

Preying on Predators: The Role of International Regimes in the Overexploitation of Shark Species

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The overexploitation of sharks resulting from high global market demand has posed a serious threat not only to shark populations, but marine biodiversity on a large scale. Through a discussion of political theory as it pertains to the environment, this research aims to articulate why the current laws and policies of the international community have failed, as well as what efforts may be taken to protect sharks and marine biodiversity. These proposed solutions are grounded in the political theories of commons governance and multispecies politics. Through analysis of empirical data regarding species decline, these theories serve as a framework for how to preserve shark populations and thus, marine ecosystems as a whole.

Keywords: Sharks, Environmental Politics, International Governance, Marine Conservation, Multispecies Politics, the Tragedy of the Commons

The issue of shark exploitation extends far beyond individual species: marine systems as a whole rely on apex predators like sharks to thrive, and therefore, the danger posed to sharks also threatens the survival of marine ecosystems. Despite them being essential to the health of our oceans, millions of sharks are killed each year. Sharks are exploited for their fins, meat, and cartilage daily, and these practices are more often than not unregulated by the international community. Furthermore, the international community has contributed to this overexploitation of shark species by building upon negative shark imagery created by the media and perpetuating capitalist ideals that drive overexploitation in global fish markets. In order for the international regime to adequately address the overexploitation of sharks, it must draw from political theory to curate an effective system of solutions. Historically, the environmental movement has followed two differing philosophies: conservation and preservation. These philosophies conflict on the basis for which nature is conserved: for its value to humans or for its intrinsic value, respectively. The challenges currently faced by shark conservation efforts, however, must be solved through international action grounded in both the theory of commons governance and multispecies politics.

Background

Scope of Shark Exploitation

Due to the high demand for shark products in the global market, the scope of shark exploitation and species endangerment is vast. Elasmobranchs, or sharks and rays, are one of the most evolutionarily distinct and functionally diverse vertebrate radiations. Despite this, it is currently estimated that one-quarter of sharks are threatened with extinction, making sharks the most threatened vertebrate lineage after amphibians (Pacoureaux et al., 2021). Worsening the issue, the long generation times and low intrinsic population growth rates of many sharks makes them inherently susceptible to overexploitation. Globally, sharks are exploited for their meat, fins, gill plates, and liver oil. The catching and killing of sharks reached an estimated peak of 63–273 million individuals in the early 2000s before declining, likely due to overfishing (Pacoureaux et al., 2021). The combination of threats posed towards sharks and their innate vulnerability have driven population declines, with 37% of shark species assessed as threatened with extinction (Jabado and Rigby, 2023).

One of the most public displays of this exploitation issue is the shark finning industry. Shark finning is the practice of harvesting sharks solely for their fins and disposing of the rest of the animal. Shark finning is not only unsustainable and

cruel, but the demand for shark fin products can fuel unsustainable fishing practices and overexploitation. In January 2020, United States Fish and Wildlife Service (USFWS) wildlife inspectors seized an illegal shipment of shark fins at the Miami airport during an inspection of an in-transit shipment from South America to Asia. The shipment contained over 5000 fins, placing it among the largest seizures in the US to date (Partin et al., 2022). Fins from as many as 73 million sharks end up in the global shark fin market every year, resulting in nine of the top 10 shark species in the fin trade being at risk of extinction (Cardeñosa et al., 2022). Shark finning serves as an example of how sharks are seen as resources rather than animals by many fishing groups. This goes against the fundamentals of the multispecies politics perspective, in which animals are seen as valuable not because they serve humans, but rather because they have intrinsic rights as living beings.

Even when multispecies perspectives are disregarded, the exploitation of sharks as a “resource” contributes negatively to the health of other “resource-species,” thus threatening the commercial fishing industry. Because sharks are apex predators, they are necessary to regulate the marine ecosystems they inhabit—and without them, these ecosystems will begin to collapse (Holcomb, 2023). The overexploitation of shark species therefore poses a dire threat to the health and existence of marine ecosystems. This threat reveals a need for drastic change in international governance regarding shark exploitation, and in order to devise an effective solution to this issue it is necessary to draw from existing theoretical knowledge in the realm of environmental politics.

