

Massive iceberg threatens remote penguin sanctuary

November 4 2020, by Eléonore Hughes



King penguins like these could see their foraging routes cut off by the giant iceberg

The world's biggest iceberg is on a collision course with a remote South Atlantic island that is home to thousands of penguins and seals, and could impede their ability to gather food, scientists told AFP

Wednesday.

Icebergs naturally break off from Antarctica into the ocean, but climate change has accelerated the process—in this case, with potentially devastating consequences for abundant wildlife in the British Overseas Territory of South Georgia.

Shaped like a closed hand with a pointing finger, the iceberg known as A68a split off in 2017 from Larsen Ice Shelf on the West Antarctic Peninsula, which has warmed faster than any other part of Earth's southernmost continent.

At its current rate of travel, it will take the giant ice cube—which is several times the area of greater London—20 to 30 days to run aground into the island's shallow waters.

A68a is 160 kilometres (93 miles) long and 48 kilometres (30 miles) across at its widest point, but the iceberg is less than 200 metres deep, which means it could park dangerously close to the island.

"We put the odds of collision at 50/50," Andrew Fleming from the British Antarctic Survey told AFP.

Many thousands of King penguins—a species with a bright splash of yellow on their heads—live on the island, alongside Macaroni, Chinstrap and Gentoo penguins.



A68a iceberg, drifting in the South Atlantic, could crush organisms and their seafloor ecosystem, which would need decades or centuries to recover

Seals also populate South Georgia, as do wandering albatrosses, the largest bird species that can fly.

If the iceberg runs aground next to South Georgia, foraging routes could be blocked, hampering the ability of penguin parents to feed their young, and thus threatening the survival of seal pups and penguin chicks.

Release of stored carbon

"Global numbers of penguins and seals would drop by a large margin," Geraint Tarling, also from the British Antarctic Survey, told AFP in an interview.

The incoming iceberg would also crush organisms and their seafloor ecosystem, which would need decades or centuries to recover.

Carbon stored by these organisms would be released into the ocean and atmosphere, adding to [carbon emissions](#) caused by [human activity](#), the researchers said.

As A68a drifted with currents across the South Atlantic, the iceberg did a great job of distributing microscopic edibles for the ocean's tiniest creatures, said Tarling.



Icebergs naturally break off from Antarctica into the ocean, but climate change has accelerating the process

"Over hundreds of years, this [iceberg](#) has accumulated a lot of nutrients and dust, and they are starting to leach out and fertilise the oceans."

Up to a kilometre thick, icebergs are the solid-ice extension of land-bound glaciers. They naturally break off from ice shelves as snow-laden glaciers push toward the sea.

But global warming has increased the frequency of this process, known as calving.

"The amount of ice going from the centre of the Antarctic continent out

towards the edges is increasing in speed," Tarling said.

Up to the end of the 20th century, the Larsen Ice Shelf had been stable for more than 10,000 years. In 1995, however, a huge chunk broke off, followed by another in 2002.

This was followed by the breakup of the nearby Wilkins Ice Shelf in 2008 and 2009, and A68a in 2017.

Hydrofracturing—when water seeps into cracks at the surface, splitting the ice farther down—was almost certainly the main culprit in each case.

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