

MAKING SENSE OF THE OCEAN: FROM OBSERVATION TO ACTIONABLE KNOWLEDGE



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



ECOP
Early Career
Ocean Professionals

CITIZENS OF SURF

Coordinator: Natalie Fox



PROGRAMME OF THE
EUROPEAN UNION



EUMETSAT



In collaboration with
the UN OD Data
Coordination Office





10%



90%



"Surfers interact with the ocean on a day to day. **They are like our human observation systems, our citizen scientists, and they can tell us if something is starting to feel off, starting to feel different.** Surfers should mobilize and organize to make a strong voice and sound the alarm on the challenges facing the ocean. This can be in local communities, nationally, or internationally - many voices speaking in unison can have a great impact."

~ Angelique Pouponneau, AOSIS & Former Member of Decade Advisory Board of the UN Ocean Decade

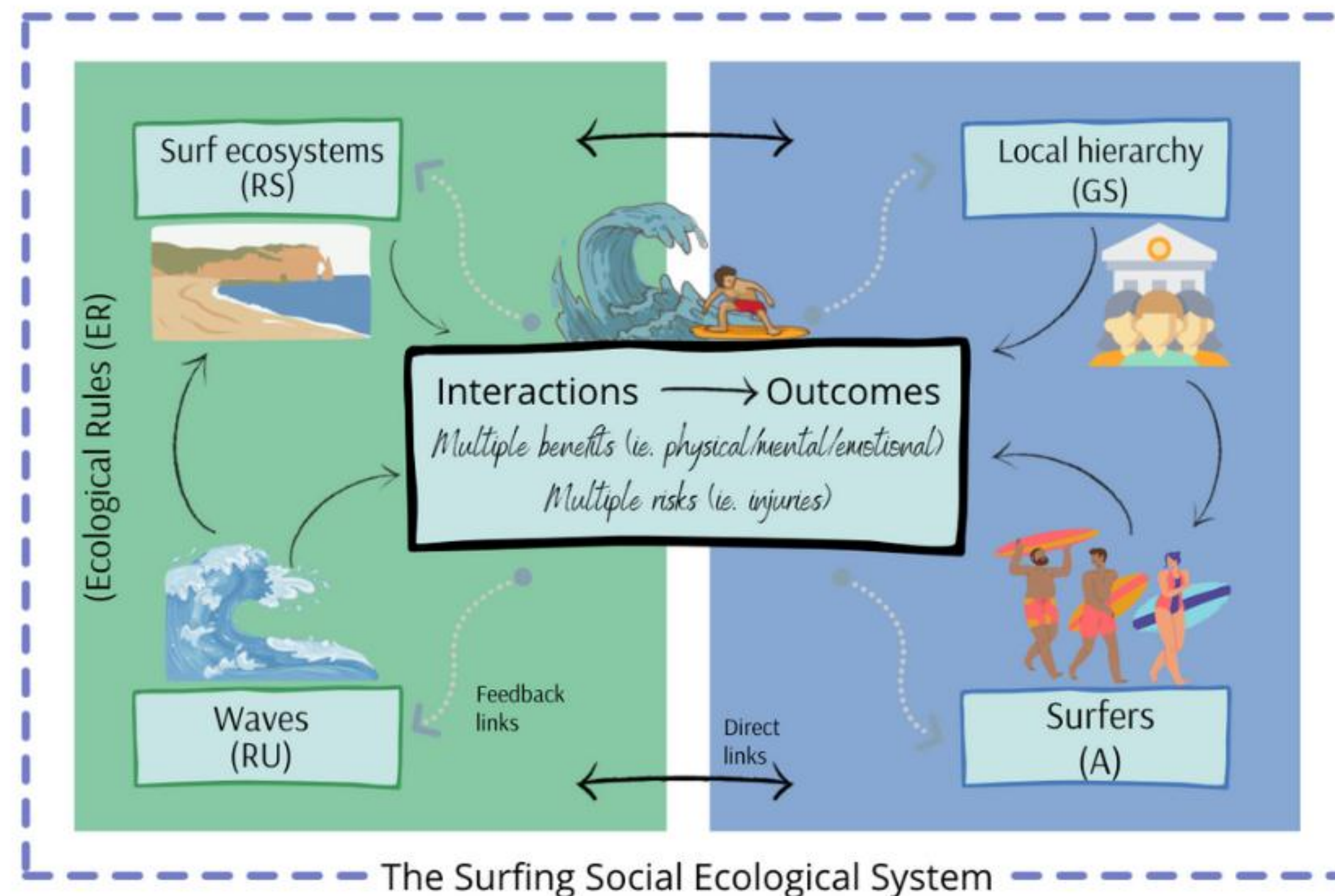
50+ million people are known to go surfing on a global scale.