Theoretical Framework

Commons Governance

In the international regime, the struggle to prevent the overexploitation of sharks can be viewed as a tragedy of the commons issue. The “tragedy of the commons” dilemma occurs when individuals working independently of one another will overuse a common-property resource for short-term benefits while decimating the resource for long-term use (Hardin, 1968). Further, in order to govern a common resource, authorities and institutions require accurate information, the ability to deal with conflict, the ability to enforce rules, and an overall

preparedness for change (Dietz, 2003). The concept of the tragedy of the commons can be applied to the exploitation of sharks, as sharks are a nonexcludable and rivalrous resource that must be governed by the entire community. This type of resource can only be effectively conserved from exploitation if it is governed in an adaptive way. In the case of sharks, a complex system governed by multiple nations and organizations is required to police exploitation such as the illegal fin trade (Dietz et al., 2003). Commons governance alone, however, is not a sufficient solution for shark overexploitation. This is because the conditions associated with the tragedy of the commons enable state actors to put fishers and fishing regulation on the frontlines of the issue rather than using more powerful mechanisms to protect and conserve marine ecosystems (Govella, 2023). In order to resolve this, the international community is in need of a dramatic shift in ideology regarding the importance of protecting marine life—a shift that multispecies politics can provide.

Multispecies Politics

When discussing shark conservation through the lens of the commons, shark species are labeled as a “resource.” In order to fully understand the political nuances of shark conservation efforts in the international regime, this categorization of nonhuman species as expendable or sub-human resources must be analyzed through a multispecies perspective. Multispecies politics provides the theoretical framework to look beyond human exceptionalism and the human-nature binary. The literature governing this theory argues that human exceptionalism is not supported by evolution, and western science is grounded in “an insistence to avoid the anthropomorphism of nonhuman species, thus further dividing the human-nature binary” (De Waal, 2016). The human-nature divide between sharks and humans is one of the most prominent, given that sharks are viewed as dangerous, violent creatures by the general public. The theory of multispecies politics can be ingrained into shark conservation efforts through shifting human attitudes about sharks and the idea that human rights supersede the rights of other species, effectively decentralizing the anthropocentric (Hammerton and Ford, 2018). While there are sects of human thought that are more ecocentric—or environmentally focused—

the majority of thought leans more towards anthropocentrism. The discussed decentralization can lead to humans extending their ethical scope to include nature, creating a balance between the anthropocentric and the ecocentric (Kortenkamp and Moore, 2001). Thinking about shark population conservation efforts through multispecies perspectives allows for larger conversations about the use of human systems of international governance to protect nonhuman species and the values used to determine what nonhuman species garner this protection and attention.

The Need for Multispecies Perspectives

While the theory of commons governance can tell us a lot about the various existing institutions governing shark fishing, this perspective is focused on managing sharks as a resource. In order to fully address the problem of exploiting marine life the international community must reckon with not only our institutions, but also our relationship with shark species. This is where the theory of multispecies politics can greatly aid in shark conservation and the overall protection of marine life.

Differing Value Levels Placed on Species by Humans

Before shifting the human perspective on sharks to one that promotes mutual respect amongst species, we first must discern why the general human perception of shark species has become particularly negative. Much explanation for this phenomenon can be found in the contrast between human perceptions on terrestrial species compared to marine ones. Some of the key dimensions that affect the value humans place on nonhuman species are the degree of “mind” the species is believed to possess, how dangerous the species is perceived to be, the species aesthetic qualities (e.g. how “cute” the species appears to be), the species’ status as a food source for humans, and the degree of similarity perceived between the species and humans (Kozachenko and Piazza, 2021). The degree of similarity perceived between other species and humans is particularly informative for understanding the disproportionate value placed on terrestrial mammals in comparison to marine mammals. Similar research has found that anthropomorphism is a key factor in shifting both wildlife value and attitudes toward wildlife management (Manfredo et al., 2020). The ability

to compare nonhuman species to humans expands moral concern and reduces speciesism (Bastian et al., 2012), and with far less appearance-based similarities to humans, marine mammals are given a much lower level of value than their terrestrial counterparts.

