



Protecting Wildlife: First Channel Island death by PIB

Spring 2013

Over 1000 sea birds have been washed up dead on Dorset, Devon and Cornish beaches in the last few weeks. All the birds found were covered with the chemical Polyisobutene (PIB) which is used to make thousands of everyday products.

On the 22nd April the first Guillemot was washed up on Alderney. Staff at the Alderney Wildlife Trust expect more birds to be washed up on the coastline over the coming weeks.



Activity

What action should be taken to protect our sea bird population?

Read the attached articles and view the suggested videos.

Take part in a video conference - Prepare a set of questions for members of the Alderney Wildlife Trust to answer

LIVE

Teaching Through Nature



22nd April 2013

RSPB says seabird deaths caused by 'worst PIB spill'

The RSPB has said a pollution incident which has killed more than 1,000 birds was the worst case involving polyisobutene (PIB) it was aware of. Peter Exley, from the wildlife charity, told BBC News this was the "worst spill" involving the substance. He said almost 20 species of bird had been washed up on the coasts of Devon, Cornwall and Dorset since 10 April.

The RSPB is calling for PIB, used in ship's engines, to be reclassified. At the moment it can be legally released into the sea under certain conditions.

Mr Exley said: "For this particular chemical it's the worst spill that we've seen." He said he hoped the pollution had "peaked" but that it was not known how many birds still at sea were affected by it.



The Maritime and Coastguard Agency (MCA) said it was trying to determine the source of the latest incident. A previous spill in January affected at least 500 birds along the South West coast. The MCA ended its investigation into that incident, admitting it was "highly unlikely" the ship could be found.

Mr Exley said that in 1994 hundreds of birds were affected in the Irish sea and in 1998, 1,100 birds were covered by the pollutant. In 2010 less than 100 were affected in the North Sea.

'Global responsibility'

More than 90% of the birds covered by the substance in the most recent incident have been guillemots. Several razorbills, gannets, fulmars and puffins have also been found.

The charity said individual reports of 14 other species had also been made, including a Manx shearwater.

Peter Exley, from the RSPB, said: "The UK has 90% of the breeding population of Manx shearwaters, we have a global responsibility."

Mr Exley added that he did not know why so many birds had been affected, but more species would be closer to shore as they were returning to their breeding sites.

LIVE

Teaching Through Nature



17th April 2013

Sticky agent could 'wipe out' generation of seabirds

A generation of seabirds could be wiped out after hundreds have been washed up dead covered in a sticky substance, a wildlife trust has warned. The RSPB said more than 700 birds had been affected in Devon and Cornwall by polyisobutene (PIB) since 10 April. The death toll, just in Cornwall, could reach the "high hundreds", the county's wildlife trust has warned.

The Maritime and Coastguard Agency (MCA) said it was trying to determine the source. In February, the same substance, which is commonly used by ships, affected more than 300 birds in the South West.



Jan Loveridge, of Cornwall Wildlife Trust's Marine Strandings Network, said she feared the incidents "could wipe out a whole generation of seabirds" after hundreds were found dead on Cornish beaches.

Tony Whitehead, of the RSPB, said more than 400 dead birds had been found in Cornwall since 10 April.

'Safe environment'

He said the impact of the pollutant on the next generation would not be apparent until after the breeding season and it was unclear how old most of the birds were. Mr Whitehead said: "The charity fears for the health of seabird colonies following the incident. The birds now need a safe and secure environment to release them back into the wild." He added said during the past week, guillemots, razorbills and gannets had been found covered in the substance, but now terns, an Arctic skua and a great northern diver had also been affected.

Ms Loveridge said: "One bird has been found as far west as Falmouth, but most have been washed up in south east Cornwall." PIB is used by ships to make their engines work more efficiently and can be released legally under certain conditions.

The RSPB has called for it to be reclassified and discharges of the substance to be outlawed.

The MCA said: "We are liaising with partner agencies to find out the extent of the problem and, if at all possible, to determine the source."

LIVE

Teaching Through Nature



15th April 2013

South West sea birds 'probably killed by PIB'

A substance thought to be responsible for the deaths of more than 350 birds is probably the same as that which affected hundreds earlier in the year, experts have said. Scientists from Plymouth University said they were "almost certain" it was polyisobutene (PIB). It is often used by ships to make their engines work more efficiently.

The Maritime and Coastguard Agency (MCA) said it would try to determine the source. Hundreds of birds have been found on beaches in Devon and Cornwall since Wednesday. The RSPB South West is trying to calculate how many birds have been washed up dead, So far tweets from members show that, 40 were found at Par, 157 at Lansallos, near Polperro, 139 at Seaton, in Cornwall and 25 at Wembury. On one section of beach between Donderry and Seaton more than 100 birds, including guillemots and gannets, were found dead on Sunday morning.

Since Wednesday, more than 170 birds have been taken to the RSPCA's centre at West Hatch, near Taunton, but 58 have died. The South Devon Seabird Trust said it was looking after 12 birds. In February, more than 300 birds, mainly guillemots and some razorbills, were rescued after they were covered in the substance, which the MCA said was a "fairly common chemical" carried aboard ships.

Sheryl Murray, the Conservative MP for South East Cornwall, said: "It's tragic not only for the wildlife, but also because we are a tourist constituency. Most of the birds are guillemots, but razorbills, puffins, gannets and cormorants have also been found dead."