(Surfing, bodyboarding, SUP / beginner - expert / recreational - professional / local - global).

Citizens of Surf connects surfers to ocean science and sustainability through the UN Ocean Decade, specifically through Challenge 10 (Restore society's relationship with the Ocean) so they can participate in achieving "The Science We Need, for the Ocean We Want" by 2030.

Citizens of Surf's mission is to transform surfing culture into a culture of care, empowering surfers to be actively engaged and involved in the monitoring, protection and restoration of surf ecosystems.





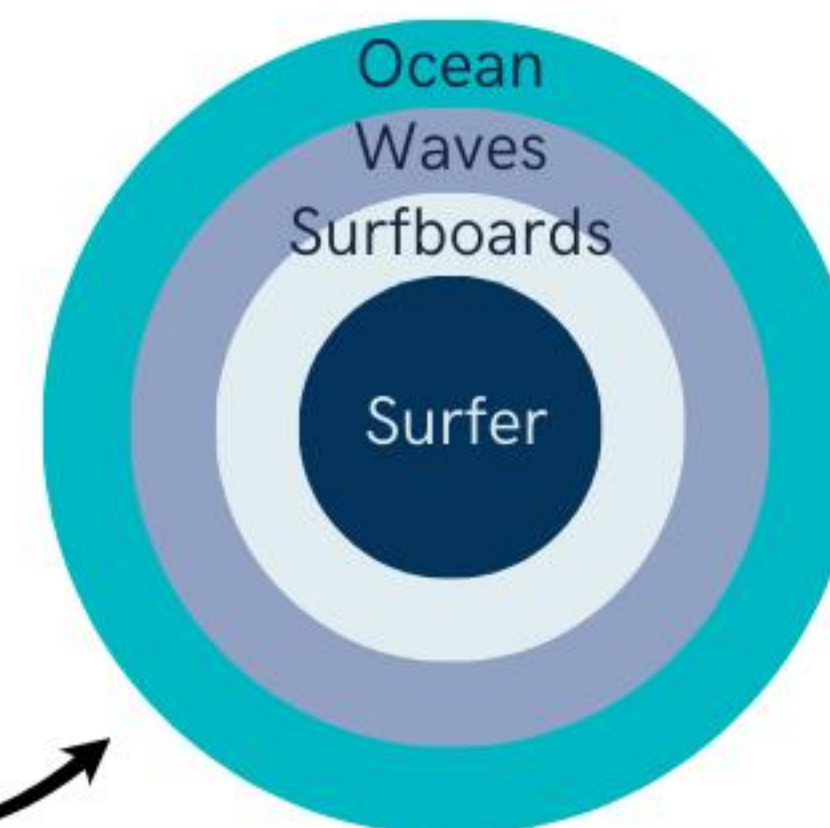
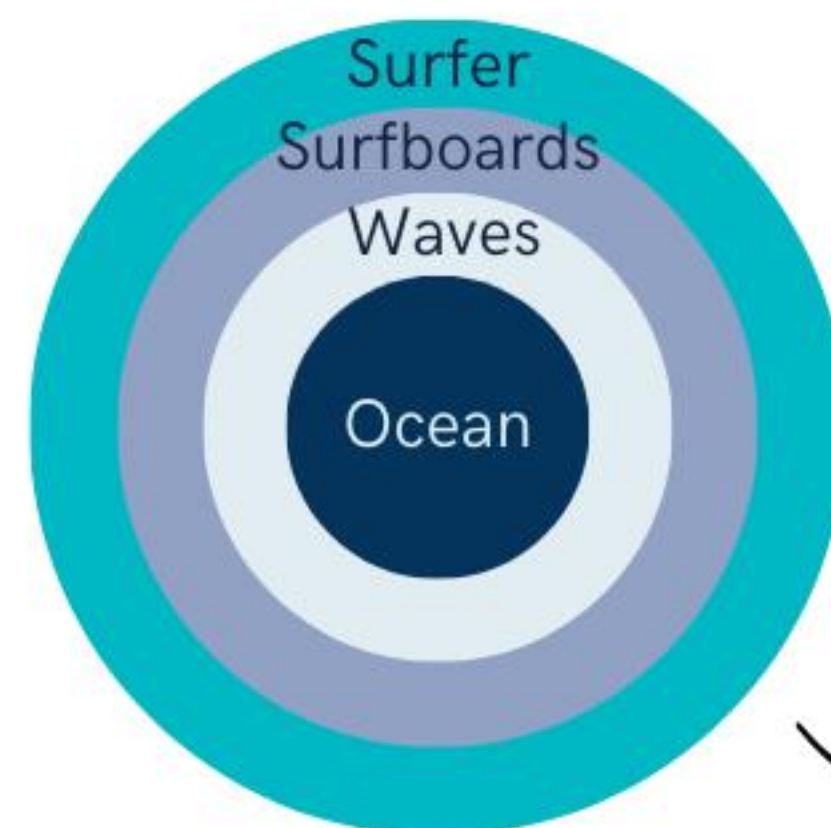
“Ocean grabbing refers to dispossession or appropriation of use, control or access to ocean space or resources from prior resource users, rights holders or inhabitants.”
Bennett et al., 2015



