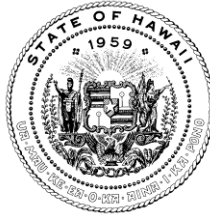


DAVID Y. IGE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**Testimony of**  
**SUZANNE D. CASE**  
**Chairperson**

**Before the Senate Committee on**  
**WAYS AND MEANS**

**Wednesday, February 28, 2018**  
**11:00 AM**  
**State Capitol, Conference Room 211**

**In consideration of**  
**SENATE BILL 2079, SENATE DRAFT 1**  
**RELATING TO SHARK AND RAY PROTECTION**

Senate Bill 2079, Senate Draft 1 proposes to establish criminal penalties and administrative fines for any person who knowingly captures, kills, takes, possesses, abuses, or entangles any shark or ray within state marine waters and makes it a misdemeanor. This measure provides exemptions for special activity permits and removals of sharks by the Department of Land and Natural Resources (Department) for reasons of public safety, and protects traditional and customary rights. **The Department supports this measure, subject to the following comments and recommended changes.**

The Department recognizes the important role sharks and rays play in maintaining healthy marine ecosystems, and the detrimental impact from significantly depleting their populations in our waters. The Department also recognizes the importance of these species for native Hawaiian cultural beliefs and practices, as well as their value for ocean recreation and tourism.

The Department supports regulating the take of sharks and rays, and will implement this measure by adopting regulations through the administrative rulemaking process to evaluate and apply scientific management principles, give due consideration to public interests, and carefully craft language to avoid conflict with existing state and federal laws. For example, the Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Shark Conservation Act of 2010, allows the landing of sharks caught in federal waters and preempts any state law that unlawfully burdens fishers' ability to achieve the benefits from federal fisheries. To avoid preemption by federal law, the Department suggests amending (highlighted in gray) Section 188-\_\_ subsection (e) to read as follows:

**SUZANNE D. CASE**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

**JEFFREY T. PEARSON P.E.**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

- (e) This section shall not apply to:
- (1) Special activity permits allowed under section 187A-6 or research permits authorized by law; provided that the permit issued does not allow a take that exceeds the potential biological removal level; provided further that the department of land and natural resources may adopt rules to define "take" for purposes of this subsection and determine when a take exceeds the potential biological removal level; [and]
- (2) The department of land and natural resources or its designated agent if the capture, killing, taking, possession, abuse, or entanglement is for the protection of public safety; and
- (3) Sharks taken outside of state marine waters and possessed on a vessel in state marine waters pursuant to any federally managed fishery, for the purpose of landing the catch in the state.

Thank you for the opportunity to comment on this measure.



**SB2079 SD1**  
**RELATING TO SHARK AND RAY PROTECTION**  
Senate Committee on Ways and Means

February 28, 2018

11:00 a.m.

Room 211

The Office of Hawaiian Affairs (OHA) offers the following **COMMENTS** on SB2079 SD1. This bill would protect sharks and rays by establishing fines and penalties for knowingly capturing, killing, or taking a shark in state waters, and expanding the existing prohibition on knowingly capturing or killing a manta ray to include all rays.

OHA has long-advocated for more responsible and proactive management and protection of our marine resources. Thus, OHA appreciates this measure's recognition of the important role of sharks and rays in marine ecosystems as well as their value in Hawaiian culture.

OHA appreciates that SB2079 SD1 includes our suggested amendments to explicitly acknowledge constitutionally<sup>1</sup> projected traditional and customary rights specific to both sharks and rays.

OHA applauds the inclusion of Hawaiian names for sharks and rays, specifically the use of manō (shark) and hīhīmanu (ray) in the respective section titles of the measure. OHA notes that while Hawaiian language references confirm the name hīhīmanu for various classes of rays, there are at least two other names commonly associated with rays—hāhālua and hailepo. OHA respectfully suggests that all three names commonly associated with rays be included in the appropriate section title to ensure Hawaiian terms are consistent with the measure's purpose to expand protection to all species of rays.

Mahalo nui for the opportunity to testify on this measure.

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<sup>1</sup> HAW. CONST. art. XII, § 7



**THE HUMANE SOCIETY**  
OF THE UNITED STATES



**HUMANE SOCIETY**  
INTERNATIONAL

**To:** Honorable Chair Dela Cruz, members of the Senate Committee on Ways and Means  
**In support of:** SB 2079 SD1  
**Date:** February 28, 2018, 11:00 a.m.  
**Testimony by:** Keith Dane, Hawaii Policy Advisor, The Humane Society of the United States

**RE: SUPPORT FOR SB 2079 SD1; Relating to Shark and Ray Protection**

On behalf of The Humane Society of the United States, Humane Society International and our members and supporters across Hawaii, I appreciate the opportunity to submit testimony in support of SB 2079 SD1. This bill would impose penalties for anyone who knowingly captures, takes or kills sharks or rays in state waters except for research purposes, under DLNR issued Special Activity Permits, while exercising native Hawaiian gathering rights and cultural practices or at the discretion of DLNR, for specific, emergency public safety reasons.

