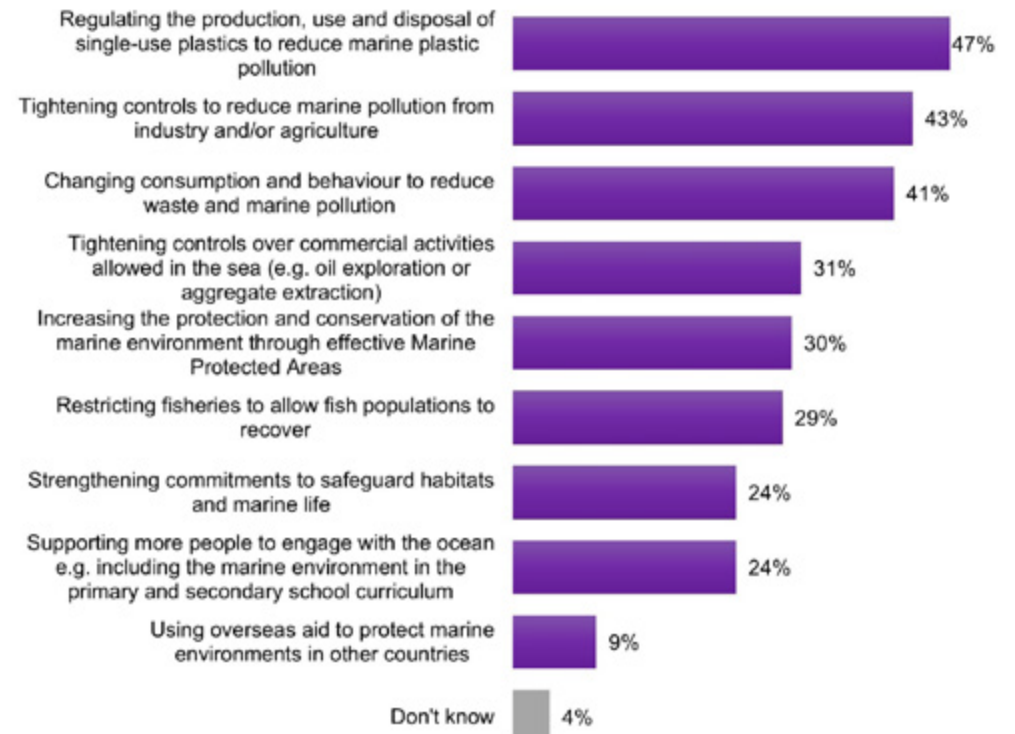
## Responding to threats to the marine environment

Thinking of potential actions, respondents were asked to select from a range of activities the three most important to address marine issues.

Regulating the production, use and disposal of single-use plastics to reduce marine plastic pollution was considered the most important activity. This was closely followed by tightening controls to reduce pollution from industry/agriculture and changing consumption and behaviour.

**47% see regulating the production, use and disposal of single-use plastics was most important to address marine issues**

**Figure 14: Most important activities to address marine issues (weighted %)**



In terms of marine litter, it is promising that there seems to be public recognition of the current issues and potential solutions. The Ocean Literacy survey gives an optimistic picture of the desire to protect the marine environment and possibilities for the future. You can view the Ocean Literacy Headline Report in full here <https://www.daera-ni.gov.uk/publications/ni-ocean-literacy-survey>

# Marine Litter Watch



## How we are tackling Cigarette butt litter

by Pamela Hanna, Armagh City, Banbridge & Craigavon Borough Council

Cigarette litter is an ongoing issue and we understand the impact it has on our environment. They are the main form of litter on our streets, and it takes considerable use of Council resources to continually clean up the mess left behind.

As you know cigarette filters contain plastic, which takes a long time to break down in the environment. Very often these end up in the water and are harmful to our marine and freshwater fish. This is why we continue to find ways to publicise the harm of cigarette litter and introduce ways to assist the public when out and about in the Borough.

**Ballot Bins** - These bins are an excellent way to engage with the public who smoke outdoors. The bins use the nudge behaviour change approach and is a great way to get people engaged in putting cigarette butts into a bin rather than just discarding them.

We are always looking for new, innovative ways

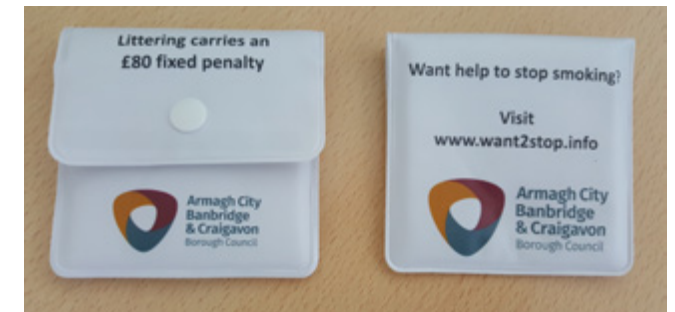


to engage with our residents and visitors whilst addressing the important issue of litter and the ballot bins allow us to do this. We have a number across the Borough and these are well used.

