

Marine Litter Report 2023

KEEP
NORTHERN
IRELAND
BEAUTIFUL



MARINE
SURVEY





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Foreword

Eleven years ago, we set off on a journey with the Department of Agriculture, Environment and Rural Affairs: to record the amount of Marine Litter that is plaguing our beaches and waterways in Northern Ireland.

This report shows that we have come a long way in advancing the debate around our waste problem, but sadly, we have some distance still to travel in preventing littering.

Clearly we need to have an honest conversation about our use of plastics. The figures in this report clearly highlight the problem with 91% of the litter found on our beaches made of plastic. This is the highest percentage since we began surveying in 2012.

These plastics include a mix of larger and more visible items such as plastic bottles, but also microplastics. These are incredibly harmful to our marine wildlife. They wreck natural habitats and pose a real risk to the lives of animals.

This damage is caused very simply because there are a minority of people in society who feel it is OK to litter. As we visit the coast, most of us will be responsible and clean

up after ourselves, but others will just leave their litter for someone else to deal with. Sadly, for our planet, the victims of this are our wildlife.

For over a decade now, this report has gone in-depth in exposing the numerous dimensions of marine litter in Northern Ireland. We take pride in this research as a way to establish a benchmark for all of us to understand the true scale of the problem.

What we want to see is this research being used to achieve results. That is why we have placed a focus on how you can help make a difference. Whilst the marine litter problem has many different dimensions, there are just as many different avenues available for us all to be part of the fightback.

You can also read some of our recommendations for government, businesses and individuals. I have always believed that if we are going to go far, we have to go together. Through legislation, we can have proper targets to work towards, which leads to new approaches from businesses, which then leads to wider behaviour change from the public.

Sometimes change is hard to believe in, until it happens. Over the last decade, this very report has charted the positive and negative trends in our marine litter. This report is critical because it informs our conversation and ensures that policy-makers have clear robust information on which to base legislative and policy decision making. And whilst

in some respects this problem has worsened, I am firmly of the belief that there has never been a more exciting time to be working on the environment.

Why am I so excited? It really is because of the rising awareness of the issue amongst so many dedicated volunteers I meet who want to make a difference. For that I sincerely thank you. I am also excited by the businesses that are keen to know just how they can reduce their negative environmental impacts.

It is my hope that this report can help steer Northern Ireland towards a better future in the next decade. The great research that has been done over the past eleven years has made a difference.

Let's keep working together and really reduce the amount of plastic that is used.

Sinead Murray

LOCAL ENVIRONMENTAL QUALITY MANAGER.
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Executive Summary

This report summarises the key findings on marine litter observed on twelve reference beaches around Northern Ireland in 2022.

Data has been collected since 2012 using the internationally recognised OSPAR methodology¹.

Marine litter continues to be an issue of global concern. The amount of plastic in the oceans has been estimated to be 75-199 million tonnes². Moreover, emissions of plastic waste into aquatic ecosystems are projected to nearly triple by 2040 without meaningful action³. In 2010, the OSPAR protocol was adopted in the North East Atlantic area to assess the impact of marine litter⁴.

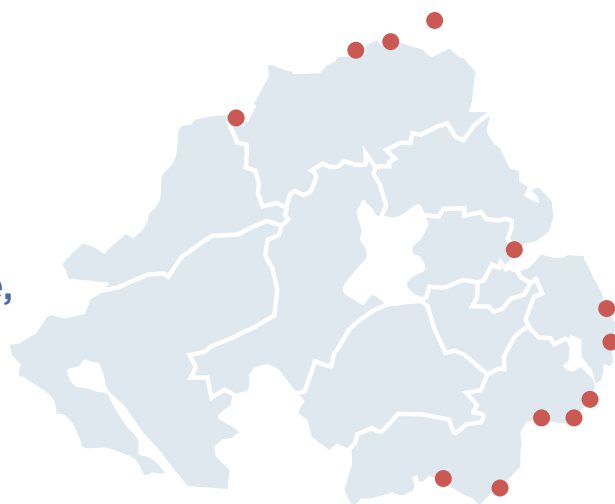
This report details the amount of litter observed on 12 reference beaches in Northern Ireland during the 2023 calendar year. This year's report is based on a reduced number of surveys totaling 43 (previous reports were based on 48 surveys). This year's report shows an increase in the overall number of items of litter recorded, when compared with last year, up from 18,994 to 22,812. The average number of items per 100m is also up from 364 to 513 in 2023. This year saw 91% of the litter on our beaches was made from plastic – this is the highest percentage since our records began in 2012.



Key Facts from 2023

513

items of litter recorded, on average, per 100m of beach surveyed



22,812

items of litter were recorded in 2023



91%

of the litter on our beaches was made of plastic, the highest since records began in 2012.

¹ OSPAR Methodology

² UN Environment Programme, From Pollution to Solution, A Global Assessment of Marine Litter and Plastic Pollution. P3 (2021).