The Jaws Effect

While this lack of anthropomorphism explains humankind’s overall lesser regard for marine species, it fails to explain why sharks in particular are viewed so negatively. After all, other marine predators such as whales and dolphins have established intrinsic value as a result of the aquarium industry. Scholars have found that sharks not only generate less conservation concerns from humans than other sea animals like dolphins, but also are likely the most vilified species by the general public (Neves et al., 2021). Though sharks are equally represented in culture and media, the imagery used to represent them carries a much different connotation. For example, the media treats negative human-shark interactions, or shark attacks, as high-impact, high-affect, and newsworthy. This is due to their potential for dramatization as detrimental to human personal safety, property, economic viability, and recreational prerogatives (Guerra, 2019). These fear-mongering media tactics, referred to as “The Jaws Effect” in reference to the 1975 film by Steven Spielberg, contribute greatly to the negative perceptions of sharks by humans.

In an analytical study of 109 shark films aiming to investigate how films portray shark-human interactions, it was found that almost all of these films (96%) overtly portrayed shark-human interactions as being potentially threatening to humans, a few (3%) covertly portrayed shark-human interactions as being potentially threatening to humans, and only one film did not include potentially threatening interactions (Le Busque and Litchfield, 2022). There are a multitude of problems related to the media’s reliance on fear when depicting sharks: gory reenactments of incidents and their aftereffects minimizes science and displaces attention from the shark species and populations in urgent need of recovery. It also negatively impacts public opinion and support for conservation and effective policy-making, and fundamentally distracts from the vision that sharks have intrinsic rights to their habitats (Cermak, 2021). Even the background music in

shark films has an effect on human perception: evidence shows that negative attitudes arise from an instinctive fear, which is validated and reinforced by disproportionate and sensationalistic news coverage of shark “attacks” and by highlighting shark-on-human violence in popular movies and documentaries (Nosal et al., 2016). In short, hostile shark representations aggravate the extent to which conflict is perceived, instill fear that negatively impacts conservation campaigns, and harm the species health as a whole through vilification (Cermak, 2021).

Research has cautioned that public values and attitudes are becoming increasingly relevant to wildlife conservation (Macdonald et al., 2023). Therefore, the way we communicate about sharks is in dire need of change. Public attitudes shape how political leaders respond to conservation campaigns, therefore reducing fear of sharks, and changing attitudes about consuming them is essential to crafting policy responses that support conservation (Jarvis, 2019). There has already been some success in changing the narrative surrounding sharks in the media: the film *Racing Extinction*, for example, portrays several commonly diminished wildlife species as individuals worthy of concern and protection. This departure from the typical “Jaws Narrative” represents animals in their natural habits and as individuals with their own interests and desires. The film’s narrative also supports a view that mantas, sharks, and whales have value intrinsically, not just instrumentally (Rooney, 2019). Given that the future of ocean ecosystems is directly tied to the existence of sharks, it is essential to shift public attitudes towards the animals into a more positive light.

Ecotourism as a Potential Catalyst for Shifting Public Attitudes

The ecotourism industry has substantially benefited global nature-conservation efforts. This industry, particularly shark tourism, also has great potential to serve as a catalyst for changing public attitudes regarding sharks and their importance. Shark tourism often takes the form of cage-diving experiences, which allow tourists to have up-close encounters with sharks. While this industry provides extraordinary opportunities for shark conservation education, there are some aspects of this industry

that have the potential to cause harm and thus must be addressed. The environmental impact of shark tourism, for example, must be considered. If not properly managed, shark tourism can be harmful to sharks and their habitat. Too much food resulting from the use of attractants to lure sharks can alter sharks’ feeding behavior or create too many nutrients or microbes in their coral reef systems (Shark Stewards, 2022). Ecotourism additionally has the potential to counteract the efforts of multispecies-focused policy to better relationships between humans and nonhuman species, because the ecotourism industry regards nonhuman species as a resource for profit (Pookhao, 2013), just as these species are viewed as a resource for consumption by the commercial fishing industry. Both of these potential consequences can be avoided however, if shark tourism is driven primarily by environmentally-focused motivations. One could argue that shark tourism industries have a degree of moral obligation to ground their businesses in sustainability, and therefore these consequences can be avoided if these motivations become the most widely supported by the international community.

Implementing A Multispecies Commons Governance Approach

Existing Regulations

In order to fully grasp why international governance has failed to protect shark populations thus far, one must look deeper into the existing legal protections for sharks and other marine life. The Convention on International Trade in Endangered Species (CITES) is perhaps the most substantial protection currently in place for endangered shark species. CITES is an international agreement adhered to voluntarily by states and regional economic integration organizations. States that have agreed to be bound by the Convention are known as Parties. Although CITES is legally binding on the Parties, it is not implicitly enforced as national law. Rather, CITES provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level. It is also pertinent to note that only endangered shark species are protected by CITES, rather than all species as a whole. Essentially, despite acting at the international level, CITES is not mandatory for countries that are part of these regulations (Dorantes-González et al., 2023).

