

Since the official launch of The Great Nurdle Hunt in May Nurdle HQ has been a hive of activity. Over the summer intrepid Nurdle Hunters from around the Forth and beyond have been scouring the coast and as a result we have now notched up over 100 finds. In Fife thanks to the Fife Countryside and Coastal Trust beach lifeguards eight beaches were carefully monitored for nurdles each day. Keen to help protect our seas, volunteers from Lloyds Bank carried out a nurdle hunt in Kirkcaldy as part of a beach clean event with the Forth Estuary Forum. All of this activity is helping us build up a picture of the extent of the nurdle pollution around our shores, and improving our understanding of why the Forth seems so badly affected. So please do continue to look for nurdles while you are at the beach and share your findings on our website.

FINDS



Nurdles found as high up the Forth as the Scottish Wildlife Trust reserve at Cambus Pools



Large concentrations of nurdles at Hope View, West of North Queensferry



Nurdles on the beautiful Ruby Bay beach, Elie



Nurdles found where the River Avon enters the Forth



Nurdles recovered from Gullane beach after hurricane Bertha

SCIENCE

Much of the science published over the summer about the extent and effects of microplastic pollution makes for worrying reading.

Perhaps the most concerning is the discovery that marine creatures can absorb plastic particles not only through food but via respiration. A laboratory study of shore crabs showed that plastic particles can be taken up by the respiratory system and retained within the gills. The question still remains where those plastics go once inside a creature and how long they persist in the food chain.

A.J.R. Watts et al. Uptake and retention of microplastics by the shore crab *Carcinus maenas*. *Environmental Science & Technology*. Published online June 27, 2014. doi: 10.1021/es501090e.

INDUSTRY

Over the summer we have been in contact with all of the companies we believe handle nurdles around the Forth.

To date our engagement with local industry has been very positive. We are delighted to have had our first sign up to Operation Clean Sweep as a direct result of 'The Great Nurdle Hunt' initiative. In addition we are in active discussion with a number of companies large and small who are keen to make a zero pellet loss policy part of their operating procedures.



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