³ OSPAR Commission, 2010 Guideline for Monitoring Marine Litter on the Beaches in the OSPAR Maritime Area. OSPAR Commission (2010)

⁴ [About | OSPAR Commission](#)

Note: Any small discrepancies between data sets in this report will be due to rounding of figures.



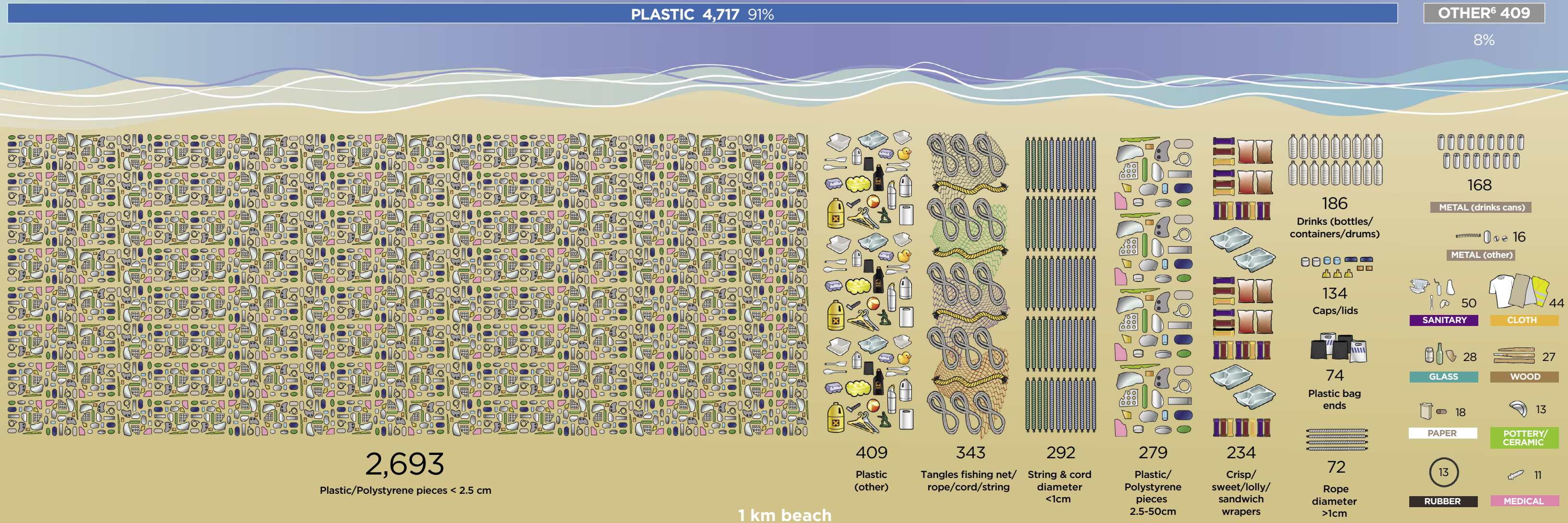
Overview

In 2012, we reported an average 4,033 items of litter per km of beach surveyed. Eleven years on, and that figure is 5,130. The graphic below illustrates the composition of this average figure.

The amount of litter per kilometre is calculated by counting the litter in a 100 metre stretch and extrapolating by ten. The figure below is a visual representation of the average amount of each litter type found on our beaches in 2023.

5,130

Items of litter per km of beach surveyed in 2023⁵



⁵ This figure varies slightly from the cumulative total in the graphic below due to it being made up of average figures that have been rounded up or down. ⁶ There were an additional 23 uncategorised items not depicted in this graphic.



What is the Marine Litter Survey?

Keep Northern Ireland Beautiful has been recording marine litter in Northern Ireland for the past ten years.

We use a survey method designed by the OSPAR Commission to standardise the monitoring of litter on beaches across countries bordering the North Atlantic.

Currently 12 beaches are being surveyed in Northern Ireland ([see page 9](#)).

OSPAR is the mechanism by which 15 governments and the EU cooperate to protect the marine environment of the North-East Atlantic. The 15 Governments are Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom⁴.

OSPAR's strategic marine litter objective, shared by Keep Northern Ireland Beautiful, is to "Prevent inputs of and significantly reduce marine litter, including microplastics, in the marine environment to reach levels that do not cause adverse impacts to the marine and coastal environment with the ultimate aim of eliminating inputs of litter."⁷

You can view the data for all OSPAR sites by visiting <https://odims.ospar.org>

The methodology

The OSPAR Commission designed the marine litter survey guidelines to assist countries with recording and tackling the marine litter problem on both a local and North East Atlantic level.

The information collected from each beach is fed into a central database which shows trends in the types of litter found in the marine environment. Surveyors record all litter found on the beach under different categories to help describe the different groups and items of litter observed.