An additional existing protection is the Convention on the Conservation of Migratory Species (CMS), which is an environmental treaty under the United Nations Environment Programme. It provides a global platform for the conservation and sustainable use of migratory animals and their habitats. CMS is the only global and UN-based intergovernmental organization established exclusively for the conservation and management of terrestrial, aquatic, and avian migratory species throughout their range. Although thirty-four elasmobranch species are listed under CMS, most CMS-listed elasmobranch species remain seriously threatened (Lawson and Fordham, 2018).

The third prominent existing regulation is the International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks), which was adopted by the FAO Committee on Fisheries in 1999. The IPOA-Sharks is a voluntary international instrument. In essence, it calls upon states to develop national plans of action (NPOAs) for the conservation and management of sharks. It covers both target species and bycatch and applies to states whether sharks are caught in their waters or elsewhere by their nationals (Techera and Klein, 2011). The IPOA-Sharks addresses shark conservation and management in a more comprehensive way than is achieved in other treaties. However, from a legal perspective it does not create binding rights and obligations on states, because it is not a treaty or “hard” law. Instead, much like CMS it serves as a framework for regulatory action at regional and national levels. This lack of legal binding has resulted in a slow uptake at the national level; however, the regional level has proved to be more promising with the adoption of a regional plan of action in the South Pacific and a proposed plan of action to be adopted by the European Union. This interaction at international, regional, and national levels contributes to the problem of fragmented and ineffective governance (Techera and Klein, 2011). These fragmentations not only reveal a multitude of weaknesses in the current international regime, but also provide information regarding what aspects of regulation are the most in need of change.

A Complex Solution for a Complex System

When looking at these institutions through the lens of Hardin’s commons governance theory, sharks

can be viewed as a nonexcludable and rivalrous resource in need of conservation efforts from a complex system of international governance. As a pelagic, or migratory species, sharks are in need of a complex system of governance as they move through different jurisdictions and exclusive economic zones (Dulvy et al., 2017). Many important environmental challenges today involve systems that are intrinsically global and result in outcomes that are spatially displaced from their causes, such as larger scale economic incentives that are not closely aligned with the condition of local ecosystems. Therefore, in order to connect these causes and consequences, there must be stronger connections made between sharks and humans. This can be achieved most effectively by raising the human-perceived intrinsic value of sharks through the aforementioned avenues of positive media portrayal and ecotourist experiences (Cermak 2021). Once this multispecies perspective has been achieved, the international community will have the proper motivation to determine where the weaknesses of existing regimes such as UNCLOS and CITES lie in their ability to ensure sustainable shark fisheries. This information can then be used to create a framework for the international community to use to fill in the gaps left by these weaknesses with more sufficient solutions (Wigginton, 2014). Dietz’s proposed “adaptive governance” for the commons is the most promising solution for complex systems such as the shark fishing industry, particularly when there is a prominent need for emphasis on the value of the species itself. In order for adaptive governance to be successfully implemented, there are six requirements that must be met: providing information, dealing with conflict, inducing rule compliance, providing infrastructure, preparedness for change, and institutional variety.

Providing Information

Environmental governance depends on good, trustworthy information about the resource system being governed. Because the current legal regimes operate independently from one another, they often fail to communicate information adequately. The sharing of information between existing legal regimes would allow for the international community to delegate responsibilities to the system that is most capable of fulfilling the specific needs of that responsibility. Furthermore, the three guiding

principles for fisheries law (harvest levels, regulations of the species through its whole range, and broad consideration of the relevant ecological factors affecting conservation) all rely on detailed scientific information (Wigginton, 2014). The current lack of accurate species-specific harvest data inhibits the international community's ability to assess the level of risk to shark species. In an attempt to combat this, some studies have used trade records from global markets to determine global shark catches and measure the degree of exploitation impacting sharks (Clark et al., 2006). This method is promising for the future gathering and sharing of information regarding resource management. Accurate and frequent procurement of these data sets is essential to conservation efforts, but if this information is not shared with all involved actors, the governance system will fail.