**Why sharks and rays need protection:**

- In 2010, Hawaii became the first state to enact a ban on the sale of shark-fins or fin products. To this date, 12 states have adopted similar measures following Hawaii's lead. SB 2079 SD1 would further complement existing law by again positioning Hawaii to be a leader in shark and marine conservation. While current laws prohibit the possession or sale of shark fins or fin products there is no law preventing the capture or killing of sharks in state waters.
- With the growing interest and number of commercial operators involved in ray diving tours, this measure would ensure that protections are afforded to ray species. If enacted, SB 2079 SD1 would prohibit the take, capture and killing of ray species in state waters.
- The number of shark and ray landings increased by 227% from 1950 to 2003.<sup>1</sup> However, the actual number of animals killed is much larger since this data represents animals that are caught and brought to shore (landed) and do not account for illegal catches, or discards.

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<sup>1</sup> IUCN Shark Specialist Group. Questions and Answers.

- One quarter of shark and ray species are threatened with extinction due to overfishing and other fishing threats. Five out of the seven most threatened Chondrichthyan species are rays.<sup>2</sup>
- Tens of millions of sharks are estimated to be killed annually for their fins. While anti-finning laws are designed to halt further shark population declines, many species are still threatened and face possible extinction. Recent research from the University of Hawaii<sup>3</sup> has shown that many species of shark, such as tiger and hammerhead, frequent state waters, especially the marine shelf around Maui, and are faced with numerous threats, most notably humans and pollution.
- There is no directed commercial shark fishery in Hawaii state waters. SB 2079 SD1 would not be expected to have a negative economic impact on commercial fishing interests. Commercial fisheries operating in federal waters reported catching 85,067 sharks and releasing 84,441 of them.<sup>4</sup>
- This measure does NOT preempt or impact federal fishing laws, and only applies to Hawaii state waters.
- With the growing number of interactions between ocean users and shark and rays, this measure would prevent consideration of ineffective mass culling efforts and those individuals who may target sharks due to misinformation. Cases involving cruelty against sharks in recent years<sup>5</sup> have prompted public outcry and highlighted public desire for strong penalties for cruelty against sharks.<sup>6</sup>
- Sharks are apex predators and play a vital role in maintaining the balance of marine ecosystems. Research has found that massive removal of sharks has a cascading effect throughout the ecosystems that they inhabit.
- Current law prohibits the take of *only giant oceanic* Manta Ray species. SB 2079 SD1 would extend this protection to all species of rays in state waters (listed below), including Torpedo, Stingray, Devilray and Eagleray, Manta alfredi (reef manta ray) and Mobula tarapacana (sicklefin devilray).
- Rays are killed in massive numbers for their meat, gill rakers, gill plates, and fins (called “wings” and also used in shark fin soup) and traded worldwide. The significant increase in global demand for these parts poses a major threat to multiple species of vulnerable elasmobranchs.<sup>7</sup> SB 2079 SD1 would prevent any future trade in harvesting rays in Hawaii state waters, as we saw recently with the mass commercial harvesting of our sea cucumbers by international companies. DLNR has since prohibited commercial harvest of sea cucumbers.

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<sup>2</sup> <http://www.iucnssg.org/global-conservation-status-of-sharks-and-rays.html>

<sup>3</sup> <https://www.voanews.com/a/2641635.html>

<sup>4</sup> [http://www.pifsc.noaa.gov/fmb/reports/hlreports/areport\\_items.php?yr=2014&type=tbl&num=1](http://www.pifsc.noaa.gov/fmb/reports/hlreports/areport_items.php?yr=2014&type=tbl&num=1)

<sup>5</sup> Video of tiger shark torture sparks outcry in Hawaii. [https://www.huffingtonpost.com/2013/09/13/shark-torture-video-n\\_3922319.html](https://www.huffingtonpost.com/2013/09/13/shark-torture-video-n_3922319.html)

<sup>6</sup> Three Florida men charged for shark dragging. <http://www.foxnews.com/us/2017/12/12/3-florida-men-charged-in-shark-dragging-video.html>

<sup>7</sup> Ellis, J. R., S. R. McCully Phillips, and F. Poisson. 2017. A review of capture and post-release mortality of elasmobranchs. J. Fish Biol. 90:653–722.

