

Ocean Science for Sustainable Development



About the program May 24th - June 14th, 2023







Introduction

At the Our Ocean Conference 2023 in Panama, Peace Boat US launched its educational programs for ocean and climate action to celebrate the inaugural voyage of the Peace Boat's new ship, the MV Pacific World. The Global Voyages resumed this year following a three year suspension due to the global pandemic. The first Global Voyage for the United Nations Decade of Ocean Science for Sustainable Development included a series of events and onboard educational programs that encouraged young leaders ages 18-30 years old to participate in the Global Voyages from different regions of the world to increase their knowledge about the UN Ocean Decade and how they can contribute to a global call to action.

These programs focused on several of UNESCO's 10 Ocean Decade Challenges for Collective Impact. Specifically, the programs contributed to Challenge 9: Skills, knowledge and technology for all by allowing participants participate in workshops and inport study programs to deepen

their understanding and knowledge of the challenges facing the ocean generally and specifically in the communities visited in the program.















By working with local partners and drawing on the experiences and knowledge of these communities, the program will contribute to Challenge 10: Change humanity's relationship with the ocean. Through the onboard workshops and inport programs, the participants explored several more of the challenges including tackling marine pollution, protecting biodiversity and building a sustainable and equitable ocean economy.

The Youth for the SDGs program is a unique experiential learning and capacity-building program for young activists and scholars engaged in SDG-related initiatives from the US and around the world. Peace Boat US aims to promote and strengthen youth engagement with the UN SDGs campaign, a goal identified as critical to achieving the SDGs.

This program was organized with various UN partners, scientists, civil society, private sector, indigenous communities and youth leaders, and, in an effort to support more indigenous youth voices in the ocean and climate education space, Peace Boat

US provided additional scholarships specifically for the indigenous youth to share their traditional knowledge and experiences onboard.

Meet the Arctic class of 2023!



Amy Harff USA

Amy Harff is a 25 year-old environmental educator and artist. Amy is currently creating an illustrated book featuring 25 female-identifying SDG changemakers around the world.

She is also conducting an independent research project to explore the intersection of art and the environment around the world. In the past 9 months, she has spoken with over 85 scientists, artists, community leaders, activists and academics about how art can be a tool for change.

Mitchell is a rising third-year undergraduate biological sciences student studying at Barrett, the Honors College at Arizona State University. Prior to his tertiary education, he had lived in multiple different countries around the world including the USA, New Zealand, and Switzerland and has since been settled in Honolulu, Hawaii for the better part of a decade.

His interest in oceans includes participation in beach clean ups with Sustainable Coastlines Hawaii, volunteering with local groups helping to clean the oceans like Rotary, and coral reef restoration. He is PADI certified and recently spent time in Tobago doing coral reef restoration.



Mitchell Chin New Zealand



Patricia De La Rosa Panama

Patricia De La Rosa is currently finishing her thesis project to opt for a Marine Biology degree at the International University of Panama (UMIP). Born in 1998 in Panama City, Panama, her interests include literature, science and languages.

From a very young age, she has been involved in different activities to support ocean conservation. From beach cleanups to organizing the Our Ocean Conference 2023, Patricia has shown a strong commitment to the protection of our planet and finding solutions for the ecological problems it faces.

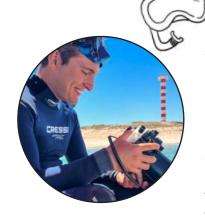
Winton is currently a program lead and a research assistant to the local NGO Kōrero o te 'Ōrau, an NGO that focuses on connecting our youth back to their roots, to their culture. As a research assistant and a program lead he focuses on various programs and initiatives that focus on educating the youth and community and to lead various research projects, such as operation Taramea, a eradication effort to remove the crown-of-thorns starfish. His involvement with both the youth of today and the wider community is what makes his contribution to Kōrero o te 'Ōrau invaluable.

Winton has also recently joined Blue Planet Alliance as a Global Ambassador.



Winton Teokotai Mata Turua Herman Cook Islands





Nicolás Marín Argentina

Nico Marín Benítez is 23 years old and from Argentina. He is an Award-winning underwater photographer, diver (divernaster), activist, and member of the prestigious National Geographic Explorer.

Some of his adventures include: living in Cozumel for one year reporting coral reefs, studying the behavior of whale sharks; being sent to report on the illegal fishing in Senegal, document MPA in Aruba; follow the hammerhead sharks migrations and manta rays in Isla de Plata and the Galapagos Islands and now documenting in Baja California Sur the behavior of orcas, sperm whales, humpback whales, mobulas and dolphins through photography and hydrophones to understand their language.

Yuki Kobayashi is in her fourth year of the undergraduate program of the Department of Legal Studies of the Global Environment at Sophia University in Tokyo, Japan, where she is majoring in environmental laws in Japan, international environmental laws, and policies. Her study focuses specifically on plastic pollution.

In addition to her academic pursuits, she is an active member of Green Sophia, a club at her university that promotes environmental studies and activities. Yuki is enthusiastic about learning and mobilizing actions around the world to tackle marine plastic pollution for a sustainable ocean.



Yuki Kobayashi Japan

Toni a no Mari As a impe Pala sust

Antoni Soalablai Palau

Toni currently works for Friends of the Palau National Marine Sanctuary, a non-profit organization that works to support the Palau National Marine Sanctuary, one of the world's largest protected areas of ocean. As an ocean conservation and protection advocate, Toni believes it is imperative to spread awareness about ocean conservation and to teach Palau's young students how they can do their part in ensuring a healthy, sustainable environment for all marine life.

She is keen to make a difference in Palau through her work in ocean conservation and awareness.

Zuzanna comes from Poland and she is studying a double major in Earth Systems and Design at Minerva University. With a passion for the ocean, education, and design, she started Thriving Corals, an ocean literacy organization aiming to spread ocean awareness to students worldwide. She believes that science + art can change the world.

Zuzanna loves sailing, scuba diving, and writing in her free time. She spent her gap year researching algae in the Atlantic, climbing mountains in Nepal, and sailing in the Caribbean. She currently writes a weekly newsletter, #e30613. Wherever she goes, she looks for an opportunity to start conversations and learn the stories of people from around the world.



Zuzanna Witek Poland



Siana is 23 years old and from the Cook Islands. She is an environmental partnerships coordinator at the National Environment Service (NES), a national agency mandated to protect, conserve and manage the Cook Islands environment. She holds a Bachelor of Science degree, double major in marine biology and environmental science from Victoria University of Wellington in New Zealand.

Siana is one of two national ozone officers in the Cook Islands, responsible for coordinating country programmes to comply with the Montreal Protocol on substances that deplete the ozone layer. Outside of her employment, she is an active member of Korero o te Orau, an environmental NGO in the Cook Islands. Siana has also recently joined Blue Planet Alliance as a Global Ambassador, and is joining the Arctic voyage with support from the organization.

Monique is a 27 year old marine biologist, working for the Fisheries Department for the past three years. She received an Associates of Arts in Biology at Miami-Dade College, Florida in 2014, and a Bachelors of Science in Marine Science with a Marine Biology focus at Rutgers University, New Jersey in 2017.

She has been working with many organizations to protect and enhance the marine environment, including the Fisheries Department where she focuses on the coral reef ecosystem and restoration, the lobster fishery, and Marine Managed Areas to name a few. She also serves as a liaison for the Caribbean Cetacean Society, which conducts whale and dolphin research in the Caribbean. Currently, she serves as President of the "Friends of Caribbean WaterWays" where she helps to organize fundraising events such as bake sales, and hands-on educational activities with youth in Saint Lucia through the NGO "Caribbean WaterWays". She is also the country representative for Sustainable Ocean Alliance Caribbean. Her ultimate goal is to encourage more Saint Lucian youth to champion the cause of environmental sustainability and marine conservation.



Monique Calderon Saint Lucia



Maria Fernanda Panama

Mafe is a finance and compliance officer by profession, with her strong background and skills she is a valuable addition to the Youth for the SDGs Scholarship program. With her keen attention to detail, analytical mindset, and excellent communication skills, she is confident that she can contribute to the program's goals of sustainable development. Her passion for ocean conservation adds a unique and valuable perspective that she is eager to share and learn from the experts in the field.

Her experience at the Our Ocean Youth Leadership Summit 2023 has given her a glimpse of the incredible power of young people as agents of change. Mafe is ready to collaborate with like-minded individuals and organizations to make a meaningful impact in ocean conservation and contribute to the United Nations' SDGs. For her, this is not just a mere aspiration; it's a deep calling that she feels within her, and she considers herself fortunate to have found her true purpose in life.