Dealing with Conflict

Stark differences in power and values across interested parties make conflict inherent in environmental choices. The potential for conflict is greatly increased when dealing with criminal activity, and thus the mechanisms for dealing with such conflict are particularly important for the regulation of illegal shark fishing organizations. The role of state actors is especially important when regulating illegal shark fishing, as the states must have vested interest in stopping these criminal organizations (Rosello, 2020). Therefore, regulations proposed within a system of adaptive governance must benefit all state actors, not just those with the most power to influence regulations. Further, there is also the issue of environmental regulations conflicting with other governance objectives. The current growing trend towards securitization of the maritime commons, for example, seriously impacts state cooperation in sustainable fisheries governance. The securitization of maritime commons undermines the effectiveness of the international framework for sustainable fisheries governance because of its fragmented nature and reliance on each country's willingness to implement change (Luo and Chi, 2022). State actors' willingness to implement change is one of the larger challenges faced by proposed governance systems, and ultimately will lead to confrontation rather than cooperation in sustainable fisheries governance. It is in this aspect of commons

governance where multispecies perspectives are most vital: after all, pressure from the public through tactics such as "naming and shaming" negative behaviors can be extremely effective in urging compliance. Additionally, in order to avoid confrontation between states and larger governing bodies, compromise must be made to some extent. For example, although no-take marine reserves are very effective in restoring biodiversity and enhancing ecosystem resilience (Sala and Giakoumi, 2018), they often rely on some of the strongest systems of control in comparison to other forms of marine protected areas, which can be difficult to entice governments to implement. Therefore, effective compromise and conflict-resolution strategies must be utilized to find a common-ground solution that the majority of actors will abide by.

Inducing Rule Compliance

In order to induce effective rule compliance, there must be clear implementation of rules and clear consequences for breaking them. The implementation of rules is only as effective as the weakest area of enforcement. This is why it is important that there are strong frameworks for implementation at all levels of governance. Many countries struggle to implement international law in multi-jurisdictional or legally pluralist contexts. The international regime could provide much greater guidance and facilitate the sharing of best practice regulatory options to overcome these issues (Techera and Klein, 2011). Research regarding enforcement tactics shows that it is generally most effective to impose modest sanctions on first offenders, and gradually increase severity of sanctions who do not learn from their first or second encounter (Dietz et al., 2003). When these enforcement tactics are implemented by all state actors in a cohesive manner, the international regime will be much more capable of preventing further harm to shark species and marine ecosystems.

Providing Infrastructure

The importance of physical and technological infrastructure is often overlooked. Infrastructure determines the degree to which a commons can be exploited, the extent to which waste can be reduced in resource use, and the degree to which resource conditions and the behavior of human users can

effectively be monitored. Effective communication and transportation technologies are also of immense importance. The nonprofit organization Global Fishing Watch has the potential to serve as sufficient infrastructure for ocean monitoring. The organization uses satellite radar imagery to monitor and report illegal fishing operations (Global Fishing Watch, 2023). This use of satellite data provides, in essence, a panopticon governance system for international waters. Moreover, this system has already proven itself as a vital tool for exposing illegal activity at sea: in 2020, Global Fishing Watch used satellite data to reveal hundreds of Chinese squid ships fishing in North Korean waters, which led to much political contention in the international community (Urbina, 2023).

Preparedness for Change

Institutions must be designed to allow for adaptation because some current understanding is likely to be wrong, the required scale of organization can shift, and biophysical and social systems change. Fixed rules are likely to fail because they place too much confidence in the current state of knowledge, whereas systems that guard against the low probability, high consequence possibilities and allow for change may be suboptimal in the short run but wiser in the long run. The issue with prioritizing systems with long-run benefits is that states are less likely to be inclined to implement them. Therefore, these adaptive and flexible regulations must have incentives attached to them that make their implementation more attractive to state actors.

