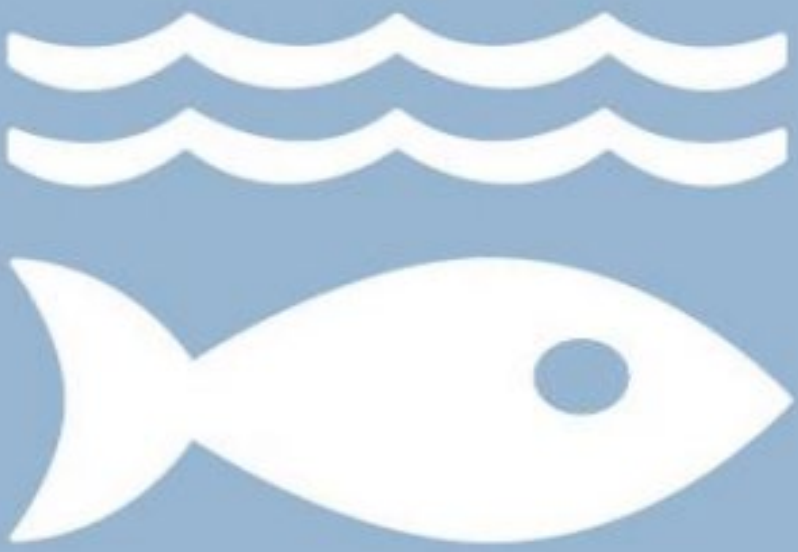
14 LIFE BELOW WATER



MODEL UNITED NATIONS

SOCOMUN XXXIII

FRESHMAN #14

TOPIC: PROTECTING CORAL REEFS

SOCOMUN XXXIII

Freshman #14
Life Below Water – Protecting Coral Reefs

Hello delegate! My name is Ward Jackson and I am very proud to be your head chair for SOCOMUN this year. I am currently a senior at SM and have been in MUN since freshmen year. With being a MUN delegate, I also participate in Lacrosse, ASB, Student Ambassadors, Link Crew, Habitat for Humanity, and CASA. I am excited to be your head chair at SOCOMUN!

Hello delegates, my name is Lucas Cottone, and I will be your vice chair for SOCOMUN this year! I'm a junior and this is my third year in MUN. SOCOMUN was my first conference and helped foster my love for MUN, and I hope to make this a spectacular experience for you as well. In addition to MUN, I am a varsity athlete in cross country and distance track, a boy scout, and interested in urban planning, baking (eating, if I'm being honest), and film making.

Hi delegates, my name is Olivia Newbro and I have proudly been part of MUN since freshman year, I am currently a junior, and cannot wait to be your rapporteur at this conference! Some interesting facts about me are that I am a Quarterback for my school's flag football team and I love going to the beach!

At the beginning of the SOCOMUN conference, there will be roll call where delegates will respond with "present" or "present and voting." Those who say "present and voting" cannot abstain from voting during committee. The bureau sees both responses as perfectly fine. From there, the speakers list will open up and give delegates a chance to briefly share their country policy and their solutions. Two comments will respond to the speech and should add ideas on or suggest a new point of view. During the speaker's list, delegates can motion for formal and informal caucuses. Formal caucuses have a set duration, speaking time, and topic. For example, "5 minute formal caucus with a 30 second speaking time on the topic of education" is perfectly acceptable. Informal caucuses involve delegates moving freely about the room to discuss solutions and form resolution groups. Resolution groups consist of delegates with similar policies and solutions. Once resolutions are finalized, they will be presented and voted on.

Since many of you are unfamiliar with MUN regulations and procedures, you are welcome to send the committee an email at socomunfresh14@gmail.com if you have any questions. We are all extremely excited about the conference and cannot wait to see you at SOCOMUN!

Background

The protection of coral reefs is necessary for a thriving ecosystem. Coral reefs are filled with life and a large amount of marine biodiversity. Coral reefs are not simply underwater landscapes, they are home to millions of tiny creatures. Inside of them, they have a unique construction. Coral reefs are mainly built with coral polyps that construct the skeleton by releasing calcium carbonate. Through this, the coral polyps provide a home, nursery, and feeding ground for a wide array of marine species.

Coral reefs are also essential as they provide an abundance of marine biodiversity to the ocean. From the recent study by U.S. Environmental Protection Agency, “an estimated 25 percent of all marine life, including over 4,000 species of fish, are dependent on coral reefs at some point in their life cycle.” These coral reefs also provide a home for crustaceans and mollusks like crabs, lobsters, and shrimp. These crustaceans and mollusks mainly stay in the crevices and caves within the coral polyps. The reefs also provide homes and protection for their inhabitants from predators. The complex structure of the coral reefs provides an environment where there are many hiding spots for creatures to live and reproduce. Furthermore, inside of these reefs, there is an extremely complex food web. For example, species gain nourishment from algae that is produced by coral polyps. Within the complex food web, algae partners with phytoplankton and seaweed to provide energy and nutrients for other organisms. This demonstrates how coral reefs prove to be a vital food source for the organisms and marine life that live within itself.

On top of being a home for many marine life, coral reefs protect the shorelines in many regions. Coral reefs protect coastlines that are very vulnerable to erosion and storm damage. The coral reef works as a barrier that fights off waves through wave dissipation. Wave dissipation is when a wave approaches the reef and get slowed and broken down by the coral polyps. This, in turn, reduces the impact on the shoreline. Coral reefs also provide natural beach protection. With coral reefs being implemented and maintained, we have seen that they reduce the amount of coastal erosion. This is because they shield the shoreline from flooding and other storm-related damage.

