

Clyde Marine Region Topic Sheet Series

Marine Litter



CONCERNS
SOME CONCERNS



TREND
DETERIORATING



BIRDS CAN BECOME ENTANGLED WITH MARINE LITTER. © KEEP SCOTLAND BEAUTIFUL

Background

The Clyde Marine Planning Partnership (CMPP) has developed this set of Topic Sheets to help communicate the findings of the Clyde Marine Region Assessment which is available on our website www.clydemarineplan.scot. The Assessment is used to inform and prioritise the development of policies for the Clyde Marine Plan. If you would like to be kept up-to-date about the development of the marine plan please visit the website and sign up to receive our e-newsletter.

About Marine Litter in the Clyde

Inefficient waste management combined with people deliberately and accidentally dropping litter means that it is found in every estuary, sea and ocean around the world. In Scotland, around 80% of this litter comes from the land; from homes and businesses it is washed down rivers and blown down streets and most of it ends up in the sea.

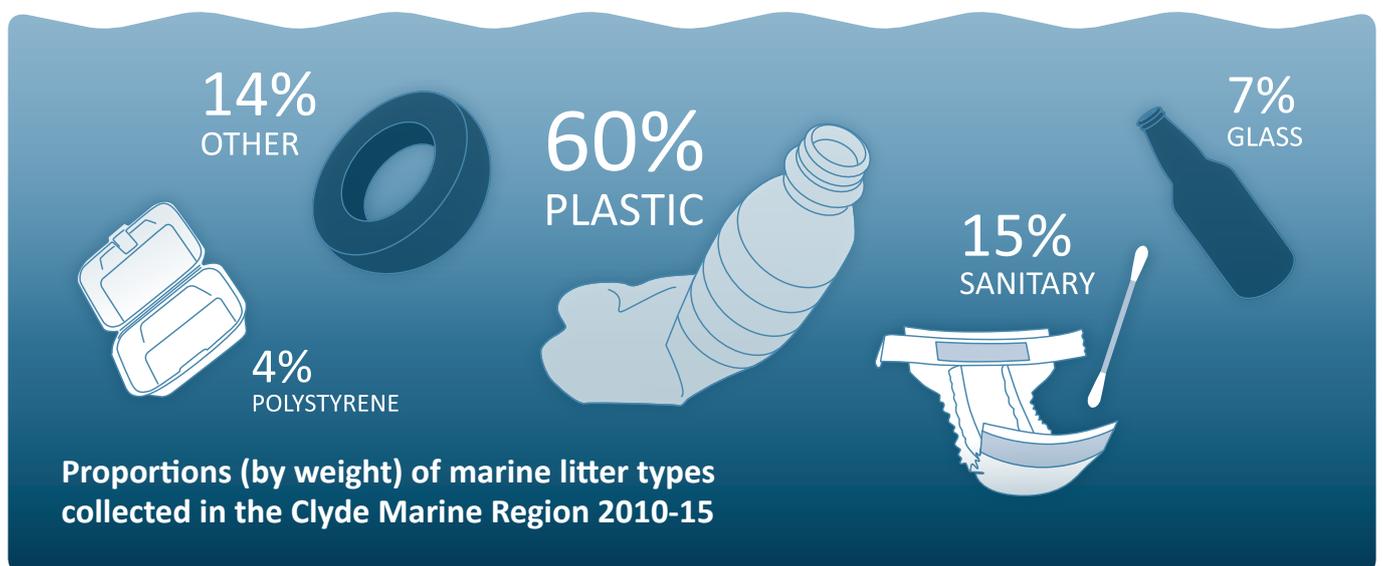
Around 70% of our marine litter is made of plastic. Over time, this slowly breaks down into smaller and smaller pieces, called microplastics, which never go away. Much of this plastic comes from the land including, plastic bags and bottles and food wrappers, as well as waste from industry and agriculture. Some rubbish comes from marine activities such as shipping, fishing and leisure. Sewage related debris (SRD), including

nappies, cotton buds, wet wipes and sanitary towels, is also a major source of rubbish on our beaches.

Natural tidal, wind and wave movements mean that litter aggregates in some areas. In the Clyde Marine Region (CMR) this can be seen at the heads of the sea lochs, in places such as Arrochar and Lochgoilhead, as well as the north shore of the Clyde estuary, for example at Helensburgh. However, litter is a widespread problem throughout the CMR.

So what?

Litter is not only ugly, it is dangerous too. Wildlife can confuse litter for food and eat it. This can cause starvation or wasting if the litter becomes trapped and gathers in intestines and stomach; in one study 91% of dead fulmars surveyed in Scotland had plastic litter in their stomachs. There is evidence that marine life, at all stages of the food chain is consuming microplastics. SRD, in particular, is a public health issue, and it can also spoil people's enjoyment of the beautiful Clyde beaches and shorelines.



