

The Climate Giants Project

Save the Whale, Save the World

WHALE AND
DOLPHIN
CONSERVATION

WDC



Climate Giants

Save the Whale, Save the World

“ The battle against climate breakdown can feel hopeless. Our ocean is warming, our ice caps are melting, our rivers are running dry, and our forests are burning. We can't ignore or deny the devastating impact rising temperatures are having on our world and our lives. Scientists' predictions are coming true, and their warnings for the future are even grimmer if we don't make changes to our lifestyles and the way we care for our planet.

But there is hope.

For over 30 years WDC has stood up for whales and dolphins – fighting against deliberate threats from hunting and captivity, and accidental threats such as entanglement in fishing gear (known as 'bycatch') and pollution. And it turns out that protecting whales and dolphins isn't just good for them, it's good for the ocean, and therefore good for us.

Whales are fighting climate breakdown in a big way; circulating the nutrients needed to support biodiversity and boost the ocean's capacity to absorb carbon dioxide. They are vital to the ocean, and the ocean – the world's largest carbon sink and life support system – is vital to us. And yet just 1% of global climate finance is spent on marine-based, natural climate solutions.

WDC is on an urgent mission to change this and put whales, dolphins, and their ocean home, at the heart of the fightback against the climate and biodiversity crises. To do this, we are establishing a community of passionate, forward-thinking conservationists, scientists, economists and businesspeople to take the conservation of whales and dolphins to a new level. These Climate Giant supporters are helping us achieve breakthroughs in the fight to stop whaling, captivity and bycatch and gain new protections for the ocean. This global endeavour will provide the scientific data we need to evidence whales' and dolphins' role as essential nature-based solutions to the climate and biodiversity crises and inspire a global movement to protect them and recover their populations.

At a time when many feel climate change has gone too far and fear it is too late to act, I hope you will feel encouraged and inspired by our Climate Giant Project and join us in making this transformational programme a reality. ”

Chris Butler-Stroud, CEO, WDC, Whale and Dolphin Conservation.



“ Our Climate Giant Project will unlock the potential of the world’s largest nature-based solution to the climate crisis. ”



How can whales help us save the world?

WDC is at the forefront of championing ground-breaking research which highlights the incredibly important role whales play in ensuring healthy marine ecosystems and helping to mitigate climate change.

Humans have done enormous damage to the planet which includes the slaughter of millions of whales, wiping out up to 99% of some populations. Yet, if we ensure that the killing ends and whale populations are able to recover, these amazing animals will be our climate champions by helping to counter the damage humans have caused through accelerating climate change.

Recovering their populations by eliminating threats such as bycatch, entanglement, ship strikes, ocean noise and by creating highly protected and enforceable marine protected areas, will allow whales to fulfil their role as an essential nature-based solution to both the climate and biodiversity crises. Our Climate Giants Project aims to achieve a restoration of whale populations by generating understanding of the role that whales play in fighting climate change. This will not only help whales but will also help them to save our ocean and our planet.

Scientists are building an ever-richer picture of how whales and dolphins act as ecosystem engineers, promoting a healthy ocean and locking away carbon through the way they live, feed, migrate and even die. We are in a race against time because there are now millions fewer whales and dolphins than there were before the age of industrial whaling, and this greatly reduces their ability to keep the ocean and our planet healthy.

- **Approximately 300,000 whales and dolphins** die in fishing nets and ropes every year. This is the biggest killer of whales and dolphins
- More than **1,000 whales** are killed every year in cruel hunts in Iceland, Norway and Japan
- More than **3,600 whales and dolphins** are held captive in aquariums, zoos and marine parks

Climate Giants

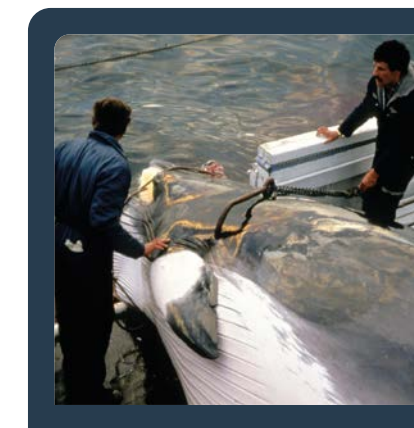
Covering over 70% of the world’s surface, the ocean has supplied half of the oxygen produced on the planet. It is one of the Earth’s largest carbon sinks, and a vital climate regulator. But the ocean is overlooked and underfunded, receiving less than 1% of climate finance. The ocean is valued more for the life that can be extracted from it than the life it provides, and nowhere is this more apparent than with its most mighty inhabitants – whales.

