



**National
Oceanography
Centre**

JELLYFISH BLOOM: AN IMPACT OF THE MARINE HEATWAVE OR JUST MORE PEOPLE HEADING TO THE BEACH?

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Recent reports highlight a surge in jellyfish sightings around UK coastlines with hundreds of blue jellyfish washing up at Westward Ho! in North Devon and a major stranding at Bude Sea Pool, where around 16 wheelbarrows of jellyfish were cleared after high tide left the terrace completely covered.

Could the ongoing Marine Heatwave be behind these increased sightings of jellyfish? I spoke with Professor Cathy Lucas, a marine biologist from the University of Southampton, to find out.



DO WE NORMALLY SEE JELLYFISH IN UK WATERS & WHICH SPECIES ARE MOST COMMON?

Yes, every year. The most common species we have are the moon jellyfish, blue jellyfish in the southwest, compass jellyfish (mainly) around the southern coast, barrel jellyfish, which are a little unusual and their occurrence changes year-on-year, lion's mane jellyfish are a cold water species that you might find along northern coasts.

IS WHAT WE ARE SEEING NOW UNUSUAL?

This year there does seem to be lots of jellies around the coast, which is not unique - it varies every year. It might be a reflection of the warmer weather where there are lots of people around the coast, reporting jellyfish sightings. The only non-native species that has been reported over the last few weeks is the mauve stinger jellyfish, which is common in warmer Mediterranean waters.

COULD THE MARINE HEATWAVE BE CAUSING INCREASED JELLYFISH BLOOMS?

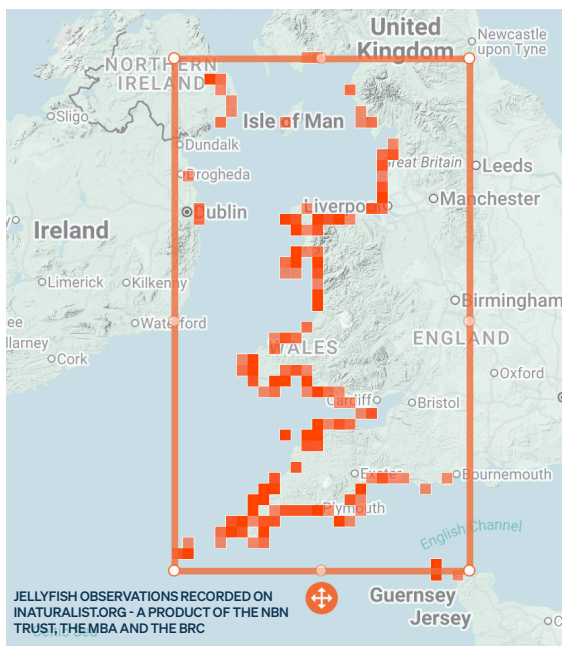
It's complicated. Most species have a polyp life stage that lives on the seabed year-round, which reproduces asexually to produce baby jellies from ~Feb-Apr, so really it is temperatures around this time that are important. The moon jellyfish actually prefers colder winter-spring temperature to reproduce. If conditions are good in spring with lots of food (zooplankton), it enables them to grow and can lead to large populations. The calmer waters and favourable winds might be causing more jellies to be found further inshore with the increased possibility of being washed up on beaches. This was the case for lots of sightings of *Velella velella* (by-the-wind-sailors) along the Welsh coast recently.

DO UK JELLYFISH LIKE WARMER CONDITIONS?

Warmer water species like the compass and mauve stinger jellyfish are likely to be quite tolerant of warmer waters, the moon jellies have a much greater thermal range and are very resilient to warm conditions, but we lack evidence to suggest they like it. Spring conditions are more important for recruitment, if it is cooler in spring, it could be beneficial because polyps tend to prefer cooler water and then there are more plankton around to eat.

"While there have been lots of sightings in the southwest recently, they are the usual suspects, mostly blue and some compass jellyfish. There have apparently also been a huge number of weever fish stings on the Exmoor coast. I think it is fairly normal for this time of year and the heatwaves have brought even more people to the beach, increasing the likelihood of interaction with marine life."

CORAL SMITH, WEMBURY MARINE CENTRE IN DEVON



ARE THERE ANY SPECIES YOU'D BE PARTICULARLY CONCERNED ABOUT?

Our native species aren't too dangerous. Moon and barrel jellies have very mild stings. Blue jellyfish around the southwest coast have a bit of a nasty sting and lion's mane jellies often found further north have quite a painful sting – even when the tentacles break off. There have recently been a few sightings of non-native species including the mauve stinger, which can have nasty stings and are commonly found in warmer Mediterranean waters.

WHAT DO YOU SHOULD YOU DO IF YOU SPOT A JELLYFISH ON THE BEACH?

Don't touch it as some may still sting. Also report the sighting to the jellyfish citizen science efforts at the Marine Conservation Society: mcsuk.org/what-you-can-do/volunteering/wildlife-sightings/report-a-jellyfish-sighting/

For advice on stings from jellyfish and other sea creatures, please visit the NHS - nhs.uk/conditions/jellyfish-and-other-sea-creature-stings