Contents

Contents		Conservation of the Biodiversity in Okinawa and	
		the Blue Coral	38
About the program	2	Onboard Peace Boat	40
Introduction	2	Jasna Bastic and the Effect of Media in	
London, UK	10	mate Industry	40
Networking Dinner at Selina Camden	10	Youthtopia workshop	40
Zoological Society of London	10	Exploring Bioethics through the Narrative Ap-	
Exploration of the Cutty Sark	11	proach of Professor Rihito Kimura	41
Clean up day in London	12	Onboard Peace Boat	42
London, UK	14	Mission Doable: Operation Taramea	42
Art, science & sound	14	OHWAKE! Magazine: Mangrove and Carbo	
Maritime Trade Museum	14	ide Emissions	42
Dinner Meet with Youth for the TPNW	15	Coral Ecosystems and their Restoration	43
Onboard Peace Boat	17	Longyearbyen, Norway	44
First Full Day Aboard Pacific World	17	The Arctic Expedition Museum and Adapt	
Navigation Trivia by Shunichi Hasama	17	the Climate Crisis	44
Onboard Peace Boat	18	Visit to UNIS: World's Northernmost U	•
Red Hill and Mauna Kea; Cultural and E		Center 78° N	45
mental Problems in Hawaii	18	Museum of Svalbard Visit	45
Cetaceans and their relationship with SD		Onboard Peace Boat	47
octaocano ana men relationemp with ob-	18	Exploring the Blue Economy: Unlocking	
Onboard Peace Boat	21	able Opportunities	47
How Art Can Help the Ocean Workshop	21	Ocean Acidification	47
Introduction Lecture to the Youth for the		Onboard Peace Boat	48
on board for the Public	22	Traditional Knowledge and Marine Manage	
Onboard Peace Boat	24		48
Cetaceans of the Caribbean: The Car		Dreams Come True: National Geographic I	•
Cetacean Society and the Ti Whale An Nou		Nicolás Marin	49
Project (TIWAN) and Presentation of Deep Sea-		Onboard Peace Boat	50
bed Mining Animation from SOA Caribbean		Conflict Exacerbation and Nonviolent Reso	
	24		50
"Chasing Corals" screening	25	Onboard Peace Boat	52
Onboard Peace Boat	26	Imagining a Future Peace Boat with "Ma	-
Plastic pollution	26	Youth Global University Program	52
Cultural Exchange by Yuki	26	Mission Blue	52
Åndalsnes, Norway	28	Against the Tide Documentary	53
Arrival to Åndalsnes	28	Onboard Peace Boat	54
"My Octopus Teacher" screening	28	Cultural Exchange with Japanese and	
Kazuo Takahashi on media literacy and pe		passengers	54
29Citizen science	32	United Nations World Oceans Day	56
Citizen Science & Youth for the SDGs	32	Akureyri, Iceland	58
Onboard Peace Boat	34	Elding Whale Watching Expedition	58
Learning about Svalbard's Seed Vault w	ith As-	Reykjavik, Iceland	60
mund Asdal	34	Geothermal Energy and Subterranean	
Professor Ehito Kimura P.H.D	34	Sequestration	. 60
Introducing the Palau National Marine S	anctu-	Sustainability, Biodiversity and the Whali	_
ary & the Palau Pledge	35	in Iceland – Public Event	61
Tromsø, Norway	36	Reykjavik, Iceland	62
Mads Qvist Frederiksen on Arctic Economics		Iceland's Human and Natural History at th	
	36	Museum	62
Dr. Vermeer on Turning the Blue Ec		GRO FTP and Iceland's MFRI	62
Green	36	Reykjavik, Iceland	64
		Whale Safari Expedition and the Integra	
Pukka Travels Kelp Study and Puffin Excu	ursion	Whales	64
• •	37	Wellness Retreat at Blue Lagoon	65
Onboard Peace Boat	38		
Ocean literacy and the science of learning	g 38		

L I will cherish forever the friendships I have made during this trip. It has been a unique opportunity to connect, create relationships and network with people all around the world.



London, UK Port programs

Networking Dinner at Selina Camden

On the 24th of May, the Youth of the SGDs program for the Arctic route kicked off in London with a networking dinner at the Selina Hotel. At the beginning of the evening, Emilie McGlone, the director of Peace Boat US, introduced herself, as well as the port activities following in the next few days in London. After which, all the Youth scholars shared their names and backgrounds, including what they were most excited for about their upcoming trip. The two most common themes were the exploration of wildlife and the ecosystems, as well as the possibility to connect with different people around the world.

The next speaker was Rebecca Daniel, marketing and communications lead at the Blue Marine Foundation, who highlighted the importance of ocean protection. She stated that industrial and destructive fishing is one of the most pressing problems when it comes to life below water. Robert Cobbold, COO of Beach Token, was the next presenter. He talked about the power of a social platform, like Beach Collective, which would reward people for climate activism and preservation. The sustainability lead of Google Arts and Culture, Clare Brooks, emphasized their aim to make art accessible to everyone everywhere around the world. Clare explained the "calling in our corals" project, an interactive online experiment to support scientists in their research around coral restoration. Chris Desai, founder of UOcean, was the next speaker. He drew attention to the fact that climate action should be selfish: we need ocean protection not only for future generations but for ourselves.

Chris mentioned that the luxury of volunteering is possible in 1st world countries only, but unthinkable or impossible in 3rd world countries. Heidi Prislan from Commonwealth Blue Charta presented 2023 as the year of the youth, specifically the commonwealth climate youth section. She highlighted the possibility of cooperation with commonwealth and non-commonwealth states.

The last speaker Dawn Moore from Oceanic Global, talked about the organization's two main principles: reconnection with origin and the rebalance of the blueprint. Dawn also talked about the work partnering with DOALOS to organize the UN World Oceans Day. The evening ended with further networking between the aforementioned speakers and the Youth scholars.

Zoological Society of London

On the second day of the program in London, the Youths for the SDGs had the opportunity to go to the Zoological Society of London (ZSL) located in Regent's Park. The ZSL was founded in 1826 and their mission is to promote and achieve the worldwide conservation of animals and their habitats. They serve as center for education, research and conservation.

The Youths for the SDGs Scholars had the opportunity to learn about different animal species and their conservations needs. Some of the animals seen during the visit included tigers, gorillas, lions, marine turtles, and otters, among others. Furthermore, the scholars learned about the ZSL's breeding efforts to increase the population of certain species of animals. This visit aligns with the Youth for the SDGs Program and the UN Ocean Decade: Tides are Changing by highlighting the importance of ocean conservation and promoting sustainable practices by showcasing the beauty and diversity of marine life and the challenges it faces.



The Youth for the SDGs group at Cutty Sark in London.

Exploration of the Cutty Sark

On May 25th, 2023, the Youth for the SDGs scholars went on an educational trip to the Cutty Sark, located in London, England.

During this visit, Youth Leaders learned about the importance of the Cutty Sark in maritime trade history. The Cutty Sark is a British clipper ship, built in Dumbarton (Scotland), in 1869. This vessel was one of the fastest tea clippers and was named after the nightdress of the fictional witch in Robert Burns' poem "Tam o' Shanter," first published in 1791. The Cutty Sark is listed by the National History Ships as part of the National Historic Fleet. This vessel is one of the only three remaining original composite construction clipper ships from the 19th century.

Cutty Sark provided Youth for the SDGs Scholars a chance to explore the world of ancient maritime trade and compare it with the way that it is done today. Maritime trade is now a complex activity that, with the passing of years, has proved essential for the economies of many cities. Argentinian scholar, Nico Marin, expressed: "The Cutty Sark was an important symbol in British transportation. It is amazing to see how ships have evolved. It makes me think of the Peace Boat." Zuzanna from Poland said: "The Youth for the SDG Program took us to historical places where we learned about the importance of Blue Economy."



London, UK

Port programs





On May 27th, the youth leaders visited the Natural History Museum in London and saw the giant skeleton of a whale hanging from the ceiling in the large, stone hall. They ventured through the different exhibits to learn about earthquakes, climate change, and various species of marine mammals. The youth marine biologists were especially excited about the models and interesting fact sheets about these animals. The group also learned that some narwhals can have two tusks instead of just one.

The next stop was the Animals temporary exhibition in the British Library. In the Animals: Art, Science & Sound exhibition the Youth for the SDGs explored the four sections: Darkness, Water, Land, and Air. Each section hosted curated pieces from the library's beautiful collections. The exhibit also highlighted interesting ocean facts, such as the earliest use of the word shark and the largest animal to ever live on planet Earth.

The group learned more about insects through stunning close-up photographs and watched a video explaining how we can make music from the library of animal and environmental sounds at the British Library to inspire others to be interested in nature. The exhibition was designed to be immersive, including ceiling projections and animated exhibitions, making it a inspiration for the youth to continue their efforts in ocean and nature education.

The day ended with a trip back to Tilbury to board the Peace Boat after the last adventures in London for the group.

Maritime Trade Museum

The group went to the Natural Maritime Museum and spent some time exploring an outside exhibition about the African slave trade and it's impacts all over the world. Several globes were on display that showed different artists' perspectives on this topic. Inside the National Maritime Museum, the youth visited several exhibits, such as "Polar Worlds" and the "Exploring the Arctic" exhibits. Amongst other things, they learned about polar slang, words and phrases that expeditioners on Arctic trips would use.



Dinner Meet with Youth for the TPNW

In London, the Youth for the SDGs Scholars had the opportunity to exchange with representatives in the UK who are part of the organization "Youth for the TPNW" and are seeking the complete abolition of nuclear weapons, pursuing constructive dialogue between nations and youth, and aiming to platform the voices of people already affected by nuclear weapons. Peace Boat is on the steering committee of ICAN, the International Campaign to Abolish Nuclear Weapons, and works towards a nuclear-free world for all. To create a sustainable future, youth leaders are coming together to support the implementation of the Treaty on the Prohibition of Nuclear Weapons.

The TPNW is the first ever treaty that completely and comprehensively bans the development, possession and use of nuclear weapons - making them finally illegal under international law. This treaty was created with a focus on the inhumanity of nuclear weapons. It is based upon the voices of the Hibakusha - the survivors of the atomic bombings of Hiroshima and Nagasaki - including both those from Japan and non-Japanese, as well as those impacted by nuclear testing and other nuclear development around the world. For decades, people from all parts of the globe and from all generations have played a role in this movement – and are together celebrating this historic achievement. We pay tribute to all those impacted by nuclear weapons who have shared their experiences as part of the movement for nuclear abolition.



The Youth for the SDGs group in front of the British Library.

It's important to me that people build a connection with nature, and I hope to spread that message to the world.



Onboard Peace Boat May 28th - May 30th

First Full Day Aboard Pacific World

The day started off with a morning team meeting during which Peace Boat US Director of the program, Emilie McGlone, informed the youth scholars that they would be featured in an interview on the Peace Boat CruiseNavi TV. During the interview, Emilie introduced the Youth for the SDGs program and the EarthEcho Water Challenge, joined by youth scholar Yuki Kobayashi, who translated to Japanese. Each youth participant introduced themselves with their name, country, and what they are

most excited about on this voyage.

They had their first team meeting and workshop, where they learned more about each other's hopes for the program, what they would like to learn, and the talents they would like to share with their fellow youth scholars, amongst other things. They also rehearsed their introductory presentation to the Peace Boat public as a team alongside the Communication Coordinators. Finally, the scholars had a networking dinner at the Marquis Restaurant onboard the ship with the Global English/Espanol Training Teachers where they had a chance to further get to know these teachers and the work they do on board the Peace Boat.



Navigation Trivia by Shunichi Hasama

On May 28, Shunichi Hasama, a maritime captain with years of experience, talked to the youth about the fjords and climate in the Arctic. First, he explained how fjords are formed: hardened glaciers carve mountains and melt, then U-shaped valleys remain, and the sea fills the resulting valley floor. During the 114th Global Voyage of Peace Boat, the youth sailed through the fjords in Norway and Iceland. One of the fjords is called Sognefjord. Sognefjord is located in the western part of Norway, and it is the second largest fjord in the world. The width of the fjords is about 5 kilometers with cliffs over 1000 meters high on both sides.