When selecting beaches to be surveyed the following criteria were used. The beach must:

- Be composed of sand or gravel and exposed to the open sea;
- Be accessible to surveyors all year round;
- Be accessible for ease of marine litter removal;
- Be a minimum length of 100 metres and if possible over;
- 1 kilometre in length;
- Be free of 'buildings' all year round; ideally not be subject to any other litter collection activities

Two sampling units are used to measure a fixed section of the beach between the water's edge and the back of the beach.

These units are:

100 metres: for identifying all marine litter items;

1 kilometre: for identifying objects generally larger than 50 centimetres.

The survey periods are as follows:

- Winter: mid-December to mid-January
- Spring: April
- Summer: mid-June to mid-July
- Autumn: mid-September to mid-October

To ensure that the marine litter being recorded during each of the surveys isn't duplicated, the survey beaches are cleaned within two weeks of the survey.

Once all data has been collected, it is collated into one form and uploaded to the OSPAR database.

"Help us develop a deeper understanding of the problem and, therefore, generate the necessary ideas to tackle it."

Sinead Murray

LOCAL ENVIRONMENTAL QUALITY MANAGER
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⁷ <https://www.ospar.org/work-areas/eiha/marine-litter/regional-action-plan>



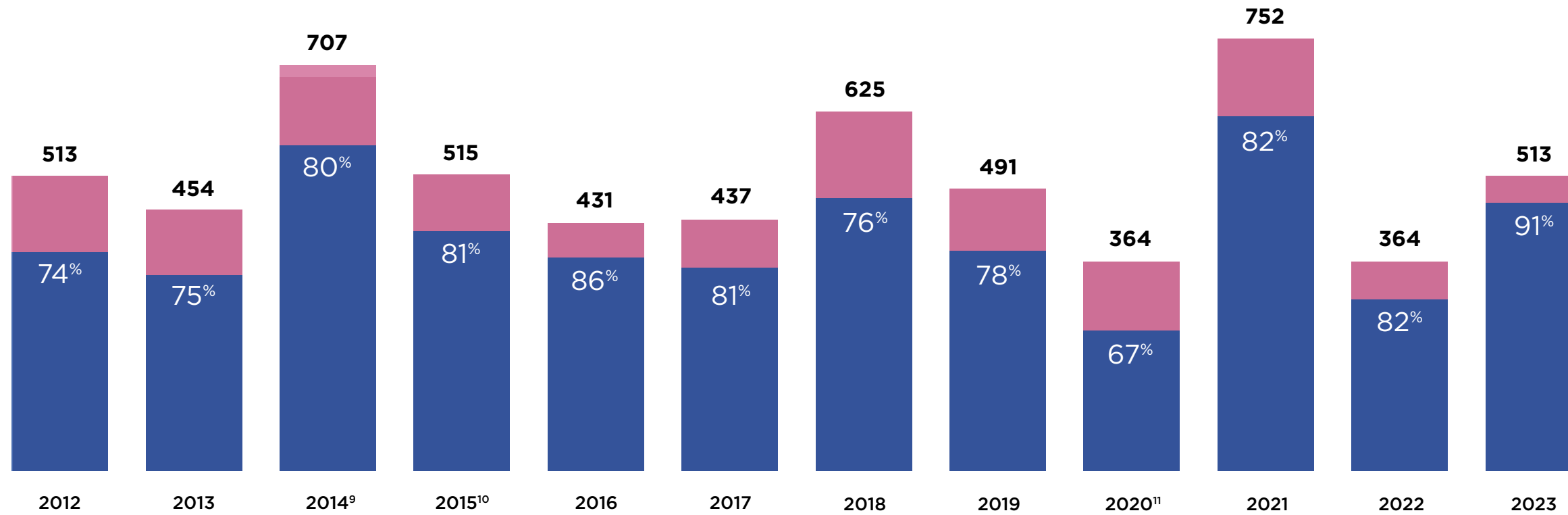
Then and Now: The Plastic Problem

In 2023, plastic accounted for an overwhelming 91% of litter recorded on our beaches.

This is up from 82% in 2022 and 2021. While perhaps not surprising, this is the highest proportion of plastic litter we've recorded to date.

Looking back at the figures since these records began, we can see the broad upward trend in the proportion of plastic litter from 74% in 2012 to 91% in 2023.

Plastic litter is a serious cause for concern, not least because it can take centuries to break down. Around the world, more than one million birds and over 100,000 sea mammals and turtles die every year from eating or getting tangled in plastic waste⁸.