- Sharks and rays share life history traits that make them particularly vulnerable to overexploitation and population collapse.<sup>8</sup> These include slow growth; low fecundity; few, well-formed young; long gestation periods; and delayed age at first reproduction, that together are known in the ecological literature as a “K-selected life history”.<sup>9</sup>

Below is a list of the 40 species of sharks that may be found in Hawaii waters. DLNR notes that it is difficult to distinguish between certain species of shark thus this measure applies to all sharks.

**Hawaii Shark and Ray Species List:** <http://dlnr.hawaii.gov/sharks/hawaii-sharks/species-list/>

(EN: Endangered; VU – Vulnerable; NT – Near Threatened; LC: Least Concern; DD – Data Deficient)

## **Sharks**

### **Order Orectolobiformes**

#### **Family Rhincodontidae**

Whale shark, *Rhincodon typus*, VU

### **Order Carcharhiniformes**

#### **Family Scyliorhinidae**

Sponge-headed cat shark, *Apristurus spongiceps*, DD

#### **Family Pseudotriakidae**

False cat shark, *Pseudotriakis microdon*, DD

#### **Family Carcharhinidae**

Bignose shark, *Carcharhinus altimus*, DD

Gray reef shark, *Carcharhinus amblyrhynchos*, NT

Silky shark, *Carcharhinus falciformes*, NT

Galapagos shark, *Carcharhinus galapagensis*, NT

Blacktip shark, *Carcharhinus limbatus*, NT

Oceanic whitetip, *Carcharhinus longimanus*, VU

Blacktip reef shark, *Carcharhinus melanopterus*, NT

Sandbar shark, *Carcharhinus plumbeus*, VU

Tiger shark, *Galeocerdo cuvier*, NT

Blue shark, *Prionace glauca*, NT

Whitetip reef shark, *Triaenodon obesus*, NT

#### **Family Sphyrnidae**

Scalloped hammerhead, *Sphyrna lewini*, EN

Smooth hammerhead, *Sphyrna zygaena*, VU

### **Order Lamniformes**

<sup>8</sup> Ebert, D.A. 2001. Sharks, Rays, and Chimaeras of California. University of California Press.

<sup>9</sup> Hoenig, J.M. and Gruber, S.M. 1990. Life-History Patterns in the Elasmobranchs: Implications for Fisheries Management in Elasmobranchs as Living Resources: Advances in the Biology, Ecology, Systematics, and the Status of the Fisheries (H.L. Pratt Jr., S.H. Gruber, and T. Taniuchi, eds.) NOAA Technical Report 90 (1990).

**Family Odontaspidae**

Smalltooth sand tiger shark, *Odontaspis ferox*, VU

Bigeye sand tiger shark, *Odontaspis noronhai*, DD

**Family Pseudocarchariidae**

Crocodile shark, *Pseudocarcharias kamoharai*, NT

**Family Megachasmidae**

Megamouth shark, *Megachasma pelagios*, DD

**Family Alopiidae**

Pelagic thresher shark, *Alopias pelagicus*, VU

Bigeye thresher shark, *Alopias superciliosus*, VU

**Family Lamnidae**

White shark, *Carcharodon carcharias*, VU

Short-finned mako, *Isurus oxyrinchus*, VU

Longfin mako, *Isurus paucus*, VU

**Order Hexanchiformes****Family Hexanchidae**

Frilled shark, *Chlamydoselachus anguineus*, NT

Bluntnose sixgill shark, *Hexanchus griseus*, NT

**Order Squaliformes****Family Echinorhinidae**

Prickly shark, *Echinorhinus cookei*, NT

**Family Dalatiidae**

Combtooth dogfish, *Centroscyllium nigrum*, DD

Kitefin shark, *Dalatias licha*, NT

Blurred smooth lantern shark, *Etmopterus bigelowi*, LC

Blackbelly lantern shark, *Etmopterus lucifer*, LC

Smooth lantern shark, *Etmopterus pusillus*, LC

Hawaiian lantern shark, *Etmopterus villosus*, LC

Pygmy shark, *Euprotomicrus bispinatus*, LC

Cookiecutter shark, *Isistius brasiliensis*, LC

Viper dogfish, *Trigonognathus kabeyai*, DD

Velvet dogfish, *Scymnodon squamulosus*, DD

**Family Centrophoridae**

Mosaic gulper shark, *Centrophorus tessellatus*, DD

Gulper shark, *Centrophorus granulosus*, VU

**Family Squalidae**

Shortspine spurdog shark, *Squalus mitsukurii*, DD

**Rays****Order Torpediniformes****Family Torpedinidae**

Torpedo ray, *Torpedo sp.*, DD or LC, depending on species

**Order Myliobatiformes****Family Plesiobatidae**

Giant stingaree, *Plesiobatis daviesi*, LC

**Family Hexatrygonidae**

Sixgill stingray, *Hexatrygon bickelli*, LC

Longnosed deepwater ray, *Hexatrygon longirostra*, IUCN uncertain whether separate species