Mr. Hasama talked about effects of the Gulf Stream, which is a current of warm water that flows across the Atlantic Ocean from the Gulf of Mexico towards Europe. It provides mild winters and cool summers in the Norwegian coast.

Sailing for the sustainable development goals!





Red Hill and Mauna Kea; Cultural and Environmental Problems in Hawaii

Isato and Emma Kimura gave a presentation on the cultural and environmental issues in Hawaii, speaking about two ongoing conflicts from both cultural and biological aspects. The environmental problem was focused on Red Hill, a citizen movement created out of a jet fuel leak into the island's biggest aguifer and contaminated millions of peoples drinking water. This connected to the SDG 11, which attempts to create sustainable cities and equal for all. The second issue that Hawaii faced was the Mauna Kea telescope incident, which consists of large organizations managed to intrude on Native Hawaiian land, building a 30-meter telescope, hoping to use the clearness of the skies of Hawaii to research the universe. Native Hawaiians were outraged, protesting with rallies and blockades in front of the entrance of the volcano.

The cultural significance of Mauna Kea and the need for clean water and interdependence between the aforementioned aspects all came together to be taught about at this presentation, and the hope was that while connecting to the SDGs, the importance of the core of the problems occurring could then be traced back to problems in the participant's own respective countries and make an impact for the better.

Cetaceans and their relationship with SDGs

On May 29th, as part of the Youth for the SDGs Program, youth leader Patricia De La Rosa presented her workshop titled "Cetaceans and their relationship with SDGs." In this workshop, youth leaders had the opportunity to explore the world of cetaceans, their classification and learn about the representative species of whales and dolphins in Panama. Additionally, Patricia showed photographs taken during her fieldwork.

Patricia explained how cetaceans relate to the Sustainable Development Goals, more specifically number 11 and 14. In Panama, whales and dolphins represent a source of income to coastal communities. They are also part of the culture – where they interact with fisheries and the ecosystem. Youth leaders also had the opportunity to ask questions and learn further about Panama's relationship with these marine mammals.

The interactive section of the workshop included youth leaders drawing their favorite dolphin or whale, and including something meaningful as part of their culture. Drawings were then shared with the rest of the class, as each youth explained how their drawing relates to their personal experience.



We, the youth, have the power to change the course of climate change. With the knowledge we have today, learning from each other and growing together, we symbolize hope for generations to come.



This is now the time for action and change. With the changing times and rising tides, we must come together as a people to make a difference. We only have so much time left.



Onboard Peace Boat May 28th - May 30th

How Art Can Help the Ocean Workshop

Amy Harff presented her workshop, "How Art can help the Ocean," based on her research over the past 10 months as a Thomas J. Watson Fellow. The group brainstormed ways that art can be a catalyst for change. Amy presented her research based on her experiences and interviews with over 100 activists, scientists, researchers, NGOs and other community leaders. Based on her research, Amy presented the six main ways that art can be a catalyst for change which are: educating, connecting, providing income, healing, inspiring and imagining. Following the presentation, Amy led a guided visualization to have the youth imagine what they want the ocean to look like in 2100. They then created illustrations, presented them to the group and discussed actionable steps to make that future a reality.





Onboard Peace Boat

May 28th - May 30th

Cetaceans of the Caribbean: The Caribbean Cetacean Society and the Ti Whale An Nou Project (TIWAN) and **Presentation of Deep Seabed Mining** Animation from SOA Caribbean

Monique introduced the Caribbean Cetacean Society (CCS) and the Ti Whale An Nou (TIWAN) project to the SDG youth scholars, detailing the mission, approach and the scientific goals of the CCS and TIWAN. She also described the methodology used to monitor whales and dolphins by the CCS, as well as the technology used during their expeditions,

used for data

collection and

she gave a

broad picture

of what life on the boat looks like on a dayto-day basis during the course of the expeditions.

Monique also showed the #CaribbeanYouthAgainstDeepSeaMining video produced by Sustainable Ocean Alliance's (SOA) Caribbean Hub, which explained the importance of the deep-sea ecosystem and the dangers of mining in the deep sea. She also issued a call to action for the Youth for the SDGs participants to join SOA in encouraging their individual governments to vote for a halt to Deep Sea Mining at the International Seabed Authority's meeting in July.



"Chasing Corals" screening

"Chasing Corals" is a 2017 documentary film directed by Jeff Orlowski focused on the devastating effects of coral bleaching: a phenomenon caused by rising ocean temperatures due to climate change. It follows a team of divers, scientists, and photographers around the world and their epic underwater campaign to document the disappearance of coral reefs.

"Chasing Corals" is not only visually stunning but also serves as a call to action, urging viewers to take responsibility for the preservation of coral reefs and the overall health of our oceans.

This documentary serves as a power catalyst for the program, inspiring the Youths for the SDGs, to take actions towards SDG 14 (Life Below Water) and SDG 13 (Climate Action), and fostering a generation dedicated to preserving our oceans and combatting climate change.





Sailing for the sustainable development goals!

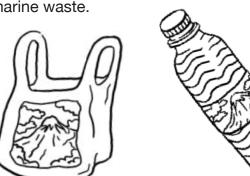


Plastic pollution

Yuki Kobayashi, a member of Youth for the SDGs program, gave a presentation on plastic pollution. SDG 14.1 states that by the year 2025 we must prevent and significantly reduce marine pollution of all kinds from land-based activities including marine debris and nutrient pollution. In some Asian countries, including Japan, it was customary to throw away garbage into the rivers, which accelerated plastic pollution. Yuki stated that after Japan had experienced high rates of sickness and disease, the government enforced laws to combat this issue. The strict enforcement of those laws has led to the decline of practices that polluted their waterways. However, some people in some rural areas in Asia still continue to throw garbage into rivers.

In Yuki's hometown, the mayor, the yacht harbor "Hayama Marina", and a holding company called Goldwin reached an agreement to collaborate on making Hayama a sustainable town and to provide citizens opportunities to understand environmental issues.

In 2022, they've installed a device called SEABIN which absorbs the sea water and captures plastic marine debris including microplastics. It collects on average 1.5 kilograms of marine debris per day. It may be still a small action, but very symbolic to understand the importance of social collaboration to take actions to eliminate marine waste.



Cultural Exchange by Yuki

Yuki Kobayashi, a Youth Leader from Japan, held a cultural exchange for the SDG youth group scholars. They learned greetings and self-introductions in Japanese, as well as basic and common phrases that they would use during the voyage.

It is important to learn the basics of the language because the majority of passengers on the Peace Boat are Japanese. Passengers onboard have many experiences related to peace, environmental issues, and the ocean. Learning Japanese encourages communications between youth leaders and Japanese passengers to share studies and thoughts with each other.







Åndalsnes, Norway Port programs

Arrival to Andalsnes

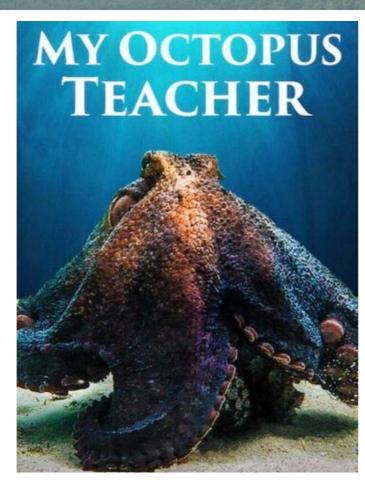
The visit to Åndalsnes by the Youth for the SDGs was an inspiring convergence of environmental awareness and sustainable development. Åndalsnes is a small town located in the western part of Norway, at the mouth of the Rauma River and is surrounded by majestic mountains. This city also serves as a gateway to the Romsdalen valley, known for its picturesque scenery and outdoor activities.

During their visit, the youth participants noticed a cluster of bladder wrack seaweed near the dock. The presence of this particular brown algae is characterized by its air-filled bladders that facilitate buoyancy. This seaweed serves as a habitat and provides sustenance for marine organisms.

The group conducted water testing by the dock. Using EEWC testing kits, they collected water samples and performed relevant tests on chemical conditions such as pH and dissolved oxygen. Additionally, they tasted the water for turbidity and temperature. From their testing and observations, they gained a greater understanding of the vital role of water quality in marine ecosystems.

After the water testing, the Youth for the SDG Scholars embarked on a gondola ride to Mount Nesaksla. The Åndalsnes Gondola offered panoramic views of the surrounding fjords, mountains and the town below.





"My Octopus Teacher" screening

"My Octopus Teacher" (2020) is a captivating documentary that shows the gradual bond that forms between Craig Foster, a filmmaker, and a wild octopus through breathtaking underwater cinematography and intimate storytelling. The documentary unravels profound insights about life, resilience, and our connection with the ocean.

"My Octopus Teacher" not only educates about the wonders of the ocean but it is also a reminder of the beauty and fragility of our planet. Its exploration of environmental conservation, marine biodiversity, and the need for sustainable practices resonates with the Youth for the SDGs Program and their passion for create a better future.

Kazuo Takahashi on media literacy and politics

On the 31st of May, the Youth for the SDG scholars met with Mr. Kazuo Takahashi, an international political scientist and Professor Emeritus of the Open University of Japan. He communicates world affairs to the public in easy-to-understand language. In his session with the Youth participants, he used humor to broach serious topics such as conflicts of war, refugee acceptance and how refugees contribute to economies. His takeaway message for the youth was to consider how Japan does not easily accept refugees and by doing so, prevents access to hard working and bright people. Mr Takahashi gave various examples of leading innovators and business executives from around the world who have refugee backgrounds, stating that refugees work extremely hard to succeed because of their harsh experiences and therefore refugees contribute a lot to the economies they take refuge in. His presentation pushed the students to consider how countries that do not accept refugees can compete with countries that do.

Mr. Takahashi also discussed the potential of a new shipping route from Norway to Japan, which could open new trading opportunities, particularly in the gas and oil sector. This route may be favorable compared to current routes because it would be a shorter travel distance, therefore faster shipping with less fuel and energy expended.