Key
■ OTHER
■ PLASTIC

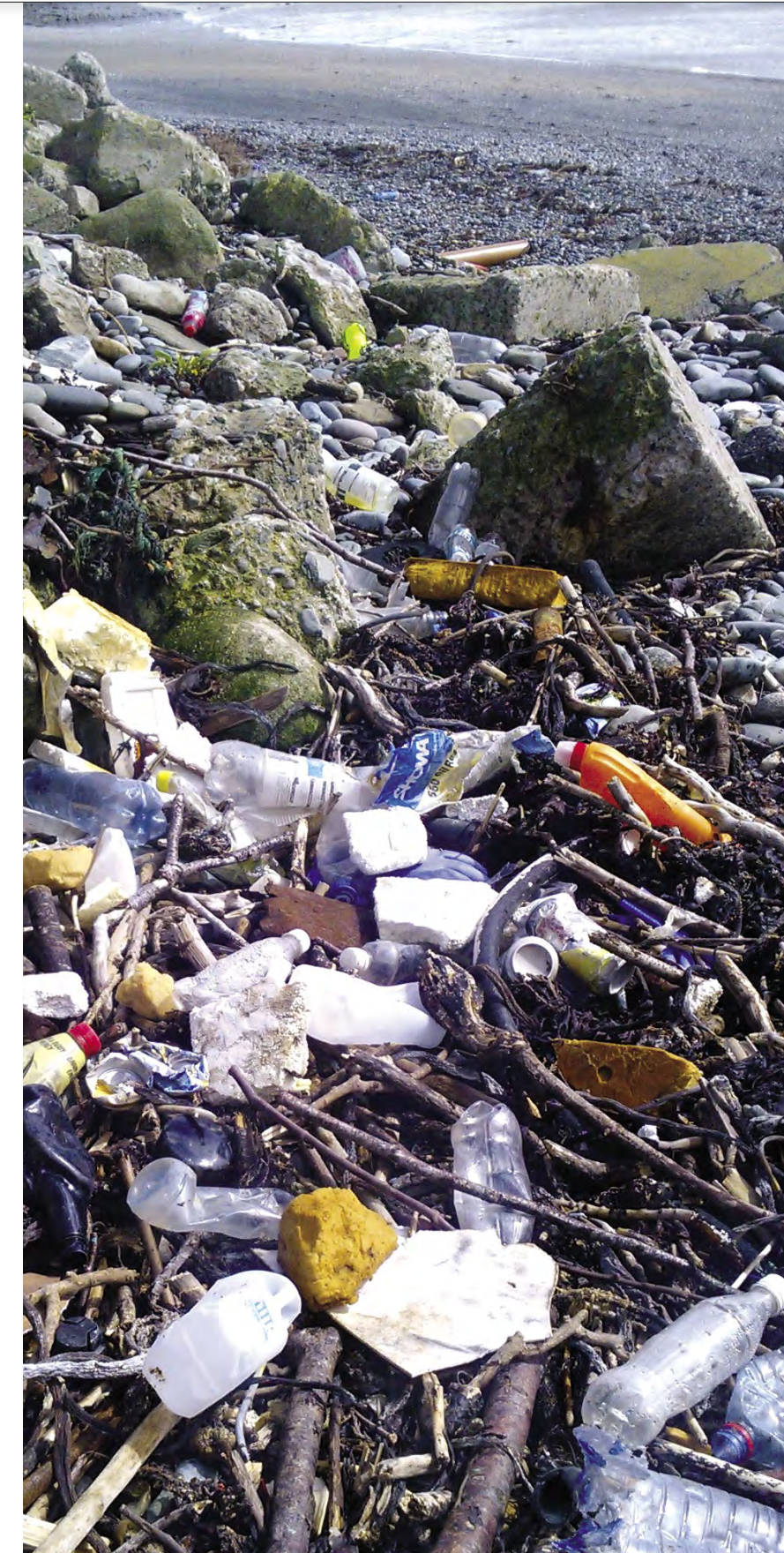
Bar chart shows mean items of litter per 100 metres of beach surveyed.

⁸ Next steps to tackle plastic waste – GOV.UK (www.gov.uk)

⁹ One off events, such as the winter storms of 2014, can skew the data. It can also be influenced by very good weather, or if there has been a recent clean up.

¹⁰ Surveys were not carried out in Northern Ireland during the period Spring–Autumn 2015.