**Family Dasyatidae**

Diamond stingray, *Dasyatis dipterura*, DD

Brown stingray, *Dasyatis lata*, LC

Pelagic stingray, *Pteroplatytrygon violacea*, LC

**Family Myliobatidae**

Spotted eagle ray, *Aetobatus narinari*, NT

**Family Mobulidae**

Manta ray, *Manta birostris*, VU

Spinetail devil ray, *Mobula japonica*, NT

**The Humane Society of the United States requests a favorable report on SB2079 SD1**

Keith Dane

[kdane@humanesociety.org](mailto:kdane@humanesociety.org)

301-312-1489





O'ahu  
Chapter

[Surfrider Foundation O'ahu Chapter](#)

[Web: oahu.surfrider.org](http://oahu.surfrider.org)

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SB 2079: Strong Support  
Senate Committee on WAM  
DATE: Wednesday, February 28, 2018  
TIME: 11:00 a.m.  
PLACE: Conference Room 211

Aloha Members of the Senate WAM Committee,

As the O'ahu Chapter Coordinator for the Surfrider Foundation, I am writing in strong support of SB2079. As a non-profit dedicated to the protection and enjoyment of our world's ocean, beaches, and waves, we have a distinct mission to engage our members and volunteers with issues of environmental protection. We are equally concerned about how we treat the organisms in the ocean as we are with the land-based decisions that affect our nearshore ecosystems. Surfrider works with many groups of ocean conservationists and is educated in our membership base by marine biologists lending their expertise to our mission. With that in mind, we fully support the protection of sharks and rays. These incredible creatures are managers of the ocean, being top level trophic animals that are imperative to the balance of ecosystems. As global loss of sharks continues to mount, it is imperative that we take a stand on the being a leader in protection of these creatures.

Our organization closely monitors water quality and is enriched with dedicated scientists and experts working in the field. Our near shore ecosystems are already in dire straits with massive coral loss and impaired bodies of water becoming the norm. Leading local coral reef scientists already attribute losses to major issues of sedimentation and nutrient runoff from land. We need to ensure that the life within the ocean is not suffering from both ends of the spectrum.

Mahalo for your time in considering this bill.

With Aloha,  
Rafael Bergstrom  
O'ahu Chapter Coordinator, Surfrider Foundation

**SB-2079-SD-1**

Submitted on: 2/23/2018 1:57:05 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Benton Kealii Pang, Ph.D.	Testifying for Hawaiian Civic Club of Honolulu	Support	No

Comments:

**SB-2079-SD-1**

Submitted on: 2/25/2018 9:38:40 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
nadean	Testifying for Keiko conservation	Support	No

Comments:

Please support this ban to further protect these creatures and Hawaii's ocean. Humans gain nothing from killing sharks, we are only hurting ourselves by taking them away from the environment as the world depends greatly on the role of sharks and rays for a healthy eco system. Sharks are also very special and sacred in Hawaiian culture, I would hope you would want to make the ancient Hawaiians proud and protect what they love.

## In Support Of SB 2079



On behalf of Keiko Conservation and our international supporters, I would like to voice our support for Bill 2079 to further protect sharks and rays in Hawaiian waters.

Of particular concern to us is Hawaii's scalloped hammerhead shark population, a species classified as endangered in other parts of the world, and severely vulnerable to at-vessel (Morgan, A. and G. H. Burgess. 2007) or post-release mortality due to the stress of struggling on a line and build up of lactic acid. Although the tropical fish on Hawaii's reefs have gained protection from the aquarium fish trade this past year, sharks are still vulnerable to this practice. Sharks caught for aquariums are usually juveniles, as the smaller they are, the longer they tend to live in a confined space. This takes many sharks out of Hawaiian waters long before they have a chance to reach sexual maturity and reproduce. Studies have show that the survival rate of juvenile sharks can play the largest role in that animal's overall population rate (Heppell et al. 1999, Cortes 2002). Unfortunately, the mortality rate is very high during the capture (Morgan, A. and G. H. Burgess. 2007) and transport of these animals, so multiples have to be caught which could be anywhere from 20 to 90 animals for one aquarium (Keyes, R. 2000, Arai 1997), making the impact on our reefs even higher. Scalloped hammerheads in Kaneohe Bay have been taken for aquariums and shipped everywhere from Louisiana to Tokyo (Young, F. A., Kajiura, S. M., Visser, G. J., Correia, J. P.S. and Smith, M. F.L. 2002), profiting few but impacting many.