Scientists have discovered that whales play a key role in maintaining a healthy ocean and have identified three main ways that they are fighting the climate and biodiversity crises:


- **Whale pump** – as whales dive deep to feed and then come to the surface to breathe, they circulate essential nutrients. Whales defecate when they surface, releasing huge plumes of nutrients which fertilise phytoplankton - tiny plant-like organisms that remove carbon dioxide and release oxygen.
- **Whale conveyor belt** – when whales undertake their long migrations, they transport nutrients on their skin and in their urine, faeces and placentas, spreading them from nutrient-rich areas near the poles to nutrient-poor areas in the tropics. This has the potential to increase biodiversity.
- **Whale falls** – when whales die, their carcasses sink to the sea floor, providing a habitat for up to 200 species. Their carcasses take the carbon stored within their bodies to the sea floor, where it can be locked away for thousands, perhaps even millions, of years.
- Studies show that whales and dolphins are an essential part of a healthy marine ecosystem; but to unlock the changes in policy that will lead to the necessary protection that will restore their populations, we need to learn more, and quickly, given the urgency of the climate and biodiversity crises.

In 2021, WDC co-convoked an international workshop to establish the scientific insight and identify key knowledge gaps. Since then, we have been working with some of the world’s leading scientists to start filling those gaps.

WDC is in a race against time to raise the funds needed to establish the data which is essential to securing the protections whales need to fulfil their position as global climate giants.



“ The slaughter of nearly three million whales in the 20th century had the equivalent impact on the environment as the destruction of a rainforest the size of the Amazon. ”



“ Our enormous underwater allies are helping to sustain an ocean that captures as much carbon as all the rainforests on Earth. ”

Climate Giants research projects

The Climate Giants Project is WDC's biggest and most ambitious research programme ever. If successful, it will enable us to scale up scientific research and provide the detailed data we need to save the whale and save the world.

The first phase consists of three cutting-edge projects:



Life After Death will provide detailed information into the vast array of species whale carcasses support through different stages of decomposition as well as furthering our understanding of how whale falls tackle climate change by identifying how much carbon whale carcasses lock away.

Life After Death research project

PROJECT OVERVIEW:

Life After Death is a project which has never been attempted before. We will sink a grey whale carcass to a depth of 890m and monitor it continuously for a minimum of three years. A high-resolution camera and sensors will be positioned around it to provide a fascinating internet live feed.

PROJECT COSTS:

Given the vast size of the whale carcass, this project requires a huge amount of equipment and logistics. We need to prepare the experiment site, transport and sink the whale carcass and ensure we can collect data continuously for three years. Costs include:

- **£60,000** to pay for a local fishing boat to haul the dead whale to the experiment site and undertake all the necessary prep work
- **£7,000** to purchase the 10 weights needed to sink the carcass to the seabed
- **£50,000** for a super-high-resolution camera system that can survive in deep sea conditions
- **£20,000** for ultra-tough deep sea connection equipment to ensure all the tech can talk to each other and relay information and data back to land.

These are just a few examples of some of the equipment we need to fund this £650,000 project. If you are interested in learning more, please contact us to find out more information.



Animating the Ocean research project

PROJECT OVERVIEW:

'AnimOcean' is a revolutionary project that aims to use the latest computer modelling technology to measure, for the first time ever, the global impact marine mammals have on the ocean. By creating the first computer model of its kind, we will be able to measure and calculate the different ways that marine mammals contribute to the ocean's health. We'll finally be able to quantify how they capture and lock away carbon and therefore how they help us tackle climate change.

The computer model created will be central to the delivery of our global policy ambitions, allowing marine mammals to be considered properly within the Intergovernmental Panel of Climate Change reports and recommendations. It will also be available as a tool for conservation and marine protected area management, mapping how marine mammals help keep the ocean healthy, which will be revolutionary for setting conservation goals, guiding management programmes, and aiding national and international policy making. Crucially, it will be available in perpetuity, with more science and data feeding into it over time, making it more robust as the years go by.

