Helford Notes

Newsletter of the Helford Voluntary Marine Conservation Area *Winter 2017 – Issue 52*



PHOTO Seal pup amid plastic, photo by Sue Sayer

Join the ReFILL Revolution!

n average adults in Cornwall will use an estimated 64 million single use plastic water bottles this year, a shocking figure! With low local recycling rates in our county, and a growing demand from industry to make bottles out of single use plastic, the scale of plastic entering our waste streams is rapidly increasing and too much of this waste is littering our oceans and land.

Plastic is not biodegradable, it will remain in the environment potentially forever. US scientists recently estimated that 8.3 billion tonnes of plastic has been made with 70% of this

total production now in our waste streams. And as we all know, escaped plastic harms wildlife through entrapment and once ingested it finds it ways into our food chain.

ReFILL Cornwall aims to reduce our plastic pollution and litter levels by calling on people to make just one simple change – to choose tap water instead of buying plastic bottled water both at home and out and about.

It is an original concept created by BeachCare (Keep Britain Tidy) and launched with Bude resident, Deb Rosser, in 2014 with support from South West Water. The aim was to encourage people to buy a ReFILL flask and ReFILL it with tap water at various locations in Bude.

It has been a success, reducing plastic usage and raising thousands of pounds from the sale of ReFILL flasks for the 'Friends of Bude Sea Pool'.

The Helford Marine
Conservation Group – part of
the Cornwall Wildlife Trust's
Your Shore Network – is now
getting on board with the
scheme and working with local
businesses to ensure there are
several stations around the
Helford and the Lizard which
are offering free refills and
even selling the ReFILL Cornwall

bottles. Businesses will display a ReFILL Cornwall sticker on their premises, so people know they are welcome to pop in and fill their canteen, plus they will be displayed on the City to Sea ReFILL app which highlights ReFILL locations around the whole of the UK.

Local conservation groups on the Lizard are often carrying out beach cleans, like Cornwall Wildlife Trust, the National Trust or Natural England. Hundreds of tonnes of litter have been removed, which is fantastic news. But we still see thousands of plastic bottles washed-up every year after finding their way into our oceans.

Globally, environmental campaigners are united in the message that we need to reduce our demand for and consumption of throw away plastics, in anyway that we can. For the sake of our beaches – it's time we said no to single use plastic.

Abigail Crosby
Marine Conservation Officer
Cornwall Wildlife Trust



TAP WATER

We have an alternative to bottled water, an alternative that is much cheaper and more regulated. Tap water. ReFill Cornwall makes this alternative easier and more convenient for us to choose when we are on the go. It is such a simple way for us all to play our part in helping to reduce plastic pollution. So do your bit:

- If you are an individual, go and buy yourself a reusable bottle and stop buying single use plastic ones.
- Download the ReFILL app on your phone or tablet, and use it to find your local ReFILL station, or add yourself as a business.
- If you are a business sign up to ReFILL Cornwall by contacting the Helford Marine Conservation Group http://helfordmarineconservation.co.uk

Supporters of ReFILL











Easterly Beastly's

The dynamics of a Helford storm.

he North Atlantic is a fierce beast during the winter months. Vast, gyrating low pressure systems, formed by instabilities in the jet stream, are catapulted like Frisbees at the coast of Europe – bringing with them intense wind, beating rain and crumbling, wind-swept storm swells.

From time to time, a region of high pressure lingering over the UK causes these storms to swing south, and make landfall on the west coast of France. Because the air-flow of these systems is cyclonic (anticlockwise), regions north of the storms track typically experience strong southeasterly's backing to northeasterly's as the storm passes by to the south.

The 300 mile-or-so stretch of water between the Dover Straits and Rosemullion head offers more than enough fetch to whip up a reasonably sized easterly swell, and when the wind blows from the east for long enough, wave trains of up to 2m in height can be found making their way into Falmouth Bay.

The water colour changes from a deep blue to a chocolatey brown as mud and silt is whipped up from the seabed and into suspension. Fields of kelp are harvested from their rocky habitats and blown westward, intertwined in big, brown, floating rafts.