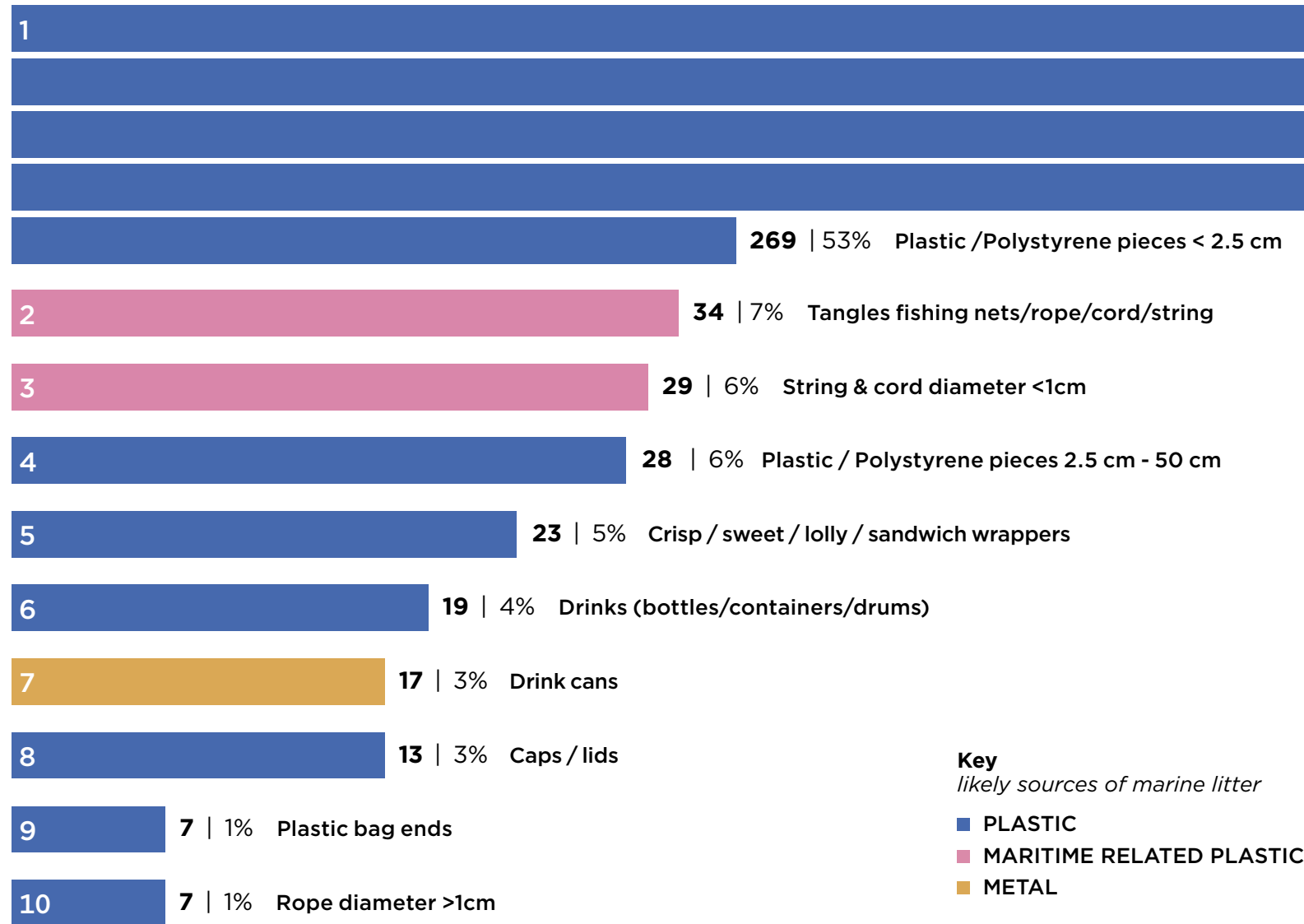
¹¹ Surveys could not be carried out in Northern Ireland during the period Spring 2020 due to COVID-19 restrictions in line with Public Health guidelines.





2023 Terrible Ten

Plastic continues to dominate the most common items found on the survey beaches, whether in the form of single-use plastics, such as food and drinks containers, or maritime related plastic such as string, rope and cord. This graph details the top ten average number of pieces of each type of litter found within each 100m survey.



Key
likely sources of marine litter

- PLASTIC
- MARITIME RELATED PLASTIC
- METAL



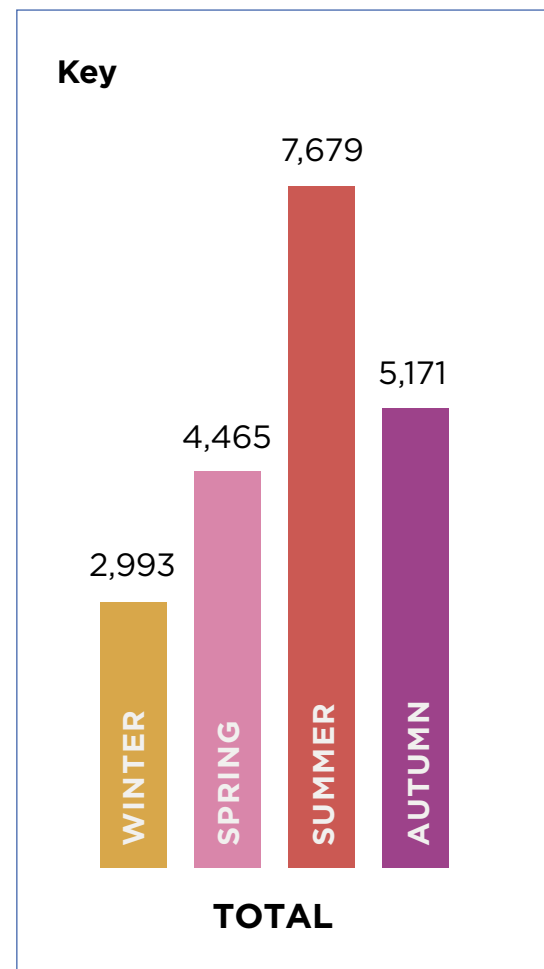
In 2023, The methodology for collecting and recording heavy duty gloves was under review and new data will be available in next years report.