Proportions (by weight) of marine litter types collected in the Clyde Marine Region 2010-15

How much!?

Between 2010 and 2015 Marine Conservation Society volunteers alone spent around 2,696 hours cleaning CMR beaches of litter – that is the equivalent of a fulltime job just picking up litter, and still litter keeps washing up on the shore! The costs don't stop there. Fishermen regularly get their nets snagged by marine litter. Each year, throughout the UK, this costs an estimated £11.5m in damages to vessels and gear. Floating litter presents a significant hazard to recreational craft both through collision and entanglement.

Can't we just clean it up like they do on the roads?

Yes, but mechanical cleaning often means taking all the strandline seaweed too. Seaweed is like compost in your garden, providing nutrients and important habitat for invertebrates (bugs) which are the basis of the food chain. No seaweed = no bugs = no birds = unhealthy ecosystem. There are other problems too, such as the cost of disposal, amount and accessibility of the waste – some places are just too difficult to reach.



VOLUNTEER LITTER PICKERS. © CLAIRE PESCOD

What else do I need to know?

Research has shown that since around the 1960s microplastics, which have been shown to have persistent organic pollutants (POPs) concentrations of up to a million times the ambient level of sea water, have been increasing in our oceans. Links have been made between the presence of toxins in the bodies of great shearwaters and other species suggesting that the ingestion of plastics is causing a build-up of these potentially harmful pollutants.

The bad news doesn't stop there – marine litter has also been identified as a good way for non-native species to move about our seas.

Our sewerage systems are designed to cope with day to day waste levels, but when there is heavy rainfall they can exceed capacity and overflow directly to the sea. This is when items, such as cotton buds and wet wipes (and other SRD) get flushed out and end up on our beaches and in the sea – play your part and never flush these things down the loo!

Who does what to reduce marine litter?

No one agency in Scotland has overall responsibility for coordinating efforts to reduce marine litter. Just as a range of regional and national policies create a framework to advise and guide activity on the reduction of marine litter, a network of local, regional and national statutory bodies, charities, NGOs and organisations have a role in litter reduction activities. Some of these bodies deal with litter where it enters water sources or when it ends up on coastal habitats. This includes Scottish Water which has responsibility for maintaining sewerage systems.

The Scottish Government published its Marine Litter Strategy in 2014. The strategy outlines their vision, actions and strategy for dealing with marine litter across Scotland. In the CMR Loch Lomond and the Trossachs National Park as well as the Councils, can have responsibility for keeping public beaches clean; but the frequency and type of beach cleans vary between authorities and the issue is further complicated depending on who owns the beach. Much work on cleaning up CMR marine litter is carried out by volunteers, community groups and charities, such as the Group for Recycling in Argyll and Bute (GRAB) Trust which runs the Beaches & Marine Litter Project across most of the Argyll and Bute area and manages the Argyll and Bute Beach Forum. The Helensburgh East Esplanade Protection Group is thought to be the longest continually running beach clean in the UK, operating since 1995. If you'd like to get involved have a look at the GRAB website or the MCS website for more information and links.

Fishing for Litter (FFL) is a UK wide project which provides fishermen with collection facilities for marine litter caught while at sea. The scheme operates in three harbours in the CMR: Tarbert, Campbeltown and Rothesay; approximately one 11yd³ skip is filled every six weeks – enough to fill 2.5 local swimming pools.

What is being done to help?

The Clyde Assessment scores marine litter at 'some concerns' level and deteriorating. The next step for the Clyde Marine Planning Partnership is to work with partners to develop policies which will support action being taken at a national level and where possible help reduce local problems. Recent measures that have come into place to reduce marine litter include a bottle deposit return scheme in Scotland and a UK-wide ban on micro beads in personal care products.

Where do I find out more?

The Clyde Marine Planning Partnership have worked with the Local Authorities in the Clyde to produce two key documents, 'Marine litter strategy for the Firth of Clyde Step 1: Defining the status quo' and 'Coastal Litter Management Guidelines for Duty Bodies'. Both can be downloaded from www.clydemarineplan.scot

Keep Scotland Beautiful www.keeptoscotlandbeautiful.org

Scottish Marine Litter Strategy www.gov.scot/Topics/marine/marine-environment/ecosystems/cleanseas/litter

Marine Conservation Society www.mcsuk.org/beachwatch

GRAB Trust www.grab.org.uk

Scottish Water www.scottishwater.co.uk/you-and-your-home/your-home/keep-the-water-cycle-running-smoothly

Keep up to date with the latest news from the Clyde Marine Planning Partnership by signing up for our newsletter at www.clydemarineplan.scot and following us on twitter @clydemarineplan. This topic sheet was published February 2018. If you would like to comment on this topic sheet or anything else please email info@clydemarineplan.scot or call 0131 314 6782.

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