













# EXPLORING THE EXTREMES TO PUT A BETTER FINGER ON THE PULSE OF THE PLANET

COP28 has recognised the critical importance of indisputable real-time scientific data and as we start to approach the milestones of 2030 and 2050 there is now an absolute need for measuring, monitoring and reporting from the extreme regions of Earth.

# **Executive Summary**

#### **Global Warrior: Illuminating Earth's Future**

With over two decades of pioneering exploration in Earth's polar regions, Global Warrior is at the forefront of providing cutting-edge, real-time scientific insights into our planet's health. Our mission is to illuminate the current state of Earth through precise measurements, comprehensive benchmarking, and continuous monitoring of all extreme regions, offering indisputable evidence to guide our collective path forward.

### **Empowering Positive Change**

We're dedicated to equipping leaders in politics, business, and society with the most accurate and up-to-date information. This knowledge enables them to make informed, impactful decisions that shape our immediate actions and long-term strategies in addressing climate challenges, paving the way for a sustainable future.

#### **Innovation with Care**

Our approach combines state-of-the-art techniques and technologies with a deep commitment to environmental stewardship. We take great care to minimize our ecological footprint while maximizing our scientific output. By bringing together renowned experts, aspiring scientists, eager students, and engaged citizens, we're creating a global community united in understanding and protecting Earth's vital extreme environments.

## **Executive Summary**

#### **A Partnership for Progress**

Supporting Global Warrior offers brands an unparalleled opportunity to be part of a transformative journey. Partners benefit from worldwide exposure, invaluable association with cutting-edge research, and demonstrable return on investment. Moreover, they contribute to ongoing explorations that have lasting impact, creating a legacy of positive change.

### **Proven Track Record, Bright Future**

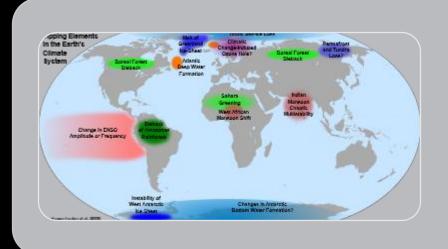
Since 2001, through Ice Warrior, we've trained over 500 individuals and conducted numerous groundbreaking expeditions. This wealth of experience fuels our passion for deepening our understanding of Earth's systems and measuring change with unprecedented accuracy and immediacy.

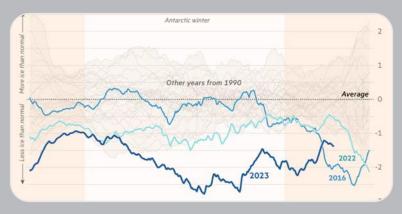
#### **Expanding Horizons**

Excitingly, and while we continue our crucial work in remote oceans and polar regions, Global Warrior is expanding into the world's deserts, mountains, and jungles. Each new frontier we explore enhances our appreciation for Earth's diverse ecosystems and contributes vital data to ensure humanity's thriving future.

Join us in this exhilarating quest to understand, appreciate, and protect our extraordinary planet. Together, we're not just observing change – we're catalysing positive action for a brighter, sustainable tomorrow.

# **Ground Truth Data – VITAL IMPORTANCE**





Calibration - sats

Validation – sat data

Accuracy - models

Benchmarking - realism

Parameterisation - verification

Understanding
Uncertainty - quantifying

Long-term

Monitoring – patterns and trends

Reliable Policy and Decision Making - confidence



### **Ocean Warrior - Aims**

- Provide a platform to deliver the marine science needed to inform international environmental policy and practice
  and contribute to achieving the UN Sustainable Development Goals (SDGs).
- Demonstrate the viability of sailing vessels to deliver net zero oceanography.
- Deliver a state-of-the-art ocean-going platform for science delivery as part of a global ocean observing system.
- Provide a platform for ongoing research and innovation needed for the development of new sensing systems to accurately measure Essential Ocean Variables (EOVs) and Essential Climate Variables (ECVs).
- Advance autonomous, polar ocean satellite calibration and data validation.
- Undertake long endurance polar ocean missions while maintaining the capability to operate safely and effectively in the coastal zone.