He posed this question to the youth: "Should a route through the Arctic be taken advantage of or are there other issues to be considered?" Mr. Takahashi shared his view that the establishment of such a route should be approached carefully given uncertainties about the possible ecological impacts.

Mr. Takahashi is also the author of numerous works, including "The Structure of Israel/ Palestine" and "Arabian Conflict," "Ambitions of the Islamic State," and "The World Collapsing from the Middle East/The Return of Iran and The Transformation of Saudi Arabia".





Program highlights: Water sample testing in each port

Water testing with the EarthEcho Water

At various ports throughout their voyage to the in water testing affiliated with the EarthEcho Water Challenge (EEWC) started by EarthEcho International. They used EEWC water testing kits with simple tools and tablets to collect data points about various aspects of water quality including pH, dissolved oxygen, and temperature at respective ports. These EEWC water testing kits are designed to ensure easy public accessibility. As such, these kits and other easy-to-use data collection tools can be used as a part of citizen science. Citizen science, in turn, plays an important role in expanding the scope and capacity of science when efforts of curious individuals from the public are coupled with the work of scientists. In this regard, youth participants strove to add to the EEWC database to enhance water quality monitoring data that could help identify also go on to inform groups like policy makers or approaches to important projects like water Echo Water Challenge Ambassador program for youth ages 14-22 years of age in the United States. This program aims to engage youth with learning about protecting their local waterways while spearheading educational projects on the importance of waterway conservation for their local communities.

Select sampling locations from the Arctic voyage



Gåsvær, Norway



Longyearbyen, Norway

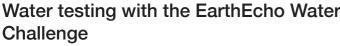


Akureyri, Iceland



Åndalsnes, Norway

Youth participants conducted testing in multiple locations including London, Åndalsnes, Tromsø on the island of Gåsvær, Longyearbyen, Akureyri, and Reykjavik. At each location, youth participants also recorded surrounding environmental conditions and nearby infrastructure. This information also helped provide additional context for the data collected.



Arctic, Youth for the SDGs Leaders participated water quality trends over longer periods of time within specific areas. Analysis of this data could conservation programs. Furthermore, EarthEcho International has recently launched a new Earth

Peace Boat US Arctic 2023 Youth for the SDGs Program

Sailing for the sustainable development goals!



Citizen science Program highlights

Citizen Science & Youth for the SDGs

Citizen science is a collaborative approach to scientific research that involves the general public. It allows curious and concerned individuals to work together with professional scientists to collect and analyze data, contributing to projects in various fields such as ecology, astronomy, medicine, and more. The participation of citizen scientists enables investigations at large scales and over extended periods, leading to discoveries that would be difficult for individual scientists to achieve alone. Anyone can be a citizen scientist, regardless of their background or expertise, and projects often emphasize standardized protocols and data sharing to ensure high-quality results.

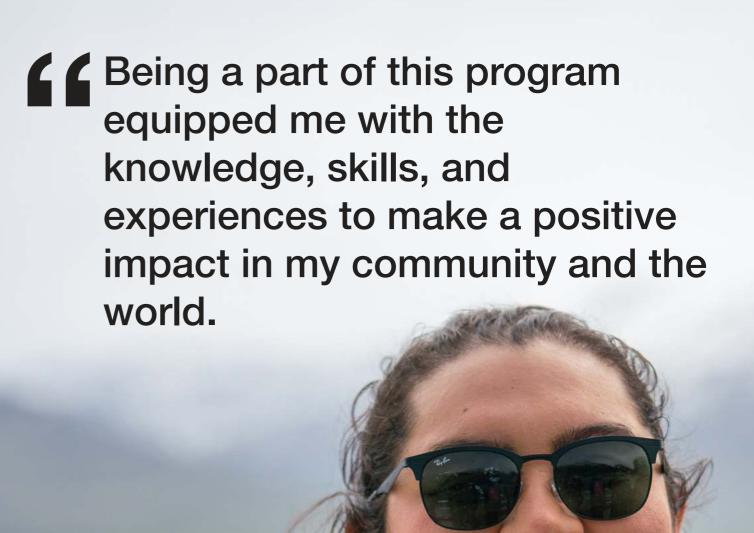
In the future, citizen science will have a significant impact on scientific research. It will bridge gaps in knowledge by connecting motivated individuals with projects aligned with their interests, expanding the scope of research through remote contributions from millions of participants worldwide. Public participation in scientific research will also cultivate a scientifically literate citizenry, empowering individuals to influence science policy decisions based on evidence and contributing to shaping the future of scientific research. Intersection with Youth, SDGs, and the UN Decade:

Citizen science intersects with the Youth for the SDGs program by providing them with opportunities to actively contribute to addressing global challenges, advancing scientific research, and participating in projects related to environmental conservation, public health, and other critical areas aligned with the SDGs.

This engagement allows them to develop a deeper understanding of the issues at hand and contribute their perspectives and ideas to find sustainable solutions.

Furthermore, citizen science aligns with the United Nations Decade of Ocean Science for Sustainable Development, which aims to promote the engagement of all people in the process of scientific discovery and innovation. By involving the general public in scientific research, citizen science supports the objectives of the UN Decade. It encourages broader participation, fosters inclusivity, and enables the sharing of knowledge and data across borders and disciplines. Citizen science plays a vital role in creating a more inclusive and sustainable scientific ecosystem, where diverse voices and contributions are valued and utilized to achieve the shared goals of scientific progress and societal well-being.





Maria Fernanda

Panama

Onboard Peace Boat June 1st

Learning about Svalbard's Seed Vault with Asmund Asdal

On June 1st, Asmund Asdal presented on his work at the Seed Vault. He gave a brief overview of the difference between seed banks and seed vaults, and explained why some plants can't be preserved as seeds. Instead, they are preserved as small plants, plant cells, or in their natural habitat. Asmund highlighted how important seed vaults and seed banks are to countries and how they are essential for agricultural production. He further explained the genetic aspect of seed and plant collections as well as the significance of maintaining multiple samples of various plant species as a potential fall back. He also explained the criteria for seeds to enter the Seed Vault in Svalbard, Norway. Asmund explained the history of the Seed Vault, which seeds are prioritized and conserved, and how long seeds can last.



Professor Ehito Kimura P.H.D

The Youth for SDG's scholars had the amazing opportunity to participate in a lecture with Associate Professor of the University of Hawaii

Professor Kimura, Ph.D., educated the youth on political sciences and political theories, and what better way to engage the youth than with a game. The game, better known as the Isle of Ted, taught the youth the theory of collective goods, the common goods, and the tragedy of the commons. The game takes place on a small island state divided into six cities each with their own road systems, fisheries, and coastal defence. The youth and their own cities focused on a shared food source, road system and costal defence against pirates. The game continued for ten rounds where Professor Kimura highlighted the political theories associated with the decision-making process and actions the youth performed.

The youth left the lecture astounded and deep in thought about the choices made and what other things that they could have done differently. Professor Kimura's lecture instilled in the youth a sense of awe and wonder in the political aspects of the world. This was an important lecture as within the climate action that the youth are taking there is also a certain aspect that is political, and having this base foundation of political science is an important steppingstone to better understand the wider world.



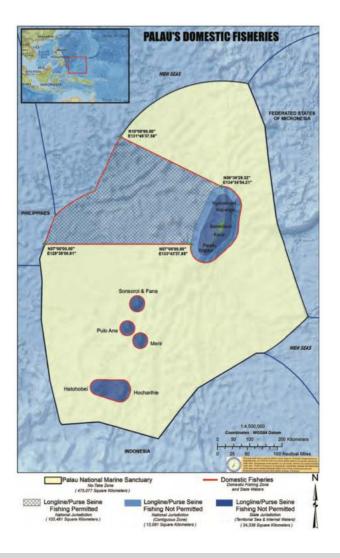
Introducing the Palau National Marine Sanctuary & the Palau Pledge

During the 114th Global Voyage of the Peace Boat, Ms. Antoni Soalablai represented the Republic of Palau as a youth scholar for the Youth for the SDGs Program for the UN Decade of Ocean Science for Sustainable Development. While traveling through the Arctic, Ms. Soalablai delivered a presentation to ten other youth advocates from all around the world about the beauty of Palau and of its efforts in maintaining that beauty via the Palau National Marine Sanctuary. Ms. Soalablai's presentation also included the Palau Pledge, a requirement for all of Palau's visitors to do their part in the protection of Palau's natural beauty.

The Palau National Marine Sanctuary (PNMS) is one of the largest no-take marine protected areas in the world. Enacted in 2015, the PNMS protects 80% of Palau's exclusive economic zone as it closes off waters that are currently fished by longline and purse seine, adjacent to Palauan customary fishing grounds. The PNMS is home to a diverse range of marine life, including the critically endangered hawksbill and leatherback sea turtles, manta rays, whales, pelagic fish, and sharks, all of which hold great cultural and socioeconomic importance to Palauans.



The Palau Pledge is a world-first initiative that requires all visitors to the country to make a commitment to protecting Palau's natural environment and respect local traditions. The Palau Pledge asks guests to take responsibility for their actions [MC1] and make a conscious effort to tread lightly - to have minimal impact and help conserve Palau (respecting the modern-day BUL) during their stay - so that they can enjoy the many marvels of Palau without taking away from them. The Pledge aims to conserve the country's natural and cultural resources so citizens and guests can enjoy them for years to come.



at Manoa, Ehito Kimura.



Mads Qvist Frederiksen on Arctic Economics

In Tromso, Norway, the youth for the SDGs had the pleasure of meeting with the director of the Arctic Economic Council, Mads Qvist Frederiksen. During their time with the director of the AEC, youth participants engaged with the business portion of the Arctic, and the communities therein, that are often overshadowed in media. Mr. Frederiksen educated the youth about the region's history of trade and the innovative ventures that businesses in the Arctic have engaged with from the application of fish skins for burn injuries to hydrogen energy in steel production. Additionally, youth participants engaged with the benefits and difficulties surrounding the Per Geijer deposit and other untapped rare earth mineral resources the Arctic region could leverage to diversify current global distribution and trade. From their discussions with Mr. Frederiksen, the youth left with a greater understanding of the pioneering role the Arctic has in the global economy and sustainable development, and the issues Arctic economic growth faces in areas such as investment.