PROJECT COSTS:

This research requires investment in technology, equipment and the scientists themselves. On top of funding the cost of laptops, supercomputer time, data storage, software licences and travel costs to attend key workshops, training and conferences, the research requires an investment of:

- **£45,000** to fund a post doc researcher to develop the first ever global marine classification which will be integrated into the computer model
- **£35,000** to fund a PhD student to support with data capture and inputting
- **£15,000** to fund the support of two leading scientists

These are just a few examples of some of the costs of this £500,000 project. If you are interested in learning more, please contact us to find out more information.

The Green Dolphin research project

PROJECT OVERVIEW:

We know from the scientific information we already have that whales are having a positive impact on ocean ecosystems and helping us to tackle climate change. We know much less about the impact that their smaller relatives, the dolphins are having. There are many more dolphins than whales, and we know dolphins do many similar things like diving for food and moving nutrients around when they are on the move; so the contribution they make to create a healthy ocean is likely to be huge. There have been localised studies that show how species are having a positive influence on ocean ecosystems and in turn the climate, but we still have much more to find out. We need our knowledge of the impact of dolphins to increase, so that we can better protect them.

PROJECT COSTS:

We plan to lead a global project that will fast track our understanding. Working with partners and strandings networks around the world, we are pulling together datasets and undertaking experiments on samples that have been collected over the years to rapidly advance understanding and create strong evidence that allows us to bring dolphins into the 'Save the Whale. Save the World' equation. This project will cost £200,000.



The part you can play

Climate Giants is WDC's biggest and most ambitious initiative ever. To pull it off, we need to secure funding of £1.47 million within the next 12 months. If we're successful, it will result in the development of a global framework to restore whale and dolphin populations to previous levels, both for their own sakes and to fight the climate and biodiversity crises.

Climate Giants will be a game-changer for ocean conservation, and we need forward thinking investors to come onboard and be a part of this amazing journey with WDC. There are a number of ways to get involved and support our Climate Giant Project:

1. **Become a Climate Giant Donor**
2. **Become a Climate Giant Advocate**
3. **Become a Climate Giant Partner**
4. **Fundraise for Climate Giants**

We are delighted to have been selected as one of Deloitte's WorldClimate charity partners and have been blown away by their passion and commitment for our work. We would like to thank the team at Deloitte for their support, insight and encouragement in helping us establish our Climate Giant Project.

“ I am really excited about our partnership with WDC. We are learning so much from them about the importance of whales and a healthy ocean to the overall health of our planet. We really want to help them in any way we can to protect these amazing creatures and fight climate change. ”

Tracy Wyman, Deloitte, WDC partner.

Deloitte.

If you would like to find out more information about how to get involved with supporting this project, please contact:

Emma Jenkins, Philanthropy Manager

emma.jenkins@whales.org

“ We know that whales and dolphins have a fundamental positive impact on the ocean and the vast life it contains. It's essential that we act now to help their populations recover before it's too late. We have no time to waste and need to restore the numbers of these keystone species, so that they can help us tackle the climate and biodiversity crises. We can't save the world without saving the ocean, and saving the ocean means saving whales and dolphins. ”

**Ed Goodall, Green Whale Project Manager, WDC,
Whale and Dolphin Conservation.**



Whale and Dolphin Conservation: who we are and what we do

WDC is the leading global charity dedicated to the conservation and protection of whales and dolphins. We've been a voice for these remarkable creatures for more than 30 years. We are a team of 80+ staff and network of dedicated volunteers based in the UK, US, Germany, Australia, New Zealand, and South America. We have an established global track record of delivering impactful public campaigns, successful lobbying, innovative research, and vital education and fieldwork programmes. Our experts are among the best in the world and we work hand-in-hand with a wider international network of leading conservationists, scientists and policy experts. We have around 150,000 engaged and active supporters worldwide.

WDC:

- runs national and global campaigns to drive change
- conducts fieldwork and research across the globe to protect threatened species and populations
- funds innovative and ground-breaking conservation by some of the world's leading whale scientists
- undertakes education and outreach programmes with institutions, governments, education centres and corporates
- advises governments and decision-makers through engagement with global bodies such as the International Whaling Commission.

