

# Octopuses stranded on Welsh beach – here are the scientific theories why

November 1 2017, by Gavan Cooke

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Credit: AI-generated image ([disclaimer](#))

A beach in Wales recently faced an eight-armed invasion. Over 20 octopuses were [reportedly seen](#) crawling up New Quay beach on the west coast of the country, with many later being found dead after failing to make it back to the sea.

Strandings of [octopuses](#) and other cephalopods (squishy, intelligent creatures including squid and cuttlefish) are pretty rare and the exact truth of why this happened may never be known. But there are several theories that might help us to better understand this unusual event.

## **They became stranded like whales do**

Whale strandings are often put down to failures in the animals' natural navigating abilities, which involve sending out sonar signals and sensing the direction of the Earth's magnetic field. Sometimes the shoreline is too complex for these [abilities to work](#), or there may be interference from human activities or even magnetic space weather.

But similar explanations aren't likely to apply to the octopuses as they [don't navigate this way](#) (instead we think they use a mental map like humans). Their hearing and auditory organs are comparatively simple and they can only hear at very narrow frequencies, which are not thought to be [used for navigation](#).

## **A storm blew them ashore**

This is quite an appealing idea. Octopuses are (relatively) small and it's easy to imagine them being caught in the forceful waves and washed up in large numbers. The coast of Britain has certainly been battered by storms recently.

There was also a [high tide](#) at around the time the octopuses are thought to have started appearing – so could a storm surge have dropped them on the beach? A sandy beach is not where you would expect these rocky seabed animals to be, so something unusual must have taken them to it.

## **They were looking for food**

While there have been anecdotal reports of octopuses leaping from rock pool to rock pool at low tide to grab a snack, this hasn't included the curled octopus (*Eledone cirrhosa*) found on New Quay beach. Although they do eat crabs, this species is normally found at [much greater depths](#). We can't rule this theory out but we also know that, instead of undergoing a frenzied feasting period, this species eats less in these waters at this time of [year](#)

## **The octopuses were senile**

As silly as this sounds, it is a plausible option. Like nearly all cephalopods, these octopuses are strictly semelparous, meaning they breed once [and then die](#). October is the last hurrah for this species and adults go through a period known as ["senescence" after breeding](#).

This final stage of their lives causes the animals to rapidly deteriorate and behave very oddly. Many of the videos showing giant squid behaving weirdly in the shallows can probably be explained by this old age senility.

This was my first thought, but a major reservation about this hypothesis is that these older octopuses normally show signs of physical deterioration. For example, their skin goes white and peels, cataracts can be common, and the animals generally appear to be in poor condition and [get skin diseases](#). So far, I have not seen any evidence of this poor body condition normally associated with senescence.

## **Octopus numbers may be increasing**

One apparently encouraging implication to this sad tale is that it might indicate an increase in the numbers of octopuses in the sea. All year, I have been seeing reports of greater and greater numbers of all

cephalopods in UK waters, especially octopuses. At the end of the summer, my social media feed was comparatively buzzing with videos of excited bathers spotting octopuses in rock pools, something not seen much before in UK waters. I've also seen many videos of huge groups of cuttlefish, a [cephalopod](#) species usually found in much smaller groups.

There are several possible explanations for this. Overfishing might be reducing numbers of [cephalopod predators](#). The increase in sea temperatures [related to climate change](#) could be helping southerly species, such as *Octopus vulgaris*, ["invade" our waters](#).

Another intriguing aspect of this event is that so many were found in the same place. Octopuses generally are thought to be solitary creatures, including *Elodone cirrhosa*. But [a recent finding](#) suggests we may have to reevaluate much of what we know regarding the sociability of these animals. Perhaps these octopuses had gathered for mating and got caught up in a powerful set of waves.

In the longer term, and at a more global scale, human interference may benefit some species rather than others. We joke that rats and cockroaches will inherit the Earth, but cephalopods may also be a benefactor. We overfish their predators and they possibly do not suffer from ocean acidification like other invertebrates. If this is indeed a happy note in a time of generally bad news for marine life, I for one welcome our new cephalopod overlords.

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