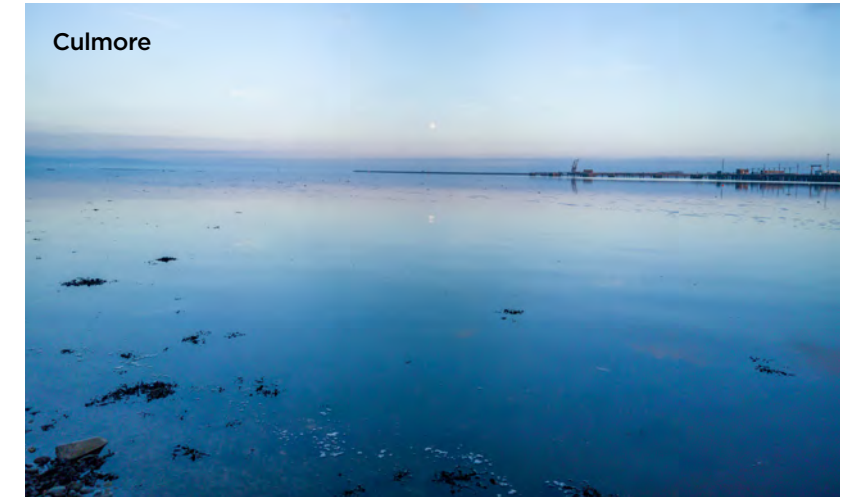
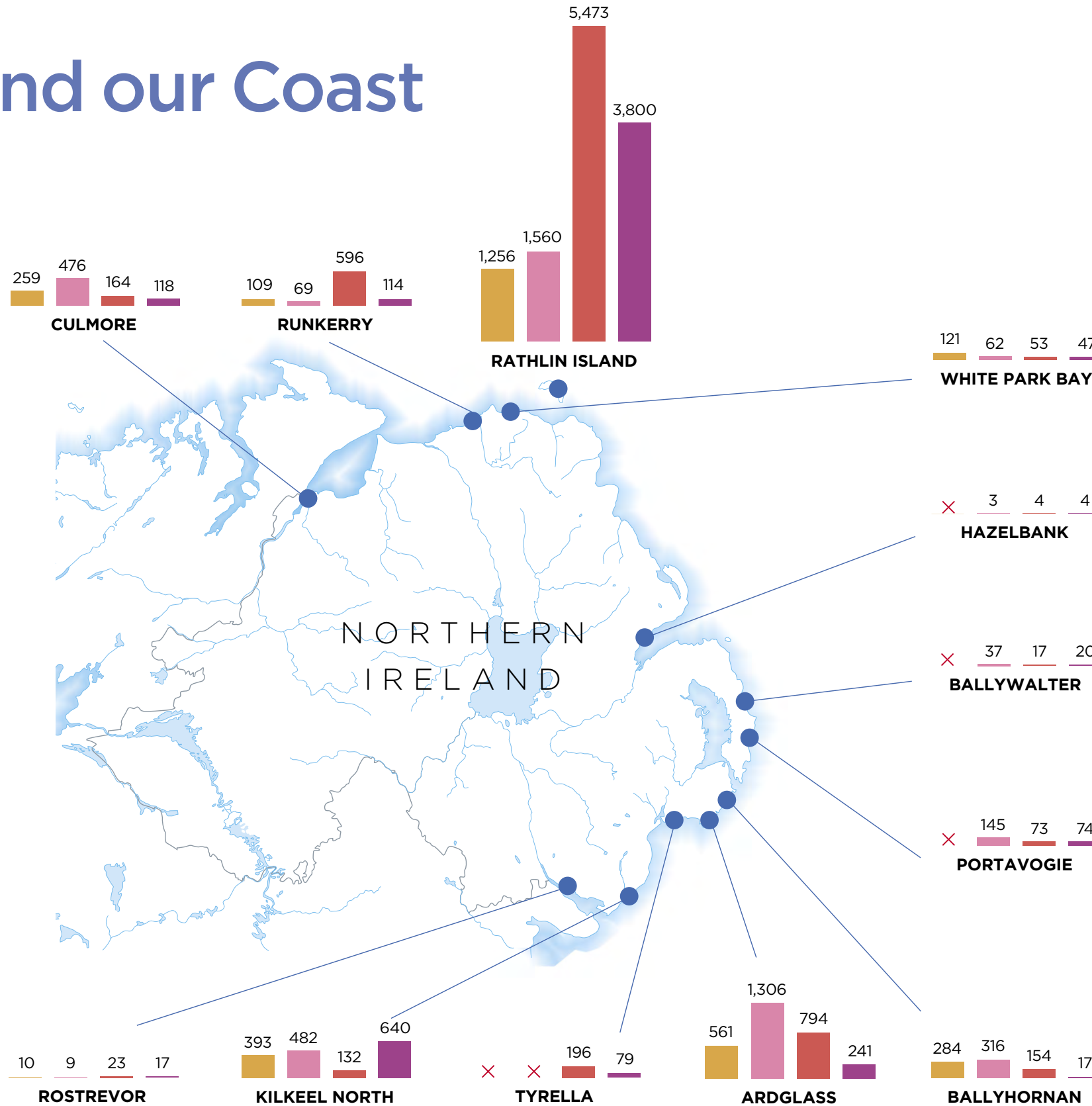


