

Oysters face alien species invasion

Scottish waters on alert for bright red sea animals, says *Julia Horton*

An oyster revival across the UK is under threat from a rising tide of alien species forecast to spread south through Scottish waters thanks to climate change, scientists have warned.

Primitive but prolific bright orange-red sea animals, called *Schizoporella japonica*, have been found at more than a quarter of Scottish ports, compared to less than one in 10 harbours in England and Wales. Researchers concluded that, while most invasive species move from south to north, these creatures were probably among the first to go in the opposite direction.

Study authors warned that the tiny invaders, which are native to Japan, "hitchhike" by encrusting ship hulls like a colony of barnacles, before spreading further on the floating parts of Scotland's marine energy schemes as infrastructure is transported from harbours into open seas during construction.

Their growing presence poses a deadly risk to oysters and mussels as the colourful colonies can also grow on their shells and smother them to death.

Lead author, Edinburgh University marine scientist Jennifer Loxton, warned that *Schizoporella japonica* could be a "bellwether of future invasions" as melting Arctic sea ice caused by global warming opened up potential new routes for a host of other alien creatures.

In a paper published in the journal *Biological Invasions*, Loxton wrote: "As our climate warms and sea ice continues to reduce year on year, the opening of new Arctic trade routes may affect the distribution of invasive species, especially for cold-tolerant species like *S. japonica*. The



Climate change is a threat to oysters

Northwest Passage and the Northern Sea Route could allow cold-tolerant hull fouling species (which can colonise on ship hulls) to move to Europe from North America to the west and from Russia and east Asian ports to the east; once arrived in Europe, species with wide temperature tolerance ranges, like we have seen with *S. japonica*, may be expected to establish reproducing populations."

Developing tidal and wave energy schemes provided an "ideal" habitat and opportunity for the alien species to take hold and spread further when structures were towed between harbours or to the final energy scheme site, she said.

The mussel and oyster industry was

"particularly threatened" economically and environmentally by the sea creatures, which in smaller numbers reduced the price farmers could get for shellfish, while larger colonies could kill them off completely by preventing them from feeding, she warned.

The findings suggested that *Schizoporella japonica* will become even more common throughout UK waters in future, sparking fears for emerging shellfish industries.

Those concerns were echoed by the scientist leading an ambitious scheme returning native European oysters to the now-protected waters of the Dornoch Firth in northeast Scotland, where they were wiped out in the 19th century by overfishing.

Bill Sanderson, associate professor of marine biodiversity at Heriot-Watt University and restoration leader, said: "I have not yet seen any evidence that [*Schizoporella japonica*] is a problem for the Dornoch restoration. However, the movement of invasive non-native species in general is a big risk and we're going completely over the top to try to compensate for that."

Measures which he was "confident" would work included quarantining every single oyster of the thousands currently being moved into the firth from shellfish farms around the UK and sterilising each one twice to keep out alien species.

The study findings are expected to help strengthen government regulations on combating the threat, with *Schizoporella japonica* already on an EU priority list which scientists hope will safeguard sites such as Dornoch.

Krispy Kreme's UK doughnut has more sugar

Jon Ungoed-Thomas

The doughnut company Krispy Kreme is selling its original glazed variety in Britain with about 25% more sugar than the same product in America.

The popular classic glazed doughnut in the UK contains 12.6g of sugar, or about half of

a primary school-age child's daily recommended intake. The same product in America has 10g of sugar.

Krispy Kreme sold more than £75m of doughnuts, drinks and snacks in Britain in 2017.

Another of its UK products, the chocolate sprinkles doughnut, has 23.2g of sugar,

compared with a chocolate iced glazed doughnut with sprinkles in America, which contains 22g of sugar.

The recommended daily maximum intake of added sugar for British children aged 7 to 10 is 24g.

The company said: "Krispy Kreme UK is committed to working with government

and other stakeholders to promote responsible enjoyment of our products and are taking steps in the direction of the Public Health England targets of 20% sugar and calorie reduction by 2020, examining ways to reduce sugar content of our product portfolio." @jonungoedthomas



SNP Westminster leader Blackford said prime minister is heading for a 'no-deal disaster'

'Stop May': Blackford in fresh confidence call

John Boothman

Theresa May "must be stopped" from driving the UK into a no-deal Brexit, according to Ian Blackford, the SNP's Westminster leader.

Blackford has made a fresh call for MPs to sign a motion – tabled last month by the SNP, Lib Dems, Greens and Plaid Cymru – for a no confidence vote in the UK government. He said he intends to redouble efforts to bring the Labour leadership on board.

"It is now clear the prime minister's tactic is to run down the clock and deprive

parliament of any alternative to her Brexit proposals, bringing the prospect of a no-deal disaster closer," he said.

"She must be stopped. If our motion doesn't succeed, Labour's only excuse for not backing a second referendum will be removed. We can then all get on with building a majority for that vote."

May pulled a "meaningful vote" on Brexit last month. It is scheduled to take place in the week starting January 14.

This weekend, Scottish pressure groups campaigning for a UK-wide referendum with the option to remain in

the EU announced they are to step up activities. Scotland for a People's Vote will hold an action day in communities across Scotland on January 12, while the European Movement in Scotland will hold a rally in Edinburgh on January 26.

Recent polling indicates that two-thirds of people in Scotland want another referendum and 70% would vote to remain in the EU.

The UK government said: "The SNP are risking a no-deal Brexit by refusing to support the deal [that] will deliver key objectives identified by the Scottish government."