Claire Wallerstein, who has been collecting the birds for the community project Rame Peninsula Beach Care, said: "It's really heartbreaking. It's like something from a horror film with bodies strewn across the beach. A few days ago we were picking up live birds, but now nearly all of them are dead."

Jo Barr, from the RSPCA, said some of the birds which were rescued in February, had been found again covered in the sticky substance.

Steve Hussey, from Devon Wildlife Trust, said: "This is something that actually impacts our economy here in the South West. We're very reliant on our natural assets and a clean sea is one of those. If you're making a decision as to where to go on holiday and where to spend your cash and you're seeing pictures of dead birds being washed up, that's not a very good message."

The RSPCA has urged people to contact them, rather than try to help any injured or distressed birds. Dog walkers have been warned to keep their pets away from dead or injured birds.



LIVE

Teaching Through Nature



22nd October 2013

Ships banned from discharging seabird pollutant PIB

A pollutant that killed thousands of birds off the coast of Britain earlier this year will no longer be dumped at sea after a worldwide ban was agreed.

More than 4,000 birds were killed or injured by the chemical polyisobutene (PIB) between Cornwall and Sussex, and on the Channel Islands.



The International Maritime Organisation (IMO) has reclassified PIBs from 2014.

It means ships will only be able to wash their tanks and dispose of all PIB residues while in port.

Until now it has been legal for discharges to be made when vessels wash out their tanks, as long as they are further than 12 nautical miles from the nearest point of land.

'Glue-like' substance

The ban had been recommended by the Maritime and Coastguard Agency (MCA), on behalf of the government, and was welcomed by the RSPB, RSPCA and other wildlife charities.

The decision was taken by the IMO at a meeting in London on Monday.

"There was only one entry for PIBs before," said the IMO's Natasha Brown.

"We are keeping the current category but will create a new entry for the high viscosity PIB, which is the problem chemical if you like, in terms of these discharges."

The substance - a lubricant used to improve the engine performance of ships - was found on seabirds, mainly guillemots, in two separate instances between January and May.

In the sea, high viscosity PIB becomes "glue-like", covering birds and restricting their movements and ability to feed, causing them to eventually die from hypothermia or starvation.





In August, the MCA said it had been unable to trace the vessel the contamination spill had come from and closed its investigation.

Adam Grogan, RSPCA senior wildlife scientist, said: "Our staff worked around the clock washing and treating these poor birds in January and April and it was heartbreaking seeing the pitiful state they were in.

"Hopefully this will help stop incidents like these happening again, and save wildlife from suffering and dying like this in the future."

Alec Taylor, from RSPB, said wildlife charities worked hard for the ban, with support from several south coast MPs.

"But the huge support we received from members of the public, many of whom experienced the effects of this pollution first hand as they walked the beaches, was perhaps the clinching factor in achieving such a quick decision to prevent discharges of harmful PIBs," he added.

The IMO is the United Nations agency responsible for the safety and security of shipping and the prevention of marine pollution by ships. It consists of 170 member states, of which the UK is one.

The organisation confirmed a number of other European countries had also been investigating the discharge of "high viscosity products" by chemical tankers, including PIBs.



Protecting Wildlife: First Channel Island death by PIB

What do these words mean?

The words in the red boxes appear in the BBC News reports. Match each word with a word meaning the same in one of blue boxes.

artificial

farm

Source

contamination

Generation

Plantation

Synthetic

Starting place

type

cohort

Pollution

material

matter

Rubber

Spill

Natural

untreated

Substance

Breed

drop

Water proof

Impermeable



Protecting Wildlife: First Channel Island death by PIB

Wordsearch



Words to find

Spill

plantation

generation

source

synthetic

pollution

Rubber

natural

breed

impermeable

substance



Protecting Wildlife: First Channel Island death by PIB

Taking part in a video conference with staff from the Alderney Wildlife Trust

Every year large numbers of sea birds are washed ashore dead victims of the pollution released in to the sea by humans.

How can this be prevented? What actions can we all take to protect the colonies of sea birds in the North Sea and English Channel?

Prepare 4 questions to ask the AWT Staff

1.

2.

3.

4.





Protecting Wildlife: First Channel Island death by PIB

Activity: What action should be taken to protect our seabird population.

Write a letter outlining what action you believe needs to be taken to protect sea birds?

A large, empty rounded rectangular area defined by a dashed orange border, intended for writing a letter.



What is Polyisobutylene?

Polyisobutylene or Butyl rubber is a synthetic rubber. It's special because it's the only rubber that's gas impermeable, that is, it's the only rubber that can hold air for long periods of time. It is used to make things like the inner liner of tires, and the inner liners of basket balls.

Polyisobutylene was first developed during the early 1940s. At that time, the most widely used rubber was natural rubber, polyisoprene which was collected from the sap of the Hevea tree. To meet demand large plantations thrived in Malaysia and grew hevea trees to supply the world's rubber needs.



World War II

During World War II Malaysia was invaded and conquered by the Japanese army. Supplies of natural rubber could now no longer be sent to the United States and Europe. Unable to acquire supplies of natural rubber scientists developed an alternative synthetic rubber (Polyisobutylene.) Today synthetic rubber is used to create millions of everyday products.

Watch the video:

BBC News

Seabird deaths 'Glue' is identified as Polyisobutylene

Web link

First Channel Island Sea bird death by PIB

<http://www.channel103.com/news/index.php?storyid=26164&s=3>