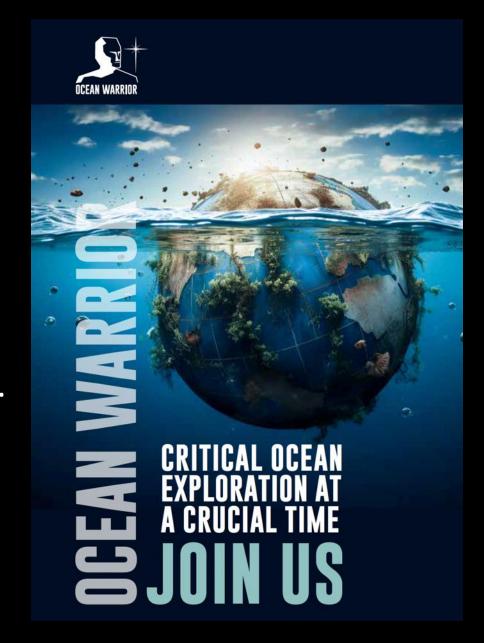






# **Take Two Sailing Vessels**

- Place Eminent Scientists onboard who will educate all.
- Add Early Career Scientists, STEM & STEAM Students and call for Participants from all walks, all echelons to raise their funds, train, help sail and help gather the vital data.
- Tell the world about Their Stories.
- Sail them on two remote, unsampled routes for 14,000 nm.
- Repeat this each year for 10 years.
- Gather vital empirical data Measuring, Benchmarking,
   Monitoring and Reporting on Change in near live fashion.



### Rationale

Earth's extreme environments are the best indicators of global change.

If we are not looking at these areas and watching change, then how do we know that anything we are doing is working?

**For Our Scientists** 

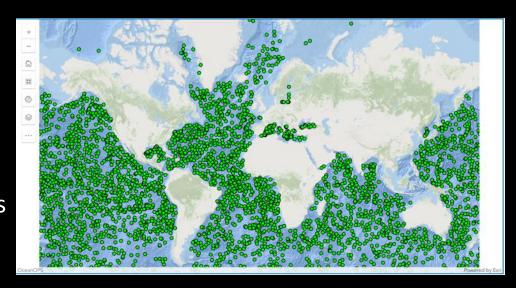
Net Zero Oceanography | Extreme Sampling | Validation and Calibration Data | Meteorology Hydrography | Student Personal Development | Graduate & Post-Graduate Participation

# **Our Routes – Two Vessels**



# The Need - examples

- Collection of Essential Ocean Variables EOVs
  - Part of Global Ocean Observing System GOOS
  - Argo Floats 10-day transmissions, down to 6000m, 5 yrs
- Collection of Essential Climate Variables ECVs
  - Part of work for Met Office modelling
- Human and Autonomous Data Collection
- Seabed Mapping
  - Less than 10% is mapped
  - That which is may have changed
  - Part of Nippon Foundation GEBCO Seabed 2030 Project





# **Foundation Expeditions September 2023**

In September 2023 we conducted two 10-day expeditions in Svalbard to trial the concept using a sailing vessel and to develop procedures and protocols.

Onboard we had businessmen, journalists, naturalists, digital content gatherers, Ocean Warrior Crew and SV Linden Pro Crew.

We trialled equipment supplied by Valeport and figured out what we could do and how we could do it.

Henri Lloyd were our main supporters.

Much discussion and debate was had but by the time we had reached our last port in Longyearbyen, Svalbard, I knew we had done our homework properly and we were in a position to configure things for the next 10 years.

Now we are in the process of raising the funds necessary to support the Ocean Warrior Project.