Misuse/exploitative use

vs.

Sustainable/regenerative use



“An ocean-literate person understands the importance of the ocean to humankind; can communicate about the ocean in a meaningful way; and is able to make informed and responsible decisions regarding the ocean and its resources.”
IOC-UNESCO

Phase 1: Research

THE OCEAN LITERACY PRINCIPLES

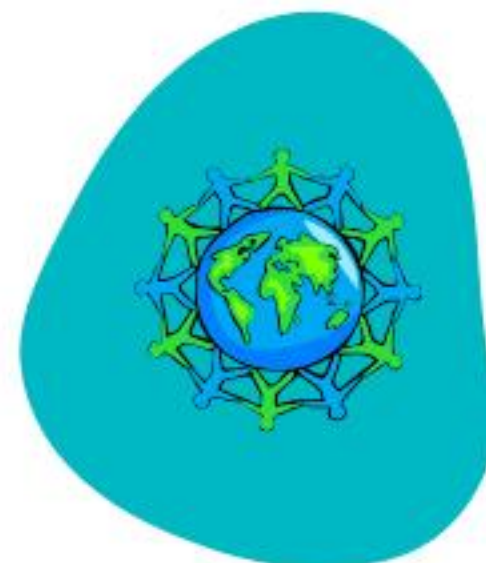
surfing research participants most identify with



3. Weather & Climate



5. Diverse Ecosystems



6. Human-Ocean connection

"READING WAVES SLOWS ME DOWN, MAKES ME MORE MINDFUL OF MY SURROUNDINGS AND OF NATURE, AND TAKES ME OUT OF ALL OF THE OTHER STUFF IN MY HEAD."

RESEARCH PARTICIPANT

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Open Access Article

Ocean Literacy and Surfing: Understanding How Interactions in Coastal Ecosystems Inform Blue Space User's Awareness of the Ocean

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Citation Export

55.8%

OF PARTICIPANTS
HIGHLY VALUE
ECOSYSTEMS DUE TO
SURFING

77.4%

OF PARTICIPANTS
ATTRIBUTE SURFING TO
THEIR UNDERSTANDING OF
THE OCEAN

91.2%

OF PARTICIPANTS
SURF TO FEEL
"CONNECTED TO THE
OCEAN"

59.2%

OF PARTICIPANTS SAID THEY
WOULD SIGN UP TO A CITIZEN
SCIENCE PROGRAMME

28.5%

OF PARTICIPANTS ENTERED
THEIR EMAIL ADDRESS TO JOIN
THE FOCUS GROUP.

DATA FOR THE
UN OCEAN DECADE
A EUROPEAN FOCUS

Phase 2 & 3: Reaching surfers through partnerships & outreach

Credit: Surfing for Science
Photo: Protect Blue



Climate Change Indicators
OL Principle 3,
Ocean Decade Challenge 5



Marine Biodiversity
OL Principle 5,
Ocean Decade Challenge 2



Marine microplastics
OL Principle 6,
Ocean Decade Challenge 1



REGENERATION SURF



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Decade
Coordination
Office



OL
Principles

OL
Dimensions

"As we look to the future of ocean literacy, and its role in delivering international ocean commitments, it is crucial to recognise that ocean literacy is a continually and rapidly evolving concept... it is important to recognise that there is no one size fits all model or quick solution to address current and future challenges...the complexity of ocean literacy as a concept must be recognised."