Dr. Vermeer on Turning the Blue Economy Green

The youth for the SDGs had the fortune of participating in a lecture by Dr. Daniel Vermeer, an Associate Professor at the Fugua School of Business at Duke University and leads the Center for Energy, Development, and the Global Environment. Dr. Vermeer's lecture focused on the Blue Economy and how it could be turned "green" for a sustainable future. Youth participants learned about how different parties have come to understand the Blue Economy and the industries such an economy includes. From a broad perspective of the Blue Economy, the youth engaged with research related to the Ocean 100, or the distribution of those sectors that profit most from oceanbased activities; of which the oil and gas sector was the largest. To turn the Blue Economy green, Dr. Vermeer highlighted four key features including decarbonized, restorative, smart, and collaborative efforts to encourage the sustainable use of ocean resources and the maintenance of its integrity. In closing, Dr. Vermeer also introduced a parallel to the "overview effect" as a means of shifting human perspective and understanding of oceans to one that is central to our existence.



Pukka Travels Kelp Study and Puffin Excursion

On June 2nd, youth leaders left Tromso on a short excursion to Gasvaer on a kelp study program with Pukka Travels. From their time on the island with Pukka's tour guides, the youth had the opportunity to see in person Norway's diverse array of macro algal species from oar weed to truffle seaweed. Their discussions also covered issues of proper harvesting and management of such algae, differentiations between kelp and seaweed development, and issues with toxic metal uptake, like arsenic, by edible kelp species within industrial zones. Youth Participants also learned about the biology of macro algal species that helped inform harvesting practices of sea weeds and kelp.





Kelp unlike, seaweed and terrestrial plants, grow from the base of their blades such that the base of blade are the youngest parts of the kelp. Furthermore, kelp have stipes, or long stems, that attach to substrate on the ocean floor via a holdfast. Youth also observed two variations of sacs on the seaweeds in the area, ones that contained gas, supporting floatation for increased sunlight exposure, and ones that contained spores, used in seaweed reproduction when environmental conditions are met to increase reproductive success. After the kelp study, the youth helped clear the island's coast of plastic debris before departing for Sorfugloya: a national bird and wildlife sanctuary where they were in awe at the bustling bird life. One species in particular, the puffin, amazed participants when they learned of the bird's ability to dive over 40 meters! From their expedition, the youth left with a newfound appreciation for the Arctic's fauna and flora.

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Onboard Peace Boat

June 2nd - June 4th

Ocean literacy and the science of learning

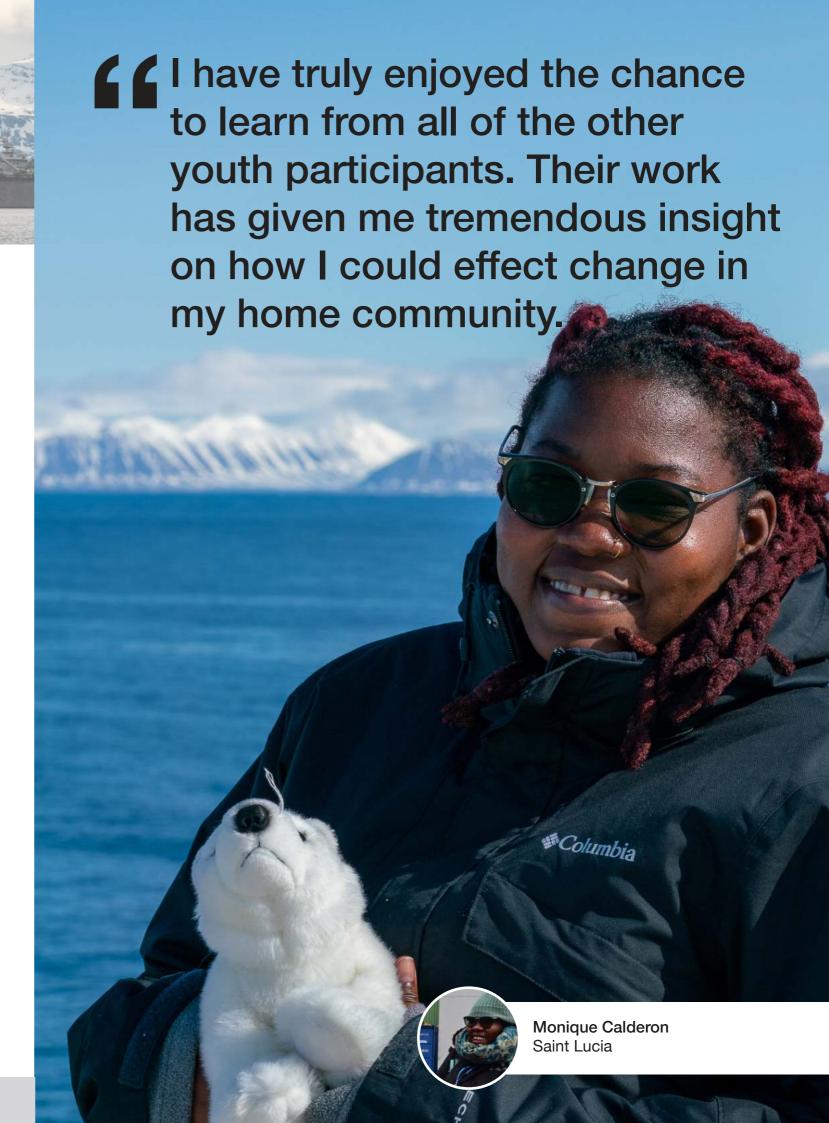
Zuzanna Witek presented a workshop about cognitive science and the science of learning. and how to apply these principles to convey ocean literacy more effectively to the public. She discussed the three key theories underlying engagement in teaching and learning, including the Flow State, Self-Determination Theory, and Situational Interest. The group also discussed how and why they were taught in the past, and reflected on why video games are an excellent example of engagement that combines mastery, purpose, and autonomy. The workshop ended with a reflection on the importance of active engagement in the classroom for increasing the number of students pursuing STEM degrees, especially women. Understanding these concepts is crucial to improving the educational programs around the oceans, and became a new helpful tool for the youth to further their initatives.



Conservation of the Biodiversity in Okinawa and the Blue Coral

Peace Boat US continues to work towards the conservation of the Okinawan Blue Coral, which is an endemic species to the southern islands of Japan. Currently, the biodiversity in the region is being threatened by the construction of military bases in the area, which would destroy the local environment and natural habitat of the Dugong, an endangered species that is a relative of the manatee. At Henoko Bay, a huge section of the ocean approximately 2500 meters long and 730 meters wide would be filled in with cement from the construction. The surrounding sea life would be destroyed, the coral, the rich culture of fish and shellfish, as well as the dugong's habitat would be affected. The sea of Henoko is a rich pasture of seaweed, which feeds the dugong that live there as Okinawa is the northernmost boundary of the habitat of the Dugong, which is threatened by extinction.

Just north of Henoko Bay, there is another unique ecosystem being threatened. The Oura Bay in Okinawa hosts a rich range of wildlife, such as the blue coral. A large blue coral, Heliopora coerulea, was found 400 meters off the coast of Nago City measuring 50 meters long, 30 meters wide and 12 centimeters high. The blue coral, along with other coral types Acroporas, Porites, Galaxea, make up a unique coral reef system that provides habitat for many different fish species such as damsel fish, fusilier and wrasse. The blue coral plays a key role in supporting the rich biodiversity of the Oura Bay marine ecosystem and therefore is vital to protect. Heliopora coerulea is currently on the International Union to Conserve Nature (IUCN) Red-list of vulnerable species.





Jasna Bastic and the Effect of Media in the Climate Industry

Jasna Bastic, born in Bosnia and Herzegovina, is a trained journalist, covering different topics such as: war and historic awareness, media literacy, media manipulation, fake news, and the use of social media later in her career. The Youth for SDG's had the opportunity to talk to Jasna about her experiences in media, which she connected to the ocean and climate industry. She highlighted how modern-day media outlets leverage emotion to make their coverage interesting, which can lead to some of the outlets using fake news to gain traction and attention.

Jasna also pointed out that there are some undeniable facts that should be accepted by all the world, with the climate crisis being one of them. As she notes, the climate crisis should be accepted by the world population because there is enough evidence to show that the climate is changing at a dangerous pace, and this crisis is going to have a devastating impact on the whole world if the world doesn't slow it down.

The media can also have a positive impact to spread the message about the climate crisis, as one of the benefits of media outlets is that news can spread fast. The Youth for SDG's hopes to take this knowledge and apply it to effectively and quickly spread knowledge about this climate crisis for the people of the world to learn and act on it.





Youthtopia workshop

Amy presented the story of Indonesian youth activists, Melati and Isabel Wijsen, and their founding of Bye Bye Plastic Bags at the ages of 12 and 10. She also talked about Youthtopia, the SDG-focused youth organization that she interned for last month at their headquarters in Bali, Indonesia. She then invited the youth under 25 to become Youthtopia Circle of Youth members which will give them access to different opportunities and resources, such as internships and master classes.

Exploring Bioethics through the Narrative Approach of Professor Rihito Kimura

Mr. Rihito Kimura has delved into the multifaceted field of bioethics, offering valuable insights through the book, "Mr. Kief," and numerous articles. Mr. Kimura has dedicated his work to understanding and addressing ethical challenges in healthcare and peace through the power of storytelling.

During his talk, Mr. Kimura emphasized the transformative power of narratives in the field of bioethics. He believed that narratives can humanize complex ethical dilemmas by connecting them to the lived experiences of individuals. By sharing personal stories, living through and witnessing the ramifications of war, a more profound understanding of the ethical dimensions of healthcare decisions, scientific advancements, and technological impacts on human lives can be achieved.

With a focus on life, death, and the stages that precede and follow them, his interdisciplinary approach has earned the term & suprainterdisciplinary & for its comprehensive nature.

Mr. Kimura invites us to engage in empathetic conversations and foster a deeper understanding of the profound ethical challenges that underlie healthcare and peace. He mentions that bioethics and SDG 3 "health and welfare for all" are closely interwind. Also, he invited the Youths to recognize the injustice in life and said that they all have a chance to transform the world.



