

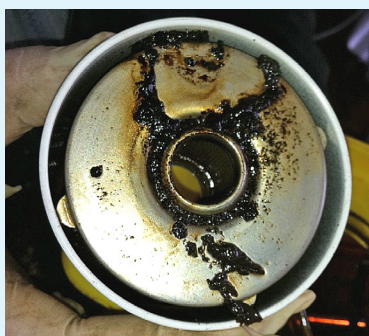
The Diesel Doctor

Last month we looked at why diesel has changed, what has changed, and introduced some of the problems now associated with modern diesel. Continuing the 'Diesel Doctor' series of articles, we examine 'Diesel Bug'.

- Long black stringy slime in your fuel filters?
- Changing fuel filters much more frequently?
- Engine hunting or suddenly stopped?

You have DIESEL BUG...

'Diesel Bug' is the generic name given to microscopic organisms and colonies of bacteria, mould and yeast that get introduced into your tank from the atmosphere or your supplier. These organisms live in water and feed off the diesel, doubling their numbers every 20 minutes, and living for 36 hours, during which time they excrete waste like any living thing, and finally die. The waste and dead bodies then collect on the bottom of the tank, and often the first you know of them, if you are lucky, is the black slime in your filters. Or, if you are unfortunate, the engine starts to falter or stops altogether as the fuel filters block. Worse still, this happens just as the boat



Black, stringy slime in your fuel filter indicates a problem with Diesel Bug.

clears the headland on its way to sea, because after being tied up for a few days the waste and dead bodies are now kicked up from the bottom of the tank as the boat pitches and rolls.

But why is the problem getting worse?

Diesel has changed. The toxic sulphur that used to act as a natural biocide has been removed, in the quest for ever-cleaner exhaust emissions, resulting in Ultra Low Sulphur Diesel (ULSD) introduced in January last year. In addition, as the government legislates for cleaner sustainable fuels, there is now up to 12% Bio Diesel – or more accurately, FAME (Fatty Acid Methyl Ester) – added, to meet these new regulations.

Bio Diesel is made from animal fats, rapeseed, sunflower, soybean, etc, but also spent frying oil from a local chippy, restaurant or pub. It is 30 times more hygroscopic than normal diesel and effectively 'sucks' moisture from the air, which collects as free water in the tank or becomes saturated in the diesel, giving it a 'hazy' appearance. This hazy diesel can have serious consequences for modern common rail diesel injectors.

But what can be done?

The solution is very simple. Get rid of the water.

Fuel tanks should be drained of water with monotonous regularity. If you get rid of the water, you will get rid of the Diesel Bug.

If it is not possible to drain the water from the tank, then fit a water separator. As 60% of fuel on a marine engine is returned to the tank, this will help



Peter Weide, Managing Director, MarShip UK, begins his series on diesel.

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keep the fuel dry. Incidentally, returning fuel also increases the temperature of the day tank, so helping to create that perfect environment for bugs to flourish. The diesel tank is dark and still, has water for oxygen, fuel for food, and is now gently warmed by the returning fuel.

Additionally, if you have seen any symptoms of diesel bug, then a biocide should be added immediately to ensure they are killed ASAP. There are two types of fuel treatment available; one is a biocide, the other is an enzyme. The biocide kills diesel bug, the enzyme just inhibits them, it does not kill them, but more on that subject in the coming months.

500t increase for Celtic Sea herring sentinel fishery



The increase to the important herring sentinel fishery was welcomed by stakeholders.

The views of stakeholders was aired in a public consultation on the Celtic Sea herring sentinel fishery last month, reports **Paucic Gallagher**.

The consultation was launched by the Minister for Agriculture, Food and the Marine, Michael Creed, and led him to approve a 500t increase for the fishery on an exceptional basis for 2016.

The sentinel fishery is an important one for the inshore sector, and is open to all polyvalent vessels under 17m in length. The fishery is confined to the Dunmore Box (ICES Sub-Area VIIaS) and receives 11% of the overall Celtic Sea herring quota.