The fight to save sharks is not just to save sharks. It is a fight for to help save the overall health of the oceans as well. No matter how landlocked we may find ourselves on this planet, more than half of the oxygen we breathe still comes from the ocean. Marine ecosystems are fragile and intricate. Every organism has a role. Sharks have arguably one of the most important roles in the ecosystems they inhabit. Removing them can inadvertently cause a domino effect that can lethally impact organisms all the way down the food chain, wiping out everything from bivalves to plankton. The same plankton that produces the oxygen we breathe. The ocean is being attacked from all angles by human action. It has never been so important to give sharks as much protection as we possibly can and we hope you will consider the passing of this bill.

Mahalo!

Natalie Parra

Co-Founder of Keiko Conservation

## In Support Of SB 2079



On behalf of Keiko Conservation and our international supporters, I would like to voice our support for Bill 2079 to further protect sharks and rays in Hawaiian waters.

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Mahalo!

Natalie Parra

Co-Founder of Keiko Conservation



**TO:** Honorable Chair Dela Cruz and Member of the Senate Ways and Means Committee  
Feb 28, 2018, 11am

**SUBMITTED BY:** Inga Gibson, Policy Consultant, West Hawaii Humane Society  
[ponoadvocacy@gmail.com](mailto:ponoadvocacy@gmail.com), 808.922.9910

**RE: STRONG SUPPORT for SB2079, Relating to Shark and Ray Protection**

The West Hawaii Humane Society respectfully urges your support of SB2079 which would prohibit the capture or killing of sharks or rays in state waters (within 3 nm) except for research purposes, under DLNR issued Special Activity Permits, the use of shark parts/products for native Hawaiian cultural purposes and at the discretion of DLNR for specific, emergency public safety reasons. The prior Committee accepted strengthening and clarifying amendments proposed by both DLNR and OHA, thus we fully support the bill in its current form.

In 2010, Hawaii became the first state in the world to enact a prohibition on shark-finning and the sale of shark-fins or fin products. This measure would complement this existing law, which has now become a global initiative, by again poising Hawaii to be a leader in shark and marine conservation. While current laws prohibit the possession or sale of shark fins or fin products there is no law preventing the capture or killing of sharks.

Tens of millions of sharks are estimated to be killed annually for their fins. While anti-finning laws have improved shark populations, many species are still threatened and face possible extinction. Recent research from the University of Hawaii has shown that many species of shark, such as tiger and hammerhead, frequent state waters, especially the marine shelf around Maui, and are faced with numerous threats most notably humans and pollution (SEE: Hawaii Scientists Study Threatened Shark Species)

There is no directed commercial shark fishery in Hawaii waters so this would not be expected to have a negative economic impact on commercial fishing interests. Evidence suggests that juvenile reef sharks are taken in small numbers by Hawaii's aquarium trade for personal aquariums outside Hawaii, but, citing confidentially, DLNR does not release the data. Further, this measure does NOT preempt or impact federal fishing laws, and only applies to Hawaii state waters (3 nm).

With the growing number of interactions between ocean users and sharks this measure would prevent consideration of ineffective mass culling efforts and those individuals who may target sharks due to misinformation (see: Local Shark Experts Explain Shark Attacks )

Finally, sharks are apex predators; when they are removed our entire marine ecosystem is negatively impacted. In addition, sharks and rays are not a staple human food source as other fish species are. Below is a list of the 40 species of sharks that may be found in Hawaii waters. DLNR notes that it is difficult to distinguish between certain species of shark thus this measure applies to all sharks.

Current law prohibits the take of only Manta Ray species. This measure would extend this protection to all species of rays in state waters (listed below), including Torpedo, Stingray, Devilray and Eagleray, Manta alfredi (reef mantas) and Mobula tarapacana (sicklefin devilray).

While the trade has not yet hit Hawaii, China and other countries have begun mass harvesting of rays for their gills/gill soup, especially since shark populations are still facing serious decline and many states and island nations now prohibit selling shark fin products. This measure would prevent any future trade in harvesting Hawaii rays as we saw in 2015 with the mass commercial harvesting of our sea cucumbers by international companies (DLNR recently prohibited commercial harvest of sea cucumbers).