McKinley et al., 2023 in
The evolution of ocean literacy: A new framework for the United Nations Ocean Decade and beyond

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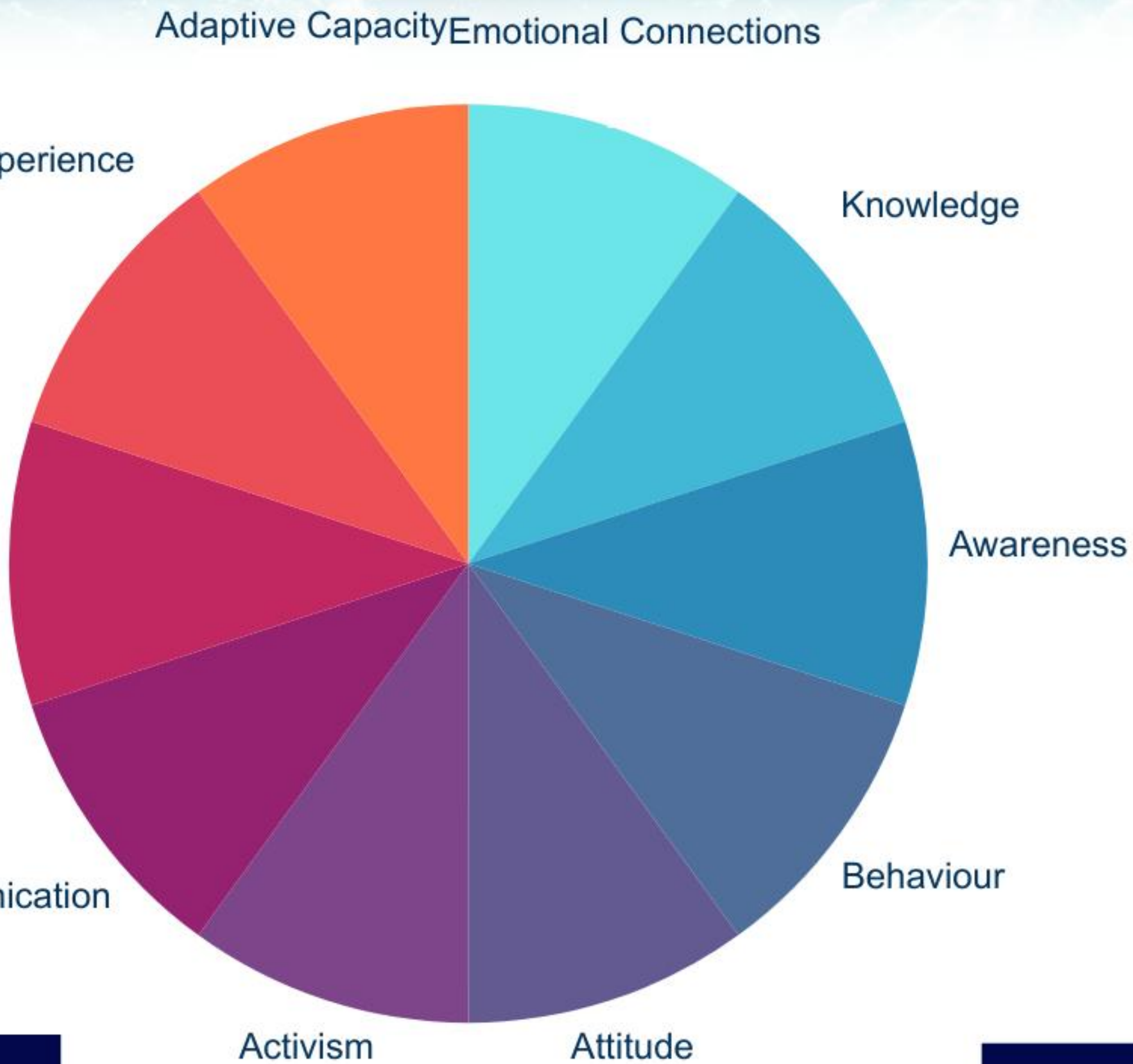




Activism



Awareness



Behaviour



Attitude

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**Phase 4: PhD research project -
Integrating Living Labs and Citizen Science:
Empowering Surfers to Monitor Climate Change
in Coastal Ecosystems**