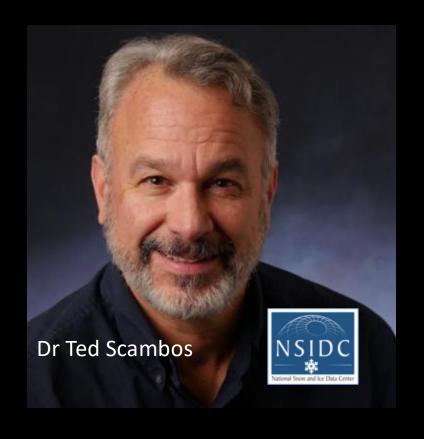








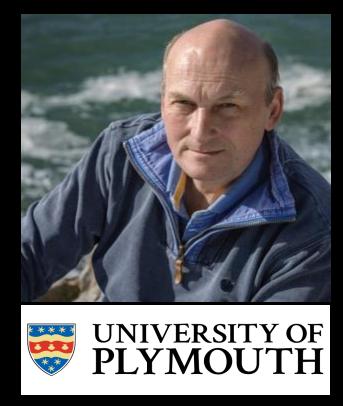
# **Some of Our Scientists**







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**Professor Icarus Allen** 



**Professor Michael Cunliffe** 

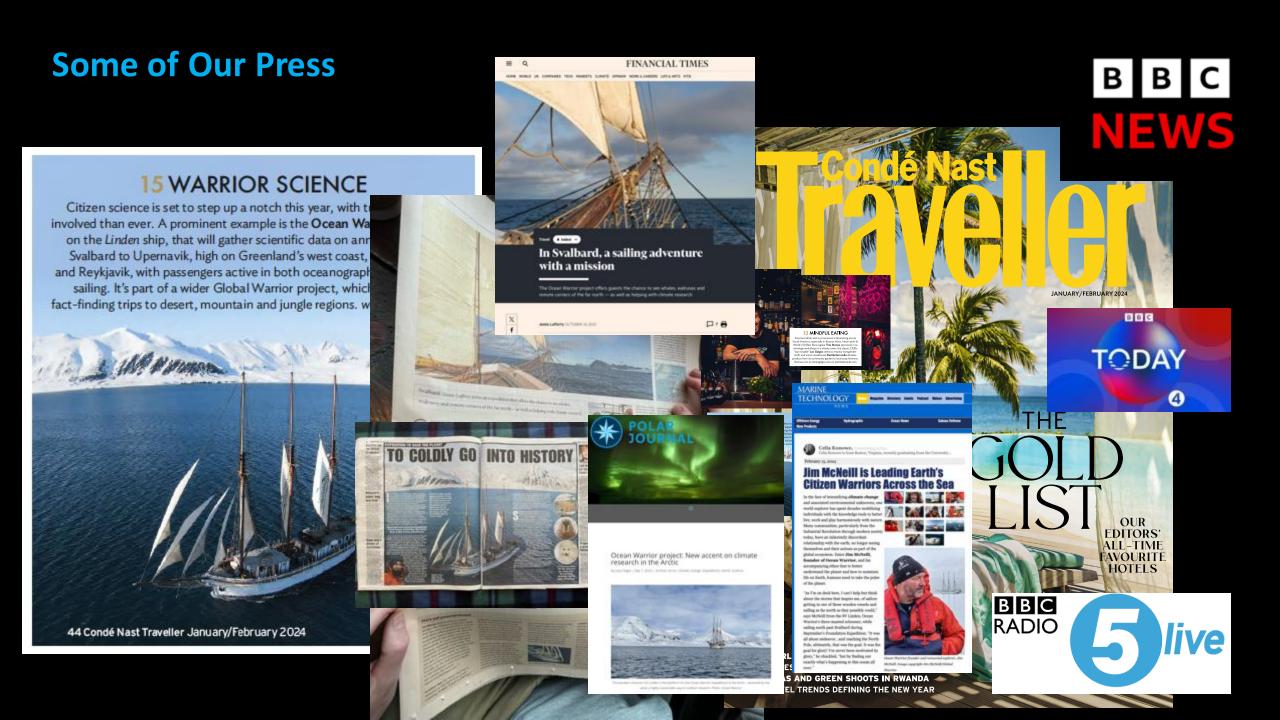
Professor Richard Thompson OBE FRS

### **Some of Our Scientists**

Professor Michael Cunliffe, Director of Science of the Marine Biological Association, said: "Plymouth has a long and rich history in scientific exploration of the polar regions. The MBA was involved in three famous Antarctic expeditions of the period 1901-15 and we continue to study in this region today. Ocean Warrior will create the platform for continuing this work, allowing wider access for all to take part in exploring some of the most critical ecosystems on our planet."

Icarus Allen, Chief Executive of Plymouth Marine Laboratory, who joined Ocean Warrior on its Arctic voyage in autumn 2023, said: "PML is delighted to be a scientific partner with Ocean Warrior and are extremely excited about the prospect of delivering responsible net zero research. To support a sustainable future for the Ocean we need to be in a position to monitor the changes which are happening. Ocean Warrior will be a valuable addition to this pursuit and I'm looking forward to seeing how we can develop the project over the years ahead."

Professor Richard Thompson OBE FRS, Director of the University of Plymouth's Marine Institute, said: "If we are to innovate for the future health of our ocean, we need to fully understand the impacts of our actions on the planet. Working with Ocean Warrior will enable us to generate critical data, while minimising our impact in the regions we are studying and ultimately seeking to protect. It is an exciting collaboration that has the clear potential to benefit all involved."



