Abstract

Cruise ships in Bergen are seen in the harbor year-round, with approximately 443,000 passengers annually. These ships impact the local ecosystem in several ways and have effects beyond what is generally understood. We investigated the additive negative consequences of cruise tourism on the environment, focusing on Bergen and Norway. Scientific literature was reviewed, and we compiled the main impacts into five categories — CO_2 emissions, ocean acidification, ballast water, noise pollution, and solid waste from tourism. Our goal for this poster was to present a broader picture of the negative aspects of cruise tourism. We found that these issues are interlinked and encountered intriguing facts and further insight into already established and well-known impacts. For example, cruise ships release 17% of annual CO_2 emissions in Norway, influencing ocean acidification and negatively impacting calcified organisms. Ballast water can transport up to 10,000 foreign species that can become invasive, and noise pollution affects the migratory and mating behaviors of humpback whales. Because of this, we recommend people consider alternative holidays. We hope to raise awareness, which could lead to influencing policymakers' decisions for preventing further expansion of cruise tourism in Norway. In conclusion, our findings, though not necessarily novel, allowed us to gain a better understanding of how these five effects interact with one another and create a cumulative outcome that negatively affects marine life in Norway. Certainly, more research is required to improve our knowledge of how these effects are directly linked to cruise ship tourism. To what extent do CO_2 emissions from cruise ships cause ocean acidification in Norwegian waters? Which species are actually introduced due to the ballast water of cruise ships? We are still lacking data and specific papers linking cruise ships as a cause for the climate crisis.

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