Plastic Around our Coast

These mini graphs depict the seasonal variation in total number of plastic items found around our coast. These include both Single Use Plastic items and also items of fishing gear.



✗ No data held, a total of 43 surveys were recorded and analysed





Council case study



Councils are on the front line of our battle against marine waste. Many of the environmental problems outlined in this report are being tackled by individuals and groups with the support of local councils.

One area in particular we would like to highlight is Mid and East Antrim Borough Council whose long coastline takes in places such as Carrickfergus and Larne with many waterways in between.

We want to highlight some of the great work being done by individuals and groups in the area and provide some much-needed inspiration for anyone else who is determined to make a difference in marine litter.

2 Minute Beach Clean

With support from the Marine Litter Capital Grants Scheme the council secured £3,000 to purchase equipment and '2 Minute Beach Clean Boards' for Brown's Bay and Carnlough South Bay. These boards provide information and equipment for members of the public to complete two-minute cleans on their visit to the beach. This encourages visitors to recognise that the smallest acts can deliver the biggest changes and that everyone doing their bit is important.

What are the Marine Litter Capital Grants?

Operated by Live Here Love Here with funding provided by the Department of Agriculture, Environment and Rural Affairs provides support to organisations and individuals to purchase items that help prevent marine litter. Keep an eye on www.livehereandlovehere.org to find out when applications are open.

Eco-Rangers NI

Established in October 2020, the Eco-Rangers began their life in Larne and now boasts over 100 active members. Their volunteers are making a real difference by collecting more than 100 bags of waste every month which plays an important role in keeping the local area clean.

The Eco-Rangers also have a big focus on marine litter, recognising the importance of keeping our local rivers and beaches clean. They took part in the Live Here Love Here's Healthy Ocean, Healthy Minds campaign by organising public litter picks. The Eco-Rangers cleaned two beaches in Carrickfergus, before moving to nearby streets and green spaces. Overall, they collected 14 bags of litter, helping keep their local area greener and cleaner for everyone to enjoy.

What is Healthy Oceans, Healthy Minds?

Healthy Ocean Healthy Minds is an annual, late-summer celebration of our blue spaces across Northern Ireland.

The campaign promotes the mental health benefits of spending time in blue spaces and encourages taking care of our coastal and inland waterways. From paddle boarding and beach yoga to educational talks, the campaign invites all to dive into our waterways and experience first-hand the mental health benefits that they have to offer.

Councils Make A Difference

We are fortunate to work with many active councils across Northern Ireland who are supporting groups and individuals. Mid and East Antrim has some truly inspirational stories that when added up together are making a real difference to the marine litter problem in Northern Ireland. If you are angry at the state of some of our waterways and beaches some of the examples in this part of the community show, don't get mad, get active.





What Can You do to Make a Difference?

You can make a difference in your local maritime environment in many ways. Live Here Love Here and Keep Northern Ireland Beautiful offer something for everyone who has a passion for making a difference.



Healthy Oceans, Healthy Minds

Healthy Oceans, Healthy Minds is an annual invitation for communities and individuals to come together and reconnect with the full array of our waterways. This programme takes place every summer and Autumn each year with the aim of achieving five goals. 1) Inspiring and re-establishing people's connection with our seas and oceans. 2) Raising awareness of the benefits a healthy marine environment can make to our physical and mental health and wellbeing. 3) Educating people on alternative choices/habits they can adopt that help protect our oceans from further damage and pollution. 4) Motivating and empowering people to take individual positive actions to protect our seas and oceans 5) Celebrating and showcasing groups connecting people to blue spaces.