# **Some of Our Supporters**

#### **Mathew Pinsent**







**Richard E Grant** 



### Midge Ure





**Sir Ranulph Fiennes** 

"During my first conversation with Jim, I was impressed by his quiet confidence and solid enthusiasm. Since then, I have come to learn the determination, dexterity, skills and knowledge of Jim and the crew behind the project and am delighted to to have been the Patron of Ice Warrior for well over 20 years."

### **Michael Palin**

"Learning to travel the hard way is not only the best way, but it's also the most memorable. I greatly admire all of you for having a go believe me you won't forget the experience."

### **Alexandra Shackleton**

"The terrain is exceptionally hostile and dangerous; but I am confident that Jim and his team will be successful not only in conducting an environmentally vital transect of the Arctic Ocean; for as Ernest Shackleton said "difficulties are just things to overcome."

### **Sir Chris Bonington**

"We all think that the world has been "discovered" and there are few areas that mankind has not reached. This is not so and projects like this serve to explore these extremes and push back the boundaries of our knowledge as well as the limits of those who take part."

### **Our Ocean Warrior Patron**



"The Oceans have been my life since I was a teenager. I love the awesome beauty, the serenity, the frenetic chaos and the overwhelming power. To think that we as humans have taken advantage of and abused our oceans to the point of serious damage is horrifying. Which is why I was honoured when Jim and Sam asked me to be Patron of their critically important project.

Over the next 10 years Ocean Warrior will train ordinary people from all walks of life and many nations to benchmark, measure, and monitor - ground-truth - exactly what is happening for our partner scientific organisations.

What's more they will do this by the power of wind, teaching the participants to sail in the process.

This by anyone's standards is an extraordinary endeavour and I'm so delighted to help them in any way I can."

TRACY EDWARDS MBE – Around the World Yachtswoman

# **Public Dashboard – Live Data**



# **Ocean Warrior Impact**

- Environmental Impact Climate and Ocean Research
- Innovation and Technological Development
- Scientific Democratisation and Collaboration
- Expanding Scientific Understanding
- Citizen Science and Education Awareness
- Developmental and Training Programmes
- Key Indicator Analysis
- Long Term Commitment and Legacy
- International Collaboration
- Adaptation Research
- Societal Benefit



# Our Founder, Explorer, Jim McNeill

With a rich history of 40 years delving into the most formidable environments on the globe, Jim McNeill stands out not just for his exploration prowess but for his unique origin story. Unlike his peers, McNeill's roots are deeply planted in the unassuming soil of a North London council estate, a stark contrast to the typical explorer's narrative.

A staunch but pragmatic environmentalist, McNeill's career is a mosaic of leadership and mentorship, where he has been instrumental in steering teams through Earth's untamed expanses. His expertise is not confined to the wilderness; it spans significant roles in environmental science, military operations, and emergency services, where he has shone as a fire and rescue authority, as well as in influential business positions.

Jim's deep-seated knowledge of safety protocols and survival in extreme conditions, derived from living with and learning from the Inuit, has made him an invaluable resource across industries. He has played a pivotal role in media, contributing to BBC's acclaimed series like 'Frozen Planet' and 'Human Planet,' and his skills have extended to the aerospace sector, aiding in the development and evaluation of helicopters and airliners.













frozen plane

## **Summary**

Jim McNeill's Ocean Warrior Project stands as a testament to human ingenuity, embodying the spirit of perseverance, resilience, determination, bravery, strength, and the collective power of individuals to drive transformation. This initiative transcends the slow pace of political action, directly challenging industrial and commercial giants to implement existing solutions that can counter environmental degradation. It emphasizes the urgency of immediate action, leveraging the latest technology known to be effective in mitigating ecological issues, and holds these entities accountable through vigilant monitoring of their impact.

The project highlights how changes in the planet's most extreme environments serve as early indicators of global ecological shifts. In pursuing this mission, the Ocean Warrior Project carries the aspirations of humanity, rallying support from every corner of society to join in this crucial endeavour.

We are actively seeking partners for our Ocean Explorations from 2025 to 2035.



"Because right now, we are facing a man-made disaster of global scale. If we don't act now, the collapse of our civilization and the extinction of much of the natural world is on the horizon".

**Sir David Attenborough** 

Please contact Jim McNeill, for the Full Story and to Prepare Your Business Case.

Join us ....and

Place Your Finger
On the Pulse of
the Planet