Rays are known to be among the slowest marine species to reproduce. For example, new data on manta ray reproduction suggest that they may reproduce even more slowly than previously believed, with a maximum lifetime reproduction potential estimated at only 5 to 15 offspring. Such extremely low reproductive capacity shows that manta and mobula rays are far more vulnerable to exploitation than previously known, and that immediate investment in their conservation is necessary to avoid continued rapid declines (SEE: <http://www.wildaid.org/mantas>)

Thank you for the opportunity to testify on this important marine animal protection measure.



**TO:** Honorable Chair Dela Cruz and Senate Ways and Means Committee Members

**SUBMITTED BY:** Inga Gibson, Policy Consultant, For the Fishes  
[ponoadvocacy@gmail.com](mailto:ponoadvocacy@gmail.com), 808.922.9910

**RE: STRONG SUPPORT for SB2079, Relating to Shark and Ray Protection**

For the Fishes respectfully urges your support of SB2079 which would prohibit the capture or killing of sharks or rays in state waters (within 3 nm) except for research purposes, under DLNR issued Special Activity Permits, the use of shark parts/products for native Hawaiian cultural purposes and at the discretion of DLNR for specific, emergency public safety reasons. The prior Committee accepted proposed strengthening and clarifying amendments offered by OHA and DLNR thus we support the bill in its current form before your committee today.

**Why sharks need protection:**

In 2010, Hawaii became the first state in the world to enact a prohibition on shark-finning and the sale of shark-fins or fin products. This measure would complement this existing law, which has now become a global initiative, by again poising Hawaii to be a leader in shark and marine conservation. While current laws prohibit the possession or sale of shark fins or fin products there is no law preventing the capture or killing of sharks.

Tens of millions of sharks are estimated to be killed annually for their fins. While anti-finning laws have improved shark populations, many species are still threatened and face possible extinction. Recent research from the University of Hawaii has shown that many species of shark, such as tiger and hammerhead, frequent state waters, especially the marine shelf around Maui, and are faced with numerous threats most notably humans and pollution (SEE: Hawaii Scientists Study Threatened Shark Species)

There is no directed commercial shark fishery in Hawaii waters so this would not be expected to have a negative economic impact on commercial fishing interests. Evidence suggests that juvenile reef sharks are taken in small numbers by Hawaii's aquarium trade for personal aquariums outside Hawaii, but, citing confidentially, DLNR does not release the data. Further, this measure does NOT preempt or impact federal fishing laws, and only applies to Hawaii state waters (3 nm).

With the growing number of interactions between ocean users and sharks this measure would



prevent consideration of ineffective mass culling efforts and those individuals who may target sharks due to misinformation (see: Local Shark Experts Explain Shark Attacks )

Finally, sharks are apex predators; when they are removed our entire marine ecosystem is negatively impacted. In addition, sharks and rays are not a staple human food source as other fish species are. Below is a list of the 40 species of sharks that may be found in Hawaii waters. DLNR notes that it is difficult to distinguish between certain species of shark thus this measure applies to all sharks.

**Why Rays need protection:**

Current law prohibits the take of only Manta Ray species. This measure would extend this protection to all species of rays in state waters (listed below), including Torpedo, Stingray, Devilray and Eagleray, Manta alfredi (reef mantas) and Mobula tarapacana (sicklefin devilray).

While the trade has not yet hit Hawaii, China and other countries have begun mass harvesting of rays for their gills/gill soup, especially since shark populations are still facing serious decline and many states and island nations now prohibit selling shark fin products. This measure would prevent any future trade in harvesting Hawaii rays as we saw in 2015 with the mass commercial harvesting of our sea cucumbers by international companies (DLNR recently prohibited commercial harvest of sea cucumbers).

Rays are known to be among the slowest marine species to reproduce. For example, new data on manta ray reproduction suggest that they may reproduce even more slowly than previously believed, with a maximum lifetime reproduction potential estimated at only 5 to 15 offspring. Such extremely low reproductive capacity shows that manta and mobula rays are far more vulnerable to exploitation than previously known, and that immediate investment in their conservation is necessary to avoid continued rapid declines (SEE: <http://www.wildaid.org/mantas>)

Thank you for the opportunity to testify on this important marine conservation issue.