Data Collection

Credit: Jessica Bradford



Challenge 1:
Introducing surf coaches to
collecting data from their
daily beach clean

Challenge 2:
eDNA sampling in surf
ecosystems - lack of funding
& lack of integration of data
back into the surfing
community

Challenge 3:
SST data collection in
Portugal & Nova Scotia...
data standardisation &
refining of research question

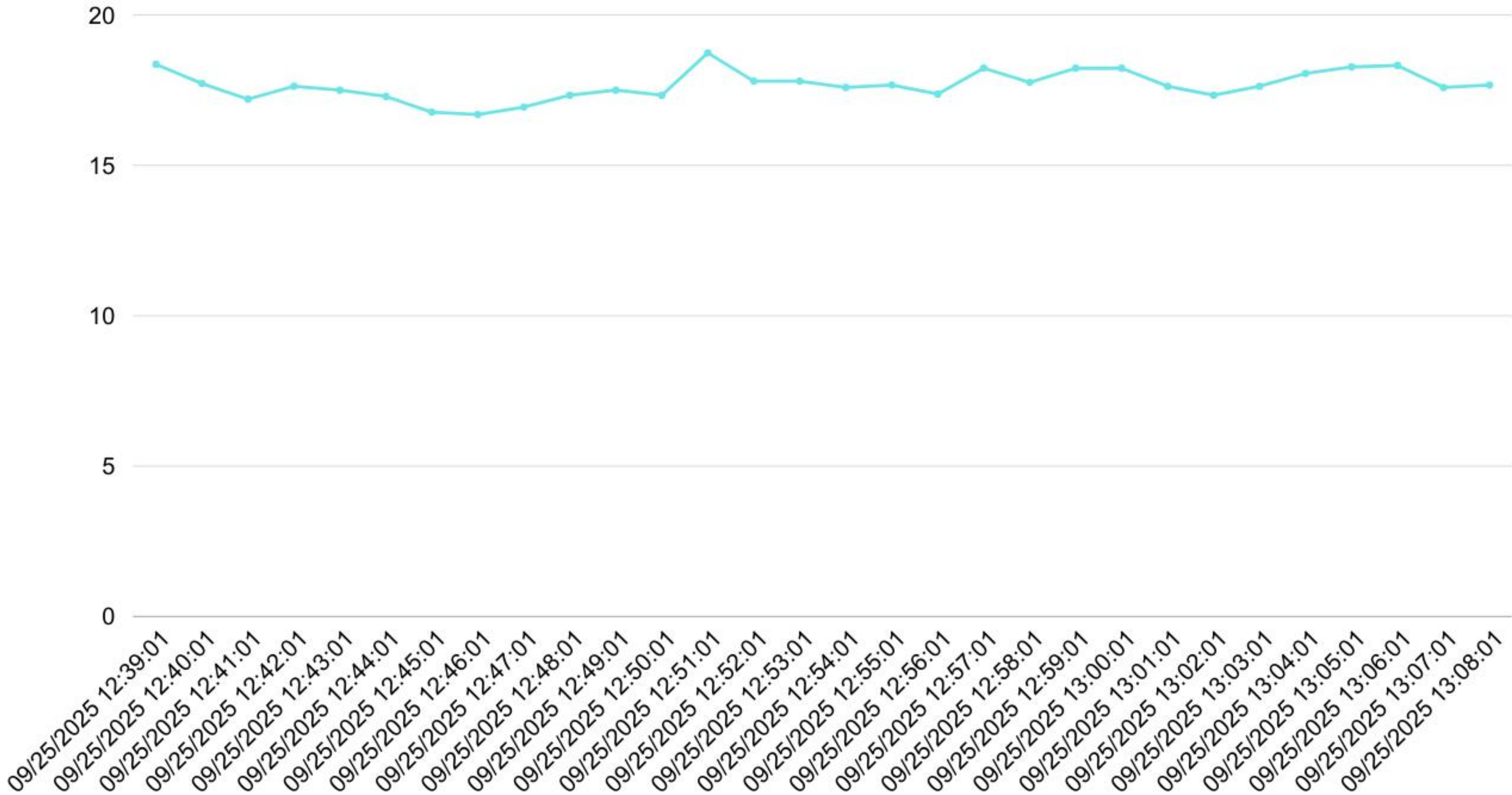


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Data Collection

HOBO Pendant MX Water Temperature
Data Logger results for 30 min surf





THANK YOU

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