Scottish meat industry alarm at no-deal Brexit

Shingi Mararike

A no-deal Brexit could have a "potentially devastating" impact on Scotland's meat industry.

The farmers' union, NFUS Scotland, warned this weekend that the UK government's failure to reach an agreement with the European Union would lead to crippling tariffs, with Scottish exporters of red meat facing rates of 92% on whole beef, 45% for lamb and 53% on pork.

"This is simply unacceptable to NFUS, particularly as the livestock industry is such an iconic part of the Scottish agricultural industry," said Clare Slipper, the body's political affairs manager.

"NFUS has warned about the potentially devastating impact on the livestock industry as trade with the EU could be stopped altogether for six months or more."

The NFUS warned that a

no-deal scenario could lead to a knee-jerk reaction from the UK government, leading to "panic deals" with other countries such as the US and Canada and trading blocs such as Mercosur, comprising Argentina, Brazil, Paraguay, Uruguay, and Venezuela. The union said high-quality Scottish meat could be undercut by cheaper products.

At the end of last year, the NFUS wrote to a Holyrood committee voicing concerns about proposals made in the UK government's immigration white paper.

It argued against recommendations that lower-skilled migrants earning less than £30,000 a year would only be able seek short-term visas, stating these could be damaging for the meat industry. According to Quality Meat Scotland (QMS), a government agency that promotes the red meat sector, 43% of the industry's skilled, unskilled and

supervisory workforce are not from the UK.

Figures also released by the QMS last year revealed that 98% of official veterinarians in Scottish abattoirs are non-UK citizens. Official veterinarians are required to supervise standards of health and welfare, as well as certifying and supervising the import and export of animals.

The Scottish Association of Meat Wholesalers which represents the majority of Scotland's abattoirs, has also voiced its concerns.

Martin Morgan, an executive manager, said: "Some plants employ up to 50% non-UK workers and would face widespread business disruption if the UK were to leave the EU without an agreement which covers the right of these workers to continue their current employment, at least for a significant transitional period." @ShingiMararike

Taller turbines for Shetland plan prompt call for inquiry

Mark Macaskill

Environmentalists are calling for a public inquiry into plans to erect a giant wind farm on the remote island of Shetland.

Viking Energy won consent from Scottish ministers in 2012 to build 103 turbines, each 145 metres high, but it now wants to increase the height of the structures to 155 metres. The move is said to have caused anxiety among residents who oppose the scheme. There are concerns over its potential impact on tourism and the environment.

"This is a new and very worrying development," said Helen McDade, head of policy at the John Muir Trust.

"The impact of these

heights on the geography and topography of mainland Shetland would be massive. We believed that there should have been a public inquiry into the original application and one should be held into this new application – it would at least give local communities an opportunity to have their say on this increase."

With a potential output of up to 457 megawatts, the Viking wind farm, a partnership between Shetland Islands council and Scottish and Southern Energy, would be one of the largest in the UK.

In 2015, the Supreme Court in London rejected an appeal against the scheme by community-based campaigners Sustainable

Shetland, after a three-year-long legal battle.

The Ministry of Defence has also strongly objected to plans to increase the size of the turbines, arguing it will cause an "unacceptable interference" to the new air defence radar at Saxa Vord in Unst.

"The original consented Viking wind farm already has the potential to have a major negative impact on the area in which the project is planned," said Frank Hay, from Sustainable Shetland.

A spokesman for Viking Energy said: "We applied in November to make a minor alteration to the project in order to be able to install the latest, most efficient, wind turbines on the market."

NEWS IN BRIEF

Edinburgh airport to deter drones

Edinburgh airport plans to strengthen its anti-drone measures after the disruption at Gatwick before Christmas. Police patrols have been stepped up at Scottish airports and other measures, such as extended no-fly zones, are being considered.

Bluefin tuna nets £2.5m at auction

A sushi tycoon paid a record £2.5m for a 278kg bluefin tuna – a species listed as endangered by the World Wildlife Fund – at Tokyo's new fish market yesterday. Kiyoshi Kimura paid more than double the previous record of £1.1m, which he set in 2013.

ScotRail apology for poor service

ScotRail has apologised to passengers for its "unacceptable service" amid complaints over delays, cancellations and overcrowding. "The reality is that we've fallen below the standard you expect and deserve," said Alex Hynes, the managing director.

Pedestrian killed by car on M5

A pedestrian was killed in a collision with a car on the M5 in Gloucestershire yesterday. Both lanes were closed for four hours. The accident occurred between junctions 12 and 13 at around 7.30am. A police spokesman said no one else was injured.

Neighbours actor Darius dies at 54

Darius Perkins, an original member of the cast of *Neighbours*, has died of cancer aged 54. Perkins played Scott Robinson when the show began in 1985 before Jason Donovan took over. He was described as "selfless" by a former co-star and "adored" by family.



Perkins: played Scott Robinson in 1985

Student cycles to Australia

A Bournemouth University student from India has become the youngest woman to cycle independently across the globe. Vedangi Kulkarni, 20, started her 18,000-mile journey in July and covered 180 miles a day before finishing her journey in Perth, Australia.

Ministry staff called reporter a 'bitch'

A reporter for the website BuzzFeed discovered that Ministry of Justice staff called her a "real bitch" and "crazy" in internal emails. Emily Dugan asked the department to provide any information it held on her, only to find abusive attacks on her and her reporting.

Hi-vis chickens cross the road

Two adventurous chickens have become local celebrities after roaming around Milton Keynes in hi-vis jackets to keep them safe. Known as Davina and Deirdre, one sports a fluorescent pink coat and the other wears bright yellow.

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