Overall, the fishery was severely hampered by poor weather in November and December 2015, where a quota of 2,212t was allocated but only 990t was caught.

Under national management arrangements, quotas are allocated within a year and may not be carried forward into the following year in respect of individual boats

or groups of boats within a fishery. Because of the poor landings in 2015, Michael Creed proposed a potential increase of 500t to the sentinel fishery in 2016, on a one-off basis, and the views of stakeholders were sought by way of public consultation. A total of 22 submissions were received, from Fish Producer Organisations and 70 individual signatures from members of the inshore fishing sector. All submissions received were in support of an increase in the allocation to the Celtic Sea sentinel fishery for 2016.

The 2016 Celtic Sea herring adjusted quota is 17,492t, of which 1,880t is available for the sentinel fishery. In January 2016, a three-week sentinel fishery operated with landings of 535t,

leaving 1,345t for the remainder of the year. The increase of 500t, approved by the minister on an exceptional basis for 2016, now provides a quota of 1,845t for the 2016 autumn sentinel fishery.

After the allocation of additional tonnage, NIFF (National Inshore Fisheries Forum) chairman Alex Crowley told *Fishing News*: "Personally, I welcome the announcement; I've previously stated that when we met Michael Creed in June I got a sense of commitment from him towards the inshore sector and the coastal communities it supports. I see this announcement as a demonstration of that commitment, and I am hopeful that it signals a recognition of the role that fisheries like the Celtic Sea sentinel herring fishery play in small coastal economies and their survival."

Trudy McIntyre Chairperson of the South East RIFF (Regional Inshore Fisheries Forum), told *Fishing News*: "This is a very positive result

for the inshore sector. By using the channels that we have in place with the RIFFs and the NIFF, our voice is now being heard.

"I don't think that we could have achieved this a few years ago, and I would like to thank minister Creed and the DAFM (Department Agriculture, Food and Marine) for their part in the process, the producer organisations for supporting the increase for the sentinel fishery – it is great to see that they too are in full support of the inshore sector – but mostly to the inshore sector for working together and bringing this increase into fruition. Overall, it is a positive indication that inshore fishermen and women are being heard loud and clear."

Seafish Economic UK fleet survey

The Seafish annual Economic Survey of the UK Fishing Fleet began last month, with researchers visiting ports around the country to speak to vessel owners and skippers. In the latest blog entry, Seafish Field Researcher, Robbie Waugh, reports from Northern Ireland:

One of the most common topics raised during this year's survey is the influence of weather on fishing performance. On a particularly rainy and blustery week in Northern Ireland, I felt this was a great opportunity to discuss exactly how bad weather affects different types of fishing, and what fishermen can do to remain safe in these conditions.

Adverse weather can affect the financial performance of vessels in three main ways: through reducing the number of days at sea a vessel can fish safely, by damaging gear, particularly static gear left out during storms, and by unfavourable conditions affecting fuel efficiency.

These factors add up each



year, causing great financial loss to the fishing industry, most notably amongst smaller boats, which are more severely restricted in harsh conditions.

Last winter, the industry suffered at the hands of a number of storms, with Desmond, Eva, Gertrude and Frank all hitting within the space of two months. The effects were particularly noticeable in South East Scotland, where many owners of creel boats reported major costs associated with gear loss.

The next edition of *Quay Issues* magazine, due in December, will examine the costs of lost gear and how this could be reduced. Visit our webpage or write to us at quayissues@seafish.co.uk to claim

your free copy today.

While we can't change the infamously unforgiving British weather, we can aim towards safer fishing practice through distributing and promoting the use of personal flotation devices (PFDS), which have already helped to save lives in the UK, as well as providing training and education to promote and teach safe practice in all weather conditions.

I have learned much during this survey, including how badly the fishing industry can be affected by bad weather, so the next time I have a wet and windy summer holiday, I will spare a thought for the fishermen who are out at sea battling the elements all year round.