If you have an idea for an event email: enquiries@livehereandlovehere.org



Adopt A Spot

Adopt A Spot is a community-based volunteer programme focused on minimising litter and promoting civic pride. Families, community groups, youth groups, schools, businesses and sporting associations are all encouraged to help foster a healthier, greener and cleaner Northern Ireland by adopting and caring for a neglected area. By helping improve just one spot at a time, we can help tackle litter that ends up in our waterways and beaches. Your adopted Spot should be safe and accessible for conducting clean-up activities and within a reasonable distance from you.

It is so easy to take part and we have a dedicated team to help you on your journey towards making our environment better. If you want to find out more information about how you could Adopt A Spot email adoptaspot@keepnorthernirelandbeautiful.org



Big Spring Clean & Grant Support

Live Here Love Here regularly runs grant support programmes to help support groups and communities in their fight against our litter problem. Make sure to check out Live Here Love Here's social media channels and website to see what support you or your group could get to help you on your journey.

Live Here Love Here also runs the Big Spring Clean annually, which is open to individuals, schools, groups and businesses from all communities who want to rid their local environment of litter and discarded rubbish. This is a great way to connect with other like-minded groups who want to make a big difference.

Visit www.livehereandlovehere.org



Recommendations

Everyone in society must contribute to solving the monumental marine health battle that we have on our hands. As always, a joined-up approach remains essential. Now that devolved government has returned in Northern Ireland there is much progress to be made.

Government

1. A Deposit Return Scheme

The Republic of Ireland introduced a DRS in February 2024. A similar scheme should be introduced in Northern Ireland working in partnership with other parts of the UK. This will help tackle some of the plastic litter that is being identified as an issue in our marine litter.

2. Introduce More Bans and Levies

Northern Ireland is lagging behind the achievements of neighbouring nations in the UK. We want the Executive

to implement outright bans on low-hanging fruit such as plastic stirrers, straws and cutlery. To build on the unquestionable success of ten years of the Carrier Bag Levy, further levies should be considered on serial plastic offenders like drinks bottles and coffee cups.

3. Play Your Part

Sound and timely environmental policies are what the electorate needs most from their representatives, but actions can also help change existing norms. Why not consider showing leadership in this space by taking part in a local beach clean with a group operating in your constituency? See www.liveherelovehere.org.

Businesses

1. Sign the Global Plastics Treaty

Some of the biggest multinational companies in the world have already signalled their support for this international instrument that aims to stop plastic pollution from ravaging our oceans irreversibly by 2040. Many other enterprises have done the same with policies such as Deposit Return Schemes and Extended Producer Responsibility. Why not do something equally powerful and go on the record with your businesses' support for the Global Plastics Treaty? Add your signature at www.businessforplasticstreaty.org.

2. Donate to a Marine Charity

Protecting endangered species, building bonds between people and the sea, and addressing overfishing problems. Those are just a handful of examples of the amazing and vital services that marine charities perform to preserve and enhance our aquatic ecosystems. If your business has the available funds and you want to show that you are serious about caring for our blue spaces, you might consider donating to fantastic charities such as the Marine Conservation Society, Ocean Conservancy and Sea Shepherd UK.

3. Organise a Litter-Pick

The beach, river or lough that is closest to your business is the perfect place for you to protect our precious waterways. You can register for the event as part of our BIG Spring Clean or Healthy Oceans Healthy Minds campaigns that are highlights of Live Here Love Here each year, and we will help get more members of the public involved in your good work. Visit www.liveherelovehere.org for more information.

Individuals

1. Make a Plastic Promise

In most cases, people have huge power and choice in where they choose to spend their money. Our Plastic Promise sets you the challenges to refuse, reduce and reuse (in that order) common plastic products, and the

best part is that most of these items are regular marine litter culprits. Sign up to cut your plastic footprint at www.liveherelovehere.org/PlasticPromise.

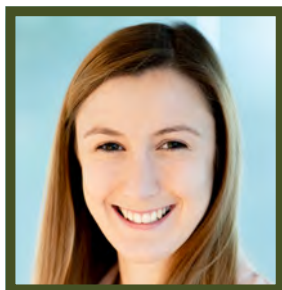
2. Support the Global Plastics Treaty

As noted, the Global Plastics Treaty has enormous potential to offer a lasting legacy in our unsustainable relationship with plastics, particularly the single-use variety. But people power will be crucial in ensuring that the treaty truly delivers the circular economy that we need. You can help maintain the momentum into 2024 by showing your support at www.greenpeace.org/international/act/lets-end-the-age-of-plastic. As noted, the Global Plastics Treaty has enormous potential to offer a lasting legacy in our unsustainable relationship with plastics, particularly the single-use variety. But people power will be crucial in ensuring that the treaty truly delivers the circular economy that we need. You can find out more about the treaty here; www.unep.org/inc-plastic-pollution.



If you would like to learn more about volunteering with Keep Northern Ireland Beautiful or would like to get involved with the marine litter surveys please contact:

White Park Bay, one of the 12 beaches being surveyed in Northern Ireland



Sinead Murray

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