**Signage** – We have generic litter signage which we install in littering hotspots. As partners with Keep NI Beautiful we are able to avail of their imagery and chose to have billboards displaying the cigarette litter message back in September 2022.



**Pocket Ashtrays** - We have free reusable pouches to give away for easy disposal of cigarette litter when out and about. This encourages responsible disposal and contributes to our ongoing pledge to reduce climate change.



**Enforcement** - Council Environmental Wardens, along with WISE Environmental Officers, regularly give out Fixed Penalty Notices for cigarette litter offences.



Photo Credits - Armagh City, Banbridge & Craigavon Borough Council



# Marine Litter Watch

## Change for Good

By Michelle McGill, Head of Art and Design, Loreto College, Coleraine

Students at Loreto College in Coleraine have been putting their creative skills to good use. Teachers Michelle McGill and Amy O'Brien have inspired their students to highlight environmental issues. Encouraged to be Agents of Social Change, they have created a number of artworks designed to highlight the issue of Marine litter.

Key Stage 3 students used waste to make marine-themed sculptures. The eco Elmer even became part of a touring exhibition travelling to Belfast, Ballymena and Enniskillen.

The students also installed a series of drain art stickers, in conjunction with North Coast World Earth. These encourage us to bin our litter, preventing it ending up in drains and getting washed out to sea. Well done to all the students for their hard work!

Photo Credits - Michelle McGill





## What's Coming Up

Rathlin Forage	14th May - 22nd July 2023 (various dates)	<a href="https://nineglensadventuretours.co.uk/walking-tour/rathlin-forage">https://nineglensadventuretours.co.uk/walking-tour/rathlin-forage</a>
Lady of the Lake Festival	7th - 16th July 2023	<a href="https://northernirelandholidays.co.uk/whats-on-in-northern-ireland-annual-events-calendar/#Jul">https://northernirelandholidays.co.uk/whats-on-in-northern-ireland-annual-events-calendar/#Jul</a>
Portstewart Red Sails Festival	23rd - 29th July 2023	<a href="https://www.visitcausewaycoastandglens.com/whats-on/searchresults?sr=1&amp;rd=on&amp;anydate=yes&amp;name=red+sails">https://www.visitcausewaycoastandglens.com/whats-on/searchresults?sr=1&amp;rd=on&amp;anydate=yes&amp;name=red+sails</a>
"SkiffieFest" – Strangford Lough Watersports Festival	5th - 6th August 2023	<a href="https://www.visitmournemountains.co.uk/whats-on/strangford-lough-watersports-festival-skiffiefest-p793941">https://www.visitmournemountains.co.uk/whats-on/strangford-lough-watersports-festival-skiffiefest-p793941</a>
Ould Lammas Fair	24th - 27th August 2023	<a href="https://www.visitcausewaycoastandglens.com/Portstewart-Red-Sails-Festival-Portstewart-Causeway-Coast-Glens">Portstewart Red Sails Festival - Portstewart - Causeway Coast &amp; Glens (visitcausewaycoastandglens.com)</a>
24Hr Charity Hydrobike Cycle, Fermanagh	8th - 9th September 2023	<a href="https://www.fermanaghlakelands.com/whats-on/24hr-charity-hydrobike-cycle-p826201">https://www.fermanaghlakelands.com/whats-on/24hr-charity-hydrobike-cycle-p826201</a>
Life Around the Lough Workshop, Antrim Castle Gardens	9th September 2023	<a href="https://antrimandnewtownabbey.gov.uk/events/2023/september/life-around-the-lough-workshop/">https://antrimandnewtownabbey.gov.uk/events/2023/september/life-around-the-lough-workshop/</a>
Great British Beach Clean	15th - 24th September 2023	<a href="https://www.mcsuk.org/what-you-can-do/join-a-beach-clean/great-british-beach-clean/">https://www.mcsuk.org/what-you-can-do/join-a-beach-clean/great-british-beach-clean/</a>
Bushmills Salmon and Whiskey Festival	7th - 8th October 2023	<a href="https://northernirelandholidays.co.uk/whats-on-in-northern-ireland-annual-events-calendar/#Oct">https://northernirelandholidays.co.uk/whats-on-in-northern-ireland-annual-events-calendar/#Oct</a>

# Marine Litter Watch



## Produced by:

Department of Agriculture, Environment and Rural Affairs  
Klondyke Building,  
Cromac Avenue,  
Belfast,  
BT7 2JA

For further information on the work of the DAERA Marine and Fisheries Division,  
or to submit an article for inclusion in the Marine Litter Watch Newsletter,  
please contact Jenny Benham.

E-mail: [Jenny.Benham@daera-ni.gov.uk](mailto:Jenny.Benham@daera-ni.gov.uk)