Onboard Peace Boat

June 4th - June 5th

Mission Doable: Operation Taramea

Winton Herman's workshop centered around his work in Rarotonga. His workshop was presented in two parts, the first being his work in removing invasive crown-of-thorns starfish or, in his mother tongue, taramea. The second involved an overview of the local NGO he works with, Kōrero o te 'Ōrau.

The crown-of-thorns or taramea is a large carnivorous starfish that feeds on coral. Within the past few years, the Cook Islands has experienced a massive outbreak, which is characterized by taramea numbers exceeding normal predator-prey levels (one to one). He highlighted how Rarotonga and some outer islands' reefs suffered heavily from this outbreak. He also noted the causes for the outbreaks that occurred on these islands, namely an overabundance of nutrients flooding the lagoon and ocean from land runoff. Winton went on to explain how he and his NGO have been working diligently to remove the taramea with their limited resources. He stated as of the 5th of June, Korero o te 'Orau had officially hit a milestone as they had successfully removed over six thousand one hundred taramea from the islands' reefs. Addressing this issue, which is driven by local impacts, builds the climate change resilience of these marine ecosystems.



The second part of Winton's workshop highlighted his local NGO Kōrero o te 'Ōrau. He spoke about the local community projects, youth engagement and development work, terrestrial and marine environmental research, and the many cultural education initiatives involved in said NGO. Winton also showed the SDG scholars a little piece of what this NGO does through the video projects Kōrero o te 'Ōrau has produced and highlighted the importance of connecting to their foundation of traditional knowledge with their natural environment with help from sciences.



OHWAKE! Magazine: Mangrove and Carbon Dioxide Emissions

On June 4th, 2023, the Youth for SDGs Scholars followed the activities on a section from OHWAKE! Magazine about the mangroves and their role in sequestering carbon dioxide emissions. The Youth scholars also learned about the importance of mangroves in coastal regions. They serve as nurseries for juvenile species of fish that are the foundation for many countries' fisheries, protection from coastal erosion, and a hub for biodiversity. The scholars created their own versions of the mangroves, including the marine species that call the mangroves home. Through this exercise, they learned about the different species that live in the mangroves and how to care for these critical ecosystems.

Coral Ecosystems and their Restoration

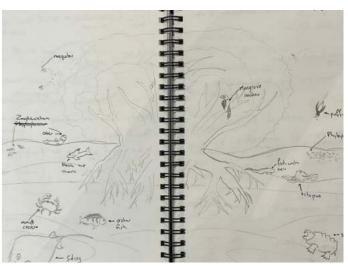
Aboard the Peace Boat, Mitchell Chin gave a workshop to the Youth for the SDGs Scholars on the practice of, and need for, coral restoration. Mitchell covered a litany of related topics that highlighted the integral role of coral reef ecosystems to marine species and human livelihoods alike. As he noted, coral reefs are essential biodiversity hotspots and can provide a source of food, revenue, and medicine. Youth participants also learned of the ever-increasing threats these reef ecosystems are now faced with as global emissions continue to increase.

To help combat such issues, Mitchell covered various processes of coral restoration work through the lens of an NGO he worked with called ERIC in Tobago. More specifically, he helped with work restoring populations of critically endangered staghorn corals, the population of which has seen an almost 98% decline in the area. His discussion of such practices involved not only the methods for coral restoration, but also the efforts to bolster community engagement and the limitations faced by those groups striving to restore reef ecosystems in more remote or poorer areas.

By the end of the workshop, youth participants were invited to brainstorm coral nursery designs and materials that could increase sustainability of, and engagement with, such practices to further conservation of these critical ecosystems.







Mangrove workshop art by the Youth.



The Arctic Expedition Museum and Adaptation for the Climate Crisis

The Youth for SDG's scholars had the opportunity to visit the Arctic Expedition Museum in Longyearbyen. The museum was curated with the purpose of teaching visitors about the attempts made to find and explore the arctic, as well as housing artifacts from some of the most significant expeditions. When the expeditions to the Arctic first started, the advancement in the technology was visible through the chronological exhibits. The advancement in the of technology in a short period of time can be paralleled to human's technological advancement to combat the climate crisis. Two explorers named Cook and Amundsen were at the height of the battle for reaching the South Pole before the other. Cook fell short, while Amundsen succeeded, and one of the major factors in Amundsen's success was adaptation to his environment. Amundsen knew that dogs were adapted to colder climates and could provide great value, while Cook used ponies, not considering the environmental conditions that could affect those animal's performances.

In the same way that simple adaptations could show great results, taking simple steps to combat the climate crisis shows modern relevancy. Take nonrenewable energy as the ponies and renewable energy as the dogs from the previous example. Both species of animals were brought by explorers for the same purpose, but the better adapted option could lead us to a brighter and cleaner future. The worse adapted option could lead the expedition for a clean and better tomorrow sinking into the depths of the climate crisis.





Visit to UNIS: World's Northernmost University Center 78° N

The youth for the SDGs visited UNIS, the northernmost university center in the world. At 78 degrees north, the university organizes unique opportunities for students to study Arctic biology, geology, chemistry, technology, and more. The youth group met with a chemical oceanography professor, Dr. Eva Falck, who explained their most recent expedition. The youth explored and learned about the trends in the data from the professor based on Ocean View CTD graphs, including the indicators of ocean acidification. The group also learned about the studies of the students at UNIS. coming from all around the world to pursue their studies and theses centered around the arctic, ocean, and climate change in Svalbard. The session finished with an informative & giving the youth group a more complete understanding of the surrounding ecosystem and university life in the arctic.

Museum of Svalbard Visit

Museum Head of Education, Sigrun Selboe, gave a thorough and informative presentation about the history of Svalbard to the youth ambassadors. She started her explanation with the early mining days and pointed out clothing, tools, and other artifacts used by the workers. She also explained traditional hunting practices, showed modest living quarters, and gave a brief overview of women's history in Svalbard. The youth then had some extra time to continue exploring the museum to learn more about the local wildlife and mining operations that were at one time prominent across the archipelago. They also visited the current exhibit on the history of democracy and representation in Svalbard.



Sailing for the sustainable development goals!





Exploring the Blue Economy: Unlocking Sustainable Opportunities

Mafe Carmona's presentation explored the Blue Economy's potential for sustainable economic growth while protecting marine ecosystems. It highlighted key principles and sectors such as fisheries, aquaculture, tourism, renewable energy, and infrastructure.

Challenges like climate change were addressed, along with successful examples from Norway, Chile, and Panama. This led to a discussion on sustainable applications of Blue Economy. The workshop also emphasizes how the Blue Economy aligns with United Nations Sustainable Development Goals and suggests an interactive workshop activity to encourage collaboration and creativity. Overall, it aims to raise awareness about the Blue Economy's importance in creating a prosperous and environmentally responsible future.



Ocean Acidification

On June 7, 2023, the Youth for SDGs scholars were presented a short video from Ocean Acidification Alliance (OA Alliance) partners broadening their knowledge about ocean acidification and how its impacts can be devastating for our oceans, our livelihoods, and our world. Ocean acidification refers to an excess of carbon dioxide emissions that are being absorbed by the ocean and altering the chemical balance of seawater upon which marine life depends for survival. The impacts of such include weakening and reduced growth of shell forming species, changes in behavior and survival of marine species, changes to natural food webs, and stifling the growth of coral reefs. Youth leaders also learned how ocean acidification's impacts can cause harm at a human and societal level, displacing people, damaging coastal communities and property. decreasing food security, and impacting jobs.



Sailing for the sustainable development goals!



Traditional Knowledge and Marine Management

On June 7th, Youth for the SDGs Scholar, Siana Whatarau from the Cook Islands delivered a workshop titled "Traditional Knowledge and Ocean Management." Siana made a clear statement advocating youth support for the integration of traditional knowledge with marine management for the UN Decade of Ocean Science.

Her presentation explored the unique relationship between indigenous Pacific Islanders and the ocean which has been developed through years of traditional practices. Traditional practices, as presented in this workshop, are typically sustainable by design, connected to the environment, time capsules, cultural heritage, and accessible and scalable, making them viable approaches to solve various issues in the world. When integrated into mainstream conservation practice, traditional knowledge can be an innovative approach to a more sustainable future. Siana used a project from the Cook Islands as an example of how traditional knowledge can be integrated into marine management to build the climate change resilience of rural communities.

The Cook Islands Global Climate Change Alliance project, delivered by Cook Islands environmental NGO, Kōrero o te 'Ōrau, worked to build climate change resilience by igniting a shift in community behaviour to be more connected to their environment and empowered to act as monitors for indicators of climate change. The project mapped fish habitats by traditional fishing methods and inserted this knowledge into the education curriculum to be shared at large.

Siana advocated for traditional knowledge and marine management integration based on the following ideas:

- (A) Traditional knowledge can be used as a mode to communicate important science to important/vulnerable communities who are otherwise unreachable.
- (B) Traditional knowledge can capture historical information about areas which are otherwise undocumented.
- (C) Traditional methods of resource management exist. Science can validate these methods and management plans can integrate them into mainstream plans and even conservation.
- (D) Traditional practice and science can be integrated to build capacity of communities to identify changes in their own backyards.



Dreams Come True: National Geographic Explorer, Nicolás Marin

Nico Marin is a 23-year-old Argentinian National Geographic Explorer who specializes in underwater photography. His catalogue includes photos of different animals in the wild such as whale sharks, dolphins, orcas, rays, mantas, sperm whales and more.

On June 7th, Nico Marin gave an inspiring presentation on his life story. Nico showcased his journey finding his passion in ocean conservation. His previous work includes coral restoration, journalism, advertising, and tennis. He had the opportunity to capture the natural beauty of species in the Galápagos Islands, Aruba, and Patagonia. Furthermore, he's documented illegal fisheries in Senegal, highlighting the impact these activities have not only on the local environment but also on the surrounding communities that rely on these waters. Today, he's working with National Geographic, based in Baja California Sur, studying the behavior and language of sperm whales and orcas.

Nico highlighted the importance of following one's dream, no matter how big those dreams might be. Following a round of questions, Nico handed out copies of his photographs to the winners of a trivia. Nico is hoping to document his journey on the Peace Boat and engage in fellowship with other youth pursuing marine conservation.





Sailing for the sustainable development goals!