Moving forwards, several issues affect coral reefs. One of them is climate change. With its prevalence, the increase in ocean temperatures has been one of the greatest threats to coral reefs. The increased heat elevates sea level temperatures, which affects the algae living within the coral reefs. The elevated sea levels also increase the gap between the water surface and the coral reefs. With this gap continuing to grow, there is less light going towards the reefs causing a lack of nutrients. This ends up killing off the species that live within the coral reefs. This effect is commonly known as coral bleaching, where the coral loses its color and becomes prone to disease and death. However, coral bleaching is not the only issue. Ocean acidification is also another climate change effect that has jeopardized the health of coral reefs around the world. Ocean acidification is a result of the heightened amount of carbon dioxide that is in salt water. This puts the health of the coral reef at risk by restricting its coral development and weakening the skeletal structure.

To tackle these challenges, The United Nations Environmental Program (UNEP) and the International Coral Reef Initiative (ICRI), have devised several plans of action together. Additionally, the UN has taken actions with the Convention on Biological Diversity, otherwise known as CBD. “The CBD is an international legally binding convention which aims to lead to the development of national strategies for the conservation and sustainable use of biodiversity,

including coral reefs. It was finalized at the 1992 Earth Summit and is known as one of the 'Rio Conventions.' Its Secretariat is based in Montreal, Canada." With these plans and strategies, they mainly work on reducing the stress that human activities have placed on coral reefs and their ecosystems. They have also provided public awareness on the value of coral reefs and have encouraged sustainable management practices. Overall, the main goal of these efforts is to keep coral reefs in shape for future generations to come.

Potential Solutions

Delegates should be well-researched and understand their country's policy to present realistic and creative solutions to the committee. If the delegates need help in formulating solutions, we recommend looking over previous actions that their country has used to protect the coral reefs. You may use past solutions as inspiration but add something new that will make it more effective than before. If you have a problem with implementation, remember you can use NGO's as a helping hand in implementing solutions. "NGOs, or Non-Governmental Organizations, are non-profit organizations working on humanitarian, human rights, and sustainable development issues worldwide. In Model UN, knowledge of NGOs will help you write a better position paper, deliver stronger speeches, and write more informed and realistic resolutions" (Model United Nations Best Delegate). Though implementation is important, delegates do not need to primarily focus on funding. It is assumed that all solutions passed will be finances by the 5th Budgetary Committee in the United Nations.

In tackling the challenge of protecting coral reefs, one possible solution could be implementing marine protected areas otherwise known as MPAs. MPAs are specifically designed to help preserve the marine ecosystem. These will prohibit fishing and recreational activities in specified zones to protect coral reefs. If delegates believe this is a useful solution, we encourage them to find flaws of MPAs and provide solutions to combat those flaws.

Another possible solution could be promoting sustainable fishing practices within coral reef communities. This could be engaging with surrounding communities and fishers to educate them. They should be taught to use specific fishing gear to reduce the amount of damage on the coral reefs as well as regulations on timing and equipment being made. If delegates believe that this is a needed solution, they should find the flaws in maintaining a sustainable fishing practice that doesn't completely affect the fisheries but also doesn't exploit coral reefs and marine life.

One more solution that could be used is the implementation of specific coral reef restoration programs. Due to coral reef degrading taking a large toll on the environment of the fish but as well as the environment of the community that is close to the coral reef, we recommend that delegates should explore ways and techniques that can be used to reconstruct these broken down coral reefs. There have been many techniques that have been used to restore the coral reef such as coral transplantation or providing artificial reef construction. This could provide an ecosystem that is needed for the marine species to thrive.

Solutions should focus on the issue from multiple perspectives, timelines, and topics. No solution can singlehandedly solve the issue, so it is essential that solutions and research cover a wide variety of topics. Lastly, when formulating solutions, we recommend you consider the complexity behind the topic and each sub-topic you come across.

Questions to Consider

Think about the following questions when researching or coming up with solutions. These types of questions are meant to help you focus on your research and develop your solution creativity. While it is great to think about and look into these issues, they will only be talked about in committee.

1. How can we successfully balance the economic needs of coastal communities with the conservation goals of protecting coral reefs?
2. What role can international cooperation play in addressing the international impacts of human activities on coral reef ecosystems?
3. How can we make sure that indigenous peoples and local communities are meaningfully involved in the decision-making processes surrounding the conservation of coral reefs?
4. What methods or technologies can be applied to monitor and lessen the effects of ocean acidification and climate change on coral reefs?
5. In what ways can the development of coastal areas and agricultural practices contribute to pollution and nutrient runoff that endangers the health of coral reefs?
6. What are your country's previous resolutions surrounding the damaging of coral reefs due to human interference?
7. How will your country tackle the issue of overfishing, which directly negatively impacts the well-being and stability of coral reefs?
8. How will your country implement modern technology and resources to further protect coral reefs from human interference?
9. Do your solutions apply to developed or less developed nations?
10. How will your country tackle the issue of industrialization and pollution, which directly impacts the stability of coral reefs?

SDG #14 Targets

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed

countries should be an integral part of the World Trade Organization fisheries subsidies negotiation

14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

14.**A** Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries

14.B Provide access for small-scale artisanal fishers to marine resources and markets

14.C Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want

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