Baby shark captured in Hawaii for the aquarium trade:



***\*4 additional shark species and all devil rays were included in Appendix II of CITES at the 17th Meeting of the Conference of the Parties (CoP17, Johannesburg) in 2016. They joined 10 other sharks, rays and sawfishes (elasmobranchs) that had already been included in the CITES Appendices over the past decade.***

- [\*Silky shark \(Carcharhinus falciformis\)\*](#)
- [\*Thresher sharks \(Alopias spp.\)\*](#)
- [\*Devil rays \(Mobula spp.\)\*](#)

#### **SPECIES LIST FOR HAWAIIAN WATERS**

Common name, *Scientific name*, IUCN status worldwide

(DD=data deficient; LC=least concern; NT=near threatened; VU=Vulnerable; EN=Endangered)

#### **SHARKS**

##### **Order Orectolobiformes**

##### **Family Rhincodontidae**

Whale shark, *Rhincodon typus*, VU

##### **Order Carcharhiniformes**

##### **Family Scyliorhinidae**

Sponge-headed cat shark, *Apristurus spongiceps*, DD

##### **Family Pseudotriakidae**

False cat shark, *Pseudotriakis microdon*, DD

##### **Family Carcharhinidae**

Bignose shark, *Carcharhinus altimus*, DD

Gray reef shark, *Carcharhinus amblyrhynchos*, NT

Silky shark, *Carcharhinus falciformes*, NT

Galapagos shark, *Carcharhinus galapagensis*, NT

Blacktip shark, *Carcharhinus limbatus*, NT

Oceanic whitetip, *Carcharhinus longimanus*, VU

Blacktip reef shark, *Carcharhinus melanopterus*, NT

Sandbar shark, *Carcharhinus plumbeus*, VU

Tiger shark, *Galeocerdo cuvier*, NT

Blue shark, *Prionace glauca*, NT

Whitetip reef shark, *Triaenodon obesus*, NT

**Family Sphyrnidae**

Scalloped hammerhead, *Sphyrna lewini*, EN

Smooth hammerhead, *Sphyrna zygaena*, VU

**Order Lamniformes**

**Family Odontaspidae**

Smalltooth sand tiger shark, *Odontaspis ferox*, VU

Bigeye sand tiger shark, *Odontaspis noronhai*, DD

**Family Pseudocarchariidae**

Crocodile shark, *Pseudocarcharias kamoharai*, NT

**Family Megachasmidae**

Megamouth shark, *Megachasma pelagios*, DD

**Family Alopiidae**

Pelagic thresher shark, *Alopias pelagicus*, VU

Bigeye thresher shark, *Alopias superciliosus*, VU

**Family Lamnidae**

White shark, *Carcharodon carcharias*, VU

Short-finned mako, *Isurus oxyrinchus*, VU

Longfin mako, *Isurus paucus*, VU

**Order Hexanchiformes**

**Family Hexanchidae**

Friiled shark, *Chlamydoselachus anguineus*, NT

Bluntnose sixgill shark, *Hexanchus griseus*, NT

**Order Squaliformes**

**Family Echinorhinidae**

Prickly shark, *Echinorhinus cookei*, NT

**Family Dalatiidae**

Combtooth dogfish, *Centroscyllium nigrum*, DD

Kitefin shark, *Dalatias licha*, NT

Blurred smooth lantern shark, *Etmopterus bigelowi*, LC

Blackbelly lantern shark, *Etmopterus lucifer*, LC

Smooth lantern shark, *Etmopterus pusillus*, LC

Hawaiian lantern shark, *Etmopterus villosus*, LC

Pygmy shark, *Euprotomicrus bispinatus*, LC

Cookiecutter shark, *Isistius brasiliensis*, LC

Viper dogfish, *Trigonognathus kabeyai*, DD

Velvet dogfish, *Scymnodon squamulosus*, DD

**Family Centrophoridae**

Mosaic gulper shark, *Centrophorus tessellatus*, DD

Gulper shark, *Centrophorus granulosus*, VU

**Family Squalidae**

Shortspine spurdog shark, *Squalus mitsukurii*, DD

**RAYS**

**Order Torpediniformes**

**Family Torpedinidae**

Torpedo ray, *Torpedo sp.*, DD or LC, depending on species

**Order Myliobatiformes**

**Family Plesiobatidae**

Giant stingaree, *Plesiobatis daviesi*, LC

**Family Hexatrygonidae**

Sixgill stingray, *Hexatrygon bickelli*, LC

Longnosed deepwater ray, *Hexatrygon longirostra*, IUCN uncertain whether separate species

**Family Dasyatidae**

Diamond stingray, *Dasyatis dipterura*, DD

Brown stingray, *Dasyatis lata*, LC

Pelagic stingray, *Pteroplatytrygon violacea*, LC

**Family Myliobatidae**

Spotted eagle ray, *Aetobatus narinari*, NT

**Family Mobulidae**

Manta ray, *Manta birostris*, VU

Spinetail devil ray, *Mobula japonica*, NT

**CHIMAERAS**

**Order Chimaeriformes**

**Family Chimeridae**

Purple chimaera, *Hydrolagus purpureescens*, DD

**Family Rhinochimaeridae**

Longnosed chimaera, *Rhinochimaera pacifica*, LC

**SB-2079-SD-1**

Submitted on: 2/25/2018 7:47:28 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Sylvia Dolena	Testifying for Pele Lani Farm LLC	Support	No

Comments:

Hawaii is the number #1 extinction capitol of the world. Why? Because of overdevelopment, pollution and toxins in the natural habitat. Let's save what we have left.

