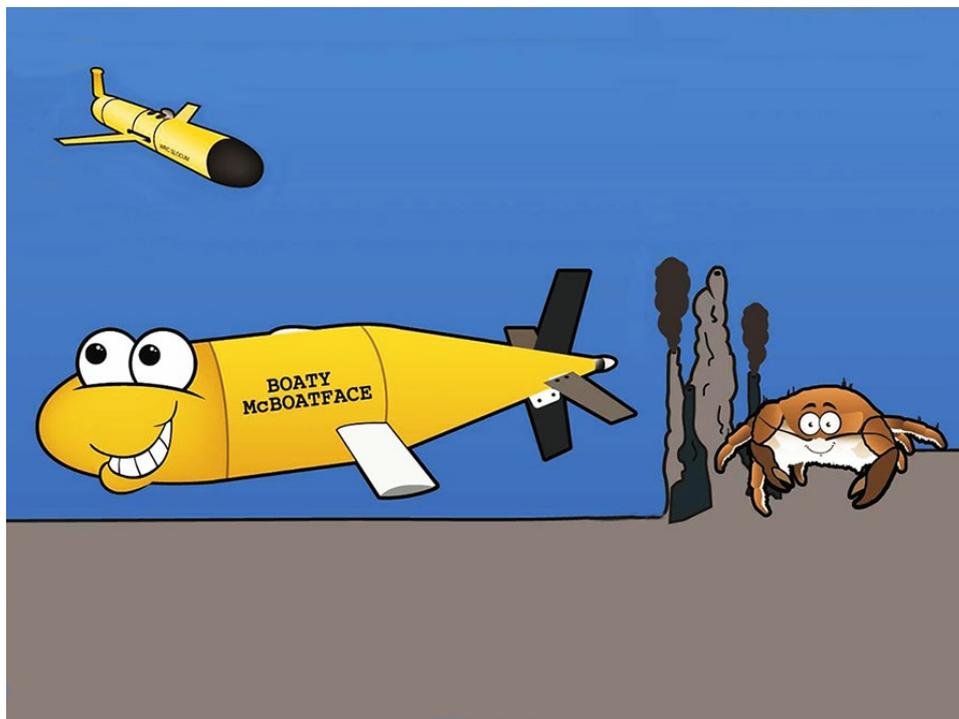


Boaty McBoatface prepares for first adventure

The yellow submarine is off to Antarctica to study rising sea temperatures. She was named after an online competition went viral last year – but could her silly name help to save the planet?



Into the deep: There are plans for a full-sized inflatable Boaty to travel to events in the UK.

It was a debate that divided Britain; a vote that inspired the masses; a result that confounded the establishment.

No, not Brexit. In March last year, an online poll asked the public to suggest names for a new polar research ship – and “Boaty McBoatface” won by more than **84,000** votes.

The UK’s science minister was not amused. The government wanted a name “that lasts longer than a social-media news cycle,” he said. They chose the RRS **Sir David Attenborough** instead.

But as a compromise, the name Boaty McBoatface has been bestowed on a new robotic submarine by the National Oceanography Centre (NOC). The unmanned vehicle is capable of exploring **6,000 metres** under icy seas for weeks at a time. She will collect vital data for scientists which will be transmitted via radio signal. And this week, she will head to the Orkney Passage in the Antarctic for her very first mission.

Boaty will “fly” back and forth through the

“rapids and waterfalls” found in the deepest currents of the ocean, says the NOC. These are also known as the Antarctic Bottom Waters, some of the coldest, deepest waters on Earth. What happens there matters: the Orkney Passage is a key part of the “great ocean conveyor”. Its water flows into the Southern Ocean, and eventually mixes with the Atlantic.

But over the last three decades, the Antarctic Bottom Waters have been getting warmer, and scientists **do not know why**. This is what Boaty will be investigating.

It is important work. Water expands when its temperature rises, pushing up **sea levels**. Across the globe, these have risen by around **3.4mm** per year since 1993, threatening coastal towns and cities. Just a few days ago, scientists warned that oceans are warming **1.3% faster** than they originally thought.

The scientists at the NOC are hoping that Boaty’s fame will inspire people to learn more about their research. Could a silly joke save the world?

Go with the flow

Don’t be daft, say some. The internet trolls who voted for Boaty do not care about science; they just wanted a laugh. Meanwhile, the people actually doing the research have been stuck with a nonsense name for decades to come – one that will take attention away from their findings, and make them seem ridiculous on the global stage.

This is the best thing that could have happened to scientists, counter others. It is very hard to engage the public with environmental issues, which is exactly why the poll was opened in the first place. So surely it has worked beyond anyone’s wildest dreams? People are investing their interest in a story they otherwise would have ignored. And Boaty’s adventures are perfect for children – they might even help to inspire the climate scientists of the future.

Q & A

Q: Why should I worry about the ocean?

A: It has a very important role in climate change. Scientists say the oceans store around 90% of the extra heat of global warming: their slow currents act as a “conveyor belt”

distributing heat around the globe, and affecting the weather accordingly. And around 40% of the world’s population lives within 100km of the coast. Rises in sea level could have a direct effect on their homes.

Q: What will Boaty do next?

A: Later this year, she will go to the North Sea

to “sniff out” signals related to the release of gas beneath the seabed. There are also plans for her to attempt the first under-ice crossing of the Arctic Ocean, a challenge that would be extremely valuable for scientists. And her image – such as the cartoon above – will be used in schools across Britain.

YOU DECIDE

1. Could Boaty McBoatface save the world?
2. Why is it so hard to engage people with news stories about the environment?

WORD WATCH

84,000 – Boaty McBoatface received 124,109 votes from the public; the runner-up, Poppy-Mai, 39,886.

Sir David Attenborough – The naturalist and television host turned 90 last year. Professor Jane Francis, director of the British Antarctic Survey, said that he has engaged and inspired the public over generations with his passion for the natural world.

ACTIVITIES

1. Class debate: Climate change is the most important issue facing the world in 2017.
2. Create a cartoon about the adventures of Boaty McBoatface, explaining her first mission to children in primary school.

6,000 metres – This will allow Boaty and the other submarines in her fleet to explore 95% of the ocean, according to the UK's National Oceanography Centre.

Do not know why – They believe it is caused by changes to winds above the surface of the sea. Boaty will be testing this hypothesis.

Sea levels – Climate scientists say these are also rising due to melting ice at the Earth's poles.

3.4mm –

SOME PEOPLE SAY...

"Our names are the most important things we own."

WHAT DO YOU THINK?

According to NASA, which has used satellites to track changes in sea levels since 1993. The last recording, in October 2016, showed that they have risen by 82.7mm since then. They have risen by around 200mm since 1870.

13% faster – According to a paper published in *Science Advances*. The same paper also found that warming rates have accelerated since the 1960s.

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 Notes