Strange artefacts of human life, deposited in the sea somewhere along the south coast, can be found washing up at the east facing beaches. A plethora of plastics, rope, household furniture and lost



"The Easterly Beastly's are tempestuous, bringing a contrast of disorder to an otherwise peaceful estuary."

fishing gear – the waste of the English Channel.
Normally these spells of weather are short lived, and after a day or two the winds veer back to the west and serenity is slowly restored.
The low-pressure system that caused the disturbance disperses as it ventures onto the continent of Europe and the easterly wind swell fades away almost as quickly as it was created.

The Easterly Beastly's are tempestuous, bringing a contrast of disorder to an otherwise peaceful estuary. The for runners of the winter season

have already passed, leading the way for a succession of similar storms that will keep on marching through all the way to spring.

By Max Campbell Graduate Oceanographer

The Prisk Cove Annual Shoresearch Survey

olunteers gathered for our annual Cornwall Wildlife Trust Shoresearch Survey down at Prisk Cove in early October. Seaweeds had been very scorched by sunlight early on in the summer when we had a heatwave (seems long ago now!) so they were not so spectacular as they can be. However recorders were pleased to find Giant Goby Gobious gobitus in our walkover survey. Caught and handled by Matt Slater who has a licence to survey for them, fully protected as they are by schedule five of the Wildlife and Countryside Act. Giant Gobies can live up to ten years and grow up to twenty-seven cm long. They often are out sunbathing in



their pool when it is quiet, you may first become aware of them by hearing a large splash as they sense you near the pool and disappear under cover. ■

A happy man with a crab!

– CWT's Matt Slater

Pacific Oyster Monitoring and Removal

ome of may have seen a group of HMCG Volunteers out and about on the river doing something that at first sight may not seem to be conservation minded! This is

the removal of the non-native and invasive Pacific Oyster Magallana gigas.

Left to their own devices these Oysters can change the character of our mudflats,



Photo by Wiebke Schmidt

shingle beaches and rocky shores if they become established. Natural England have set up a monitoring and removal project for the Fal and Helford Special Area of Conservation and has provided us with equipment to remove as many as we can over the winter months, with permission from The Duchy of Cornwall. Most importantly we have set up four transects in different parts of the Helford to monitor any resettlement so we can judge how effective we are in trying to reduce the population.

If you would like to help, please contact Coordinator Sue Scott. It is quite strenuous work over slippery rocks and not easy to get to them all but strangely satisfying too! ■

Sampling the macrobenthos of Treath

irstly, I must apologise for the title, which must sound like a medieval trilogy to some, but of course it best describes what I sometimes do as a marine life recorder.

Macrobenthos is the collective name for animals that live at the bottom of a water column such as the seabed and are visible to the naked eye. The general rule is that these organisms should be above 1mm in size, but sometimes species as small as 0.5mm are accepted. If like me you go around with a inexpensive, plastic, kitchen sieve then it's about 1mm but smaller animals can be trapped in sediment or may stick to larger animals or algae.

Sampling is necessary because it is impossible to identify most of the smaller organisms in the field, a stereo or compound microscope is needed, along with a degree of literary and internet resources. Even for larger groups such as amphipods, isopods, shrimps

and prawns it may be necessary to identify the species by a series of microscopic features such as the number of hairs on, or segments of a leg. Taking a picture to gain an identification is a start but an image can only really be taken of larger animals in the field and a digital image of a small species often does

correctly without the use of a microscope and because there are far more small species in areas of high biodiversity than large ones. Estuaries, even muddy ones, are often full of life even though life is not always apparent. Macrobenthos includes most of the main marine groups of animals, and

"Of course to conserve anything you have to know it's there in the first place, which is why sampling, record keeping and communication is so important."

not provide the resolution to resolve any issues there might be in trying to identify the species at a later date.

What has to be realized, is that probably less than 1% of the animals or plants on some shores can be visually identified

on the shore at Treath one might expect to find groups that most people are familiar with such as invertebrates like anemones, polychaete worms, crabs, shrimps, prawns, starfish, sea urchins, molluscs; and vertebrates like sea squirts (tunicates) and fish.



Smaller invertebrates often form the basis of the food chain and are highly important for the species we are more aware of and regularly see, yet less conservation importance is probably attached to them because they largely go unnoticed, this is why the overall protection of habitats is so important because it conserves 'everything', and the reason why the VMCA at Helford is so important. Of course to conserve anything you have to know it's there in the first place, which is why sampling, record keeping and communication is so important.