Onboard Peace Boat June 7th

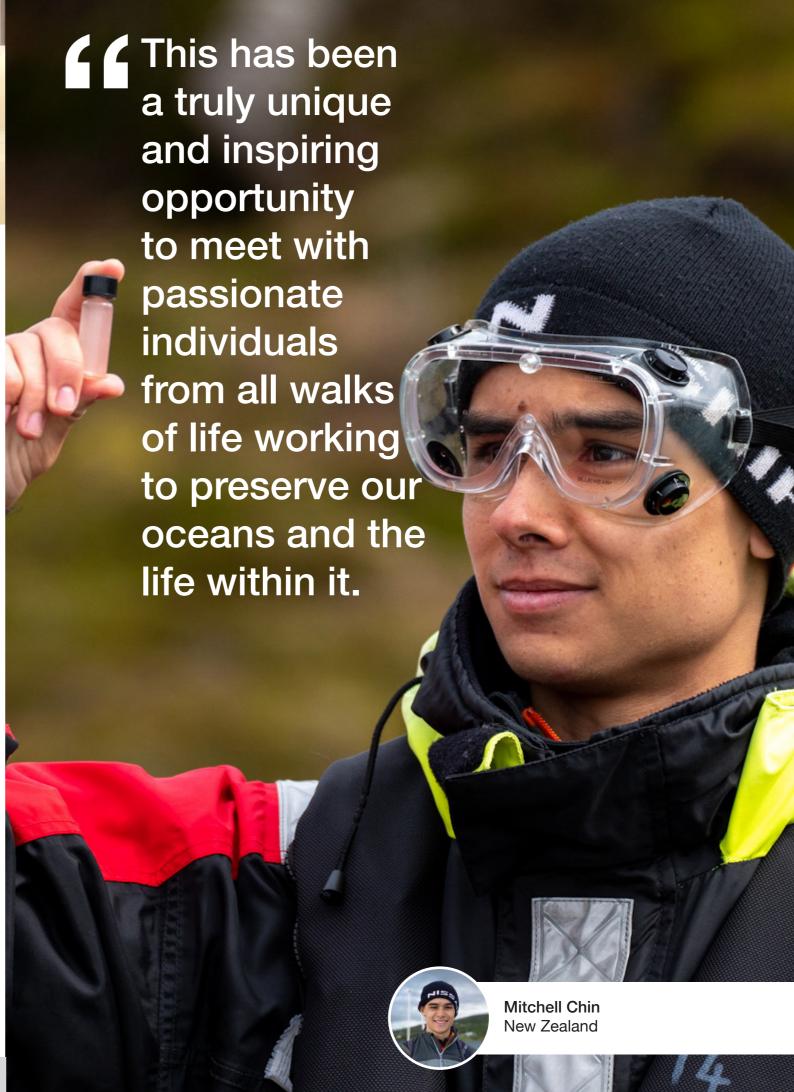
Conflict Exacerbation and Nonviolent Resolution

The Youth for the SDGs Scholars attended a public lecture by Jasna Bastic, a journalist and reporter born from Bosnia and Herzegovina, titled "Conflict Exacerbation and Nonviolent Resolution." Her lecture focused on the various stages of conflict escalation and how to resolve those issues without resorting to violence. Jasna had youth and other participants start by arranging nine escalating scenarios into chronological order and labeling each with only one word. Through the lecture, Youth for SDGs Scholars learned that conflict exacerbation is defined as the engagement in actions or behaviors that amplify or escalate conflicts, thereby impeding resolution.

Such actions encompass aggressive or violent behavior, the use of force, as well as inflammatory rhetoric. In contrast, nonviolent resolution focuses on the exploration of peaceful avenues to address and resolve conflicts, avoiding the use of violence. Nonviolent methods commonly employed encompass dialogue, negotiation, mediation, diplomacy, and the utilization of other peaceful strategies. The ultimate objective is to tackle the root causes of the conflict, foster understanding, and achieve mutually agreeable solutions. The application of nonviolent resolution has proven effective in diverse contexts, including community conflicts, social movements, and international diplomacy. It highlights the significance of communication, empathy, active listening, and a willingness to discover common ground among conflicting parties. With this knowledge, the Youth for the SDG's hopes to move their local and global communities towards nonviolent solutions to conflict instead of resorting towards violence.







Onboard Peace Boat June 8th - June 9th

Imagining a Future Peace Boat with "Manabiya" Youth Global University Program

The youth ambassadors met with Japanese university students to draw and imagine what a future Peace Boat could look like. Some ideas included a Peace Boat run exclusively on solar, wind, and hydro energy, while others focused on including greenhouses, wet and dry labs, observatories and glass floors. The groups also got creative with the designs of the ship. Some teams made boats shaped like loaves of bread. submarines, and even two whales holding fins. They then drew their ideas and presented them to the group. To finish off the workshop, the groups created their own Pledge, based on the Palau Pledge that the scholars had learned about during Toni's workshop. The idea was to create an environmental and SDGs focused pledge that future cruise participants would sign upon entering the Peace Boat. The groups also presented these at the end of the workshop. This is the combination of the teams' pledge:

As a passenger of this ship,

I take this pledge as a voyager for peace and preservation of every unique and beautiful port we visit.

I vow to be a responsible traveler, to tread lightly, act kindly, explore mindfully, and be a good guest.

I vow to respect the environment and her people and to not take what is not given. We promise by this pledge that the only mark we leave, are the waves behind us.



Mission Blue

Mission Blue is a documentary film directed by Fisher Stevens and Robert Nixon, released on Netflix in 2013. The film focuses on the work and mission of renowned oceanographer Dr. Sylvia Earl, featuring stunning underwater footage, interviews with scientists, environmentalists, and policymakers, as well as personal insights from Dr. Sylvia Earle herself.

"Mission Blue" serves as a call to action to recognize the significance of the oceans and join the global movement to protect and restore them.

This documentary holds great significance for the Youth for the SDGs program, as it highlights the urgent need for action to achieve the SDG 14: Life Below Water.

The compelling narrative and captivating imagery inspire the youths to become ambassadors for ocean conservation, fostering a sense of responsibility and empowering them to make a positive impact on the health and well-being of our oceans and the whole planet.

Against the Tide Documentary

Youth for the SDGs participated in a showing of "Against The Tide," an award-winning short film documentary directed by Luis Barreto. The documentary portrays the experiences of seven young leaders, from small island developing states, on board the Peace Boat during its 95th voyage bringing with them stories of the threats facing their homelands. These youth, who joined the first Ocean and Climate Change Ambassadors Programme, came from different backgrounds and cultures. But even so, their people's livelihoods and islands' existence are jeopardized by many common threats in ocean degradation and climate change. One particularly compelling narrative for youth participants came in the form of a spoken word poem, "Just a Blue Passport," by Selina Neirok, highlighting the devastating impact and sickly aftermath of nuclear testing in the Marshall Islands. "Against The Tide" was first screened in COP23 Bonn, Germany, and aimed to raise awareness about the fragility and vulnerability of small island, or large ocean, states. Furthermore, this documentary tried to engage more people at all levels across the globe to take environmental actions and initiatives to make a difference in protecting the world we live in.



Sailing for the sustainable development goals!

Onboard Peace Boat June 7th



Cultural Exchange with Japanese and Chinese passengers

On June 6th, the Youth for the SDGs Scholars and passengers from Japan and China aboard the Peace Boat participated in a cultural exchange. At the beginning of the exchange, the Youth Leaders introduced themselves in Japanese. The passengers then taught the Youth Leaders how to fold Japanese paper crafts called origami and performed traditional Japanese Tea Ceremonies. The Youth also learned how to write their own names in Japanese and Chinese calligraphy. Furthermore, they wore yukata, traditional Japanese clothes worn in the summer. Throughout the cultural exchange, Youth Leaders communicated in both Japanese and English, and developed a stronger relationship with other passengers onboard. This exchange provided a meaningful opportunity for the passengers to get to know more about the Youth.





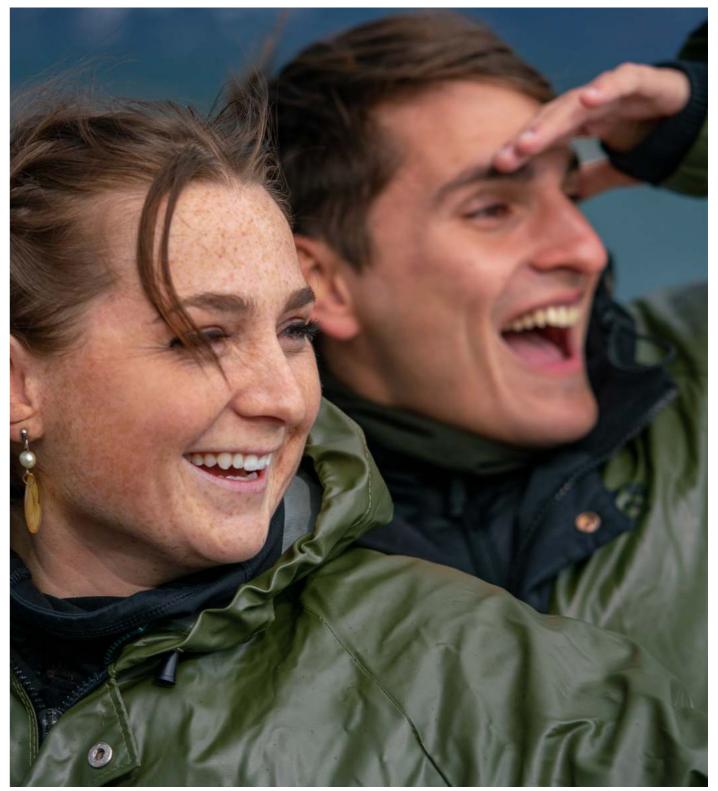
Elding Whale Watching Expedition

Whale watching is one of the most popular activities for visitors in North Iceland. The number of marine species and cold weather makes for the perfect conditions for cetaceans to visit these areas looking for food. The Youth for the SDG scholars had the opportunity to come on board one of the Elding Whale Watching tours, where they sailed from the port area and out into the fjords of Akureyri. The scholars enjoyed the beautiful views, as well as the marine life in the area. They spotted harbor porpoises, white beaked dolphins and a humpback whale. The humpback whale was feeding, doing short dives and coming back up onto the surface for short breaths in between.