Institutional Variety

Governance should employ mixtures of institutional types that employ a variety of decision rules to change incentives, increase information, monitor use, and induce compliance. For example, illegal and unregulated shark exploitation requires a different system of governance than the regulated shark trade. The tragedy of the commons occurs often in wildlife crimes, where species become overexploited to increase short-term profits while endangering and eliminating a natural resource for future users. Current approaches to the illegal wildlife trade include implementing trade bans or regulatory schemes at the national and international level, similarly to the systems in place for regulated

wildlife trade. However, a better approach in reducing the illegal wildlife trade is a combination of making it more difficult to poach and incentivizing locals to abstain from poaching (Pires and Moreto, 2017). An example of success with this approach can be found in the 2019 Lima Declaration. Twenty-one Latin American and Caribbean countries jointly signed the Lima Declaration, an agreement to enact stronger laws, better enforcement, and stricter penalties to halt the illegal shark trade. In 2022, as a result of this declaration, Peru set an important precedent by successfully prosecuting and convicting two shark traffickers for the first time in the nation's history (Guynup, 2023). While efforts like the Lima Declaration are a step in the right direction, they are only effective if the enforcement aspect is strengthened across all aspects of the shark finning trade. In order for enforcement to remain consistent, governments must pay for and train enforcement officers to be able to recognize illegal wildlife when it is imported and exported. Furthermore, in cases where governments lack the financial resources to train these enforcement officers, international organizations must step in to assist them.

Ecosystem-Based Governance

When reflecting on the aforementioned solutions, it is important to also recognize the importance of local and ecosystem-based commons governance. Too many strategies for governance of local commons are designed in capital cities in ignorance of the state of the science or local conditions (Dietz et al., 2003). When local conditions are made the central factor in conservation strategies, there is a much greater opportunity for success, as evidenced by studies of ecosystem-based tuna fisheries management. These studies revealed that many of the elements necessary for ecosystem-based management are already present in governance, yet they have been implemented in an ad hoc way, without a long-term vision and a formalized plan (Juan-Jordá et al., 2018). When these elements are implemented intentionally and with long-term goals in mind, Regional Fisheries Management Organizations have great success in conservation and protection. The success of tuna management is promising for shark conservation, as tuna are also a highly migratory species. The elements of an ecosystem-based conservation approach proven to be successful for tuna fisheries can

therefore be applied to shark fisheries management to generate the same successes. While there has been great success with regional fisheries management, there are also challenges that must be addressed. Reducing fisheries' impacts on marine ecosystems is particularly challenging in small-scale fisheries, where endangered species can have important consumptive use values (Booth et al., 2023). In order to combat this challenge, governance regimes must provide incentives whose value outweighs the value of exploiting endangered species. Recent research has revealed that payments for ecosystem services have led to a reduction in exploitation of marine life in small-scale fisheries (Booth et al., 2023); however, more research into effective incentives is necessary to fully combat this challenge.

Conclusion

Reckoning with the Negative Human Impact on Marine Ecosystems

Global shark populations are undoubtedly in need of conservation and protection; however, when looking at these conservation efforts through a wider lens, the need for a much larger conversation in the realm of multispecies politics is revealed. The use of human systems of international governance to protect nonhuman species—as well as the values used to determine what nonhuman species garner this protection and attention—must be questioned in order to give nonhuman species the most autonomy. While the implementation of conservation efforts by human systems of international governance can be regarded as humans infringing upon nonhuman species' independence and autonomy, it is perhaps the most effective way for humans to reckon with our impact on marine ecosystems that has resulted in their need for conservation in the first place. The overexploitation of sharks and the overall destruction is predominantly the result of human action. This human responsibility is not just due to direct harm from overfishing, but the indirect consequences of climate change on marine ecosystems as well.

Concluding Discussion

Overall, the theoretical frameworks of commons governance and multispecies politics provide a multitude of promising solutions for the issue of shark overexploitation. While there are promising signs that conservation efforts are working in the

oceans, overfishing remains the principal cause of biodiversity loss (Sherman et al., 2023); and the risk that overfishing poses to apex predators such as sharks is quite substantial. Sharks regulate a multitude of food-chains in the ocean, and therefore, threats to shark species are threats to the health of ocean ecosystems as a whole. The proposed frameworks, when combined, are the most practical solution for the threat currently facing shark species. The implementation of multispecies perspectives into international politics will help shift public attitudes not only towards shark species, but also towards their importance and our moral obligation to protect them from the threats that our international community has allowed to perpetuate for so long. Once this attitudinal shift has occurred, commons governance theory can then be implemented as a framework for new and improved international regulations surrounding the overexploitation of sharks. While this is admittedly a daunting task for the international community to take on, the importance of protecting and conserving shark species is too great to overlook, and therefore must be met with collective and immediate action from the international community.

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