The scholars had the chance to observe this behavior for a minute until the whale decided to take a deep dive, exposing its fluke. The tour guides for Elding Whale Watching shared their knowledge with the youth. Firstly, they gave a brief introduction on cetaceans and their classification into odontocetes (dolphins) and mysticetes (barbed whales). They also explained the best ways to practice whale watching and how birds are a good indicator of the presence of whales and dolphins.

Additionally, the tour guides taught them about the dangers of plastic waste and how 80% of plastic in the water comes from land. This causes marine wildlife to confuse plastic with prey which poses threats to their wellbeing. The scholars left the whale watching tour feeling inspired by the beauty of nature and motivated to continue their activism to conserve marine life.

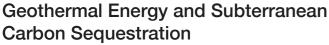




Amy and Nico spot a whale.

Reykjavik, Iceland

Port programs



On June 11th, the Youth for the SDGs Scholars had the opportunity to visit Orka Náttúrunnar (ON) geothermal power plant in Iceland situated over the Hengill geothermal area. While there, they participated in a tour that covered the geological activity that allows for Iceland's production of geothermal energy and the functions of the powerplant. ON's guide explained that Iceland is situated atop a ridge between the separating North American and Eurasian tectonic plates and a hotspot that both contribute to the high and lowtemperature fields used for ON's operations. Youth learned that high-temperature fields contributed to the production of geothermal energy as deep wells would bring up supercritical steam from deep below the Earth's surface to spin turbines on site.

On the other hand, both high and lowtemperature fields could be leveraged for hot water and space heating. ON's guide noted that the pumping process used at the Hengill sight brings up hot geothermal fluid which is separated by on site separators from the steam. Furthermore, youth participants were amazed by the use of steel insulated with rock wool to transport the 85-degree Celsius water from the Hengill power plant to houses in Reykjavik with only a two-degree Celsius loss of heat. The processes seen by the youth participants served as a testament to innovation and technological advancements for the purpose of capitalizing on natural resources for clean energy that supplies nearly 30% of Iceland's power, the other 70% coming from hydroelectric.

While at the ON geothermal plant, youth participants also learned of the activities of a sister company, CarbFix, interested in applying yet another use to the geothermal fluid for the purpose of carbon sequestration. While geothermal energy is a renewable source, it does have a small amount of greenhouse emission when gasses like carbon dioxide and hydrogen sulfide are drawn up from deep within the earth within the geothermal fluid. CarbFix developed a method to combat this issue by mineralizing carbon dioxide not only from the power plants themselves but also industries and carbon dioxide emissions produced by other European Union nations via the Coda Terminal. By injecting carbon dioxide into geothermal fluid and pumping it into deep basalt deposits, the carbon dioxide and any hydrogen sulfide in the fluid could combine with the metals in the basalt to form calcite and pyrite, respectively, in just two years. By 2031, CarbFix estimates that they will be able to mineralize three million tons of carbon dioxide annually. Youth participants were amazed by this intriguing method for carbon sequestration and its capacity to help in the meeting Paris Agreement targets and in the fight against the climate crisis.





Sustainability, Biodiversity and the Whaling Issue in Iceland – Public Event

The sustainability and ocean conservation event featured a lineup of speakers representing various organizations and covered a wide range of topics crucial to our planet's future. Emilie McGlone, Director of Peace Boat US, and the Youth for the SDGs Scholars introduced themselves and highlighted their alignment with the SDGs and the UN Ocean Decade: Tides are Changing. Their works revolve around promoting sustainable development and ocean conservation, showcasing the vital role of youth engagement in achieving these global goals and The UN Ocean Decade: Tides are Changing.

Katrin Georgsdóttir, from Elding, delved into the complex task of defining sustainability in Iceland. Her presentation shed light on the intricate interplay between cultural values and environmental factors, emphasizing the need for collaborative efforts in shaping sustainable practices within the country. This discussion showcased the importance of considering local contexts and challenges when formulating effective sustainability measures.

Eline Aalderink, a representative from Elding and Whale Safari, shared a presentation on research and the innovative use of whale-watching vessels as platforms for opportunistic data collection. This approach combines responsible whale-watching tourism with scientific research, highlighting the potential for gathering valuable information while promoting sustainable tourism practices. Aalderink's presentation underlined the importance of leveraging existing resources and infrastructure for scientific advancements in marine conservation.



Miquel Pons, also from Elding and Whale Safari, focused on the impacts of climate change in Iceland. Pons provided valuable insights into the environmental consequences faced by the country due to global warming. By raising awareness about these impacts, the presentation aimed to inspire action and encourage the adoption of sustainable solutions to mitigate and adapt to the challenges of climate change.

Anahita Babaei, alongside Micah Garen, represented Last Whaling Station and presented on the pressing issue of whaling in Iceland. Their informative session emphasized the urgency of ending commercial whaling and exploring sustainable alternatives. This discussion highlighted the need for conservation measures to protect vulnerable species and promote ethical practices in line with global efforts to preserve marine biodiversity. Babaei, an award winning artist, writer, and filmmaker, shed light on the harmful impacts of commercial whaling and emphasized the urgent need to address this practice.

Eugenia Berroca, as the Regional Representative from Lusofonia and Europe for the Sustainable Ocean Alliance, focused on the urgent matter of deep sea mining. Berroca advocated for a moratorium on this activity, stressing the need to address the potential environmental consequences associated with deep-sea resource extraction and stop it before it can cause serious environmental harm. Her presentation highlighted the importance of sustainable practices and responsible decision-making to ensure the long-term health and well-being of our oceans.

The collective insights offered valuable perspectives on these critical issues.



Iceland's Human and Natural History at GRO FTP and Iceland's MFRI the Perlan Museum

The visit to the Perlan Museum was an immersive experience. The group started with a screening of the northern lights show, Aróra, which explained the history, science, and cultural stories associated with this natural phenomenon. They then explored the natural science exhibits on the history of Iceland, volcanic activity, like the Laki Fires, and marine life. The highlight for many was walking through the ice cave and glacier exhibit. After wandering through the glacier exhibit, the group learned about the science behind certain glacier formations and how climate change is a serious threat to Iceland's glaciers and wildlife. Some predictions have indicated that smaller glaciers, like Snæfellsjökull, could disappear entirely by the end of the century if current trends continue. The museum finished with an exhibit on freshwater flora and fauna and a 360° view of Reykjavik.



On June 12th, the Youth for the SDGs Scholars attended a presentation by UNESCO partners, GRO FTP. This presentation was focused on the Fisheries Training Programme. The program's director, Julie Ingham, explained that this program consists of a six-month fellowship where students do research-based training. Students attend short courses and workshops and also have the opportunity to attend conferences. Ms. Ingham highlighted that most students from this program belong to Africa and other large ocean nations. The Fisheries Training Program has four lines of specialization: aquatic resource assessment and monitoring, fisheries policy and management, quality management of fish handling and process, and sustainable aquaculture. Not only do they teach classes focused on fisheries, but they also work to strengthen the student's soft skills, including communication and creative problem-solving. Einar Petur Jónsson, another GRO FTP associate, gave a second presentation characterizing fisheries in Iceland. He pointed out important locations in Iceland where fish schools are very productive due to water temperature and currents. Einar explained the process of surveying catch and annotating important information such as size, color, species, and the overall value of the fish captured to assess fish stocks. GRO FTP partner Mary Frances Davidson contributed to this presentation and helped answer questions from the Youth scholars. Einar also explained the otoliths - small metabolically inert stones inside fish's heads - that serve as information banks on them for research purposes. Furthermore, he explained the Marine and Freshwater Research Institute's (MFRI) lobster tagging program and the surveys on the newly discovered island of Surtsey.



The Youth and guest speakers gather for a group photo at the public event.

After these short presentations, which highlighted the importance of SDG 14, the Youth went on a tour of the facilities, exploring wet labs and offices.

The Youth for the SDGs Scholars left the presentation feeling motivated to contribute to the good management of fisheries.





Whale Safari Expedition and the Integral Role of Whales

On June 13th, Youth for the SDGs Scholars had the opportunity to attend a whale observation program with Whale Safari alongside Melanie Magnan in Reykjavik. Before departing for open waters, Ms. Magnan covered multiple aspects of whale conservation and identification, including the difficulties of tracking migratory patterns of harder-to-identify minke whales. She also highlighted issues within the space of whale-watching tourism that arises from differing codes of conduct across different countries. For instance, the practice of allowing tourists to touch whales in some countries can facilitate parasite and bacterial transfer between whales. After briefing about some of the cetacean species in the area, youth participants left the harbor, stopping briefly by a colony of puffins before heading farther out. While at sea, youth participants spotted whitebeaked dolphins and minke whales using those spotting techniques covered on their previous expedition in Akureyri. Youth participants also engaged with the critical role whales played in their ocean environment. As Ms. Magnan explained, whale fecal matter provides important nutrients for phytoplankton and enriches the waters. Whales are also crucial to the carbon sequestering capacity of our ocean. Through the growth and subsequent death of whales over the seabed, whales essentially intake carbon collected by organisms near the surface and deposit it on the ocean floor. Furthermore, their carcasses provide unique ecosystems for a diverse array of deep-sea life. From their discussions and observations, youth participants came away with a deeper understanding and appreciation of the whales' integral role in maintaining the ocean's health.



Wellness Retreat at Blue Lagoon

The Blue Lagoon in Iceland is a prime example of sustainability and serves as a role model for the tourism industry. It focuses on using renewable energy sources, particularly Iceland's abundant geothermal energy, to reduce its environmental impact. Additionally, the Blue Lagoon takes advantage of naturally replenishing geothermal sea water and implements efficient water management systems to conserve water. By embracing these practices, the Blue Lagoon demonstrates its dedication to long-term sustainability.

The Blue Lagoon's commitment to sustainability extends beyond energy and water. It also emphasizes waste reduction and environmental education. Through these initiatives, the Blue Lagoon showcases the potential for a sustainable world. During their visit to the Blue Lagoon, the Youths for the SDGs Scholars had the opportunity to indulge in a one-of-a-kind experience. This visit not only provided them with a memorable time but also highlighted the importance of maintaining a harmonious relationship between tourism and nature. As a leading advocate for responsible tourism, the Blue Lagoon inspires others to adopt sustainable practices and work towards a greener future for everyone.