**SB-2079-SD-1**

Submitted on: 2/27/2018 9:26:36 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melodie Aduja	Testifying for OCC Legislative Priorities Committee, Democratic Party of Hawai'i	Support	No

Comments:

**SB-2079-SD-1**

Submitted on: 2/24/2018 9:22:46 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Crystal Dombrow	Individual	Support	No

Comments:

I am a graduate student currently at Scripps Institution of Oceanography and I support this Bill. Sharks are a crucial top predator in our oceans. They intentionally detect and feed on the weak, sick and dying individuals of prey populations and leave the healthiest to survive and reproduce. Their predation behavior keeps ocean communities healthy, so they are vital to maintaining oceanic ecosystems, which are especially of commercial value for ecotourism revenue in the state of Hawai'i. Unfortunately, films and television documentaries have been framing sharks as man-eating monsters over the past few decades and this portrayal directly impacts shark populations. A close colleague of mine recently interviewed recreational shark fishermen in the US and filmed on camera, these fishermen attributed their love for shark fishing having started after watching the Discovery Channel's Shark Week which capitalizes on that image of a deep sea demon to be conquered. By not allowing these animals to be hunted for sport, the state of Hawai'i is declaring their value to our world. As sharks hold cultural value as 'aumakua, I hope you will stand to protect them from needless slaughter which will in turn help transform public opinion of them so we can again coexist with these keystone species of our ecosystem.

**SB-2079-SD-1**

Submitted on: 2/22/2018 6:02:39 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
carissa cabrera	Individual	Support	Yes

Comments:

Shark's and rays are absolutely essential to maintain ecosystem homeostasis. Sharks eliminate the sink and injured animals, allowing for natural selection of health lower trophic level species. On average sharks 11,297 sharks are killed per hour for their fins. This barbaric institution needs to be eliminated and we can begin that path with this measure. When sharks are removed from the ocean, which 90% are currently gone, lower down the food chain other populations overproduce. This causes overconsumption of primary fish and algae, which source our fisheries and produce our oxygen. An ocean without sharks is one that cannot be maintained, and we are dependent on our ocean for every other breath we take. By sharing the new open-minded view of sharks we can flourish ecotourism in Hawai'i and promote living in harmony with other creatures on this planet.



**SB-2079-SD-1**

Submitted on: 2/23/2018 9:01:40 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
naomi egami	Individual	Support	No

Comments:

**SB-2079-SD-1**

Submitted on: 2/23/2018 7:40:04 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melanie Laberge	Individual	Support	No

Comments:

Hi,

My name is Melanie and I am a shark conservationist from Canada. The ocean is home to me and the creatures in it are my family which is why I care deeply about its health and protection. I am writing this testimony and proudly saying that I support bill SB2079 SD, because to protect sharks and rays not only helps conservation, but keeps the balance of our oceans which is crucial because we get 50% of our oxygen from this main water source. Protecting these creatures would help promote tourism and in the end would help the economic growth of Hawaii. Also, it would sustain the beautiful ecosystems and give a clean environment to its citizens! Many sharks are facing extinction and by saying yes to this bill you will be setting a great example for nations worldwide to follow in your footsteps!!

I know that you will see the positive aspects in approving this bill and make the right choice!!

Best,

Melanie

**SB-2079-SD-1**

Submitted on: 2/23/2018 10:06:46 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Randy Cheung	Individual	Comments	No

Comments:

Sharks are a common bycatch while fishing. As a fisherman, I would prefer not to have any interactions with sharks, but it is not up to me. Once hooked, the most responsible and safe way to release a hooked shark, is to bring it to the boat. The hook can then be removed, or for safety reasons, the line can be cut close to the hook instead of removing the hook. While trying to accomplish this the shark can be injured, entangled, or die. I ask that an exemption be made for fishermen regarding such interactions with sharks or rays.

**SB-2079-SD-1**

Submitted on: 2/23/2018 12:47:31 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jenny Yagodich	Individual	Support	No

Comments:

Please support SB2079. Sharks and Rays should indeed be protected in Hawaiian waters. They are a valuable part of our fragile marine ecosystem.

Mahalo

**SB-2079-SD-1**

Submitted on: 2/23/2018 2:49:19 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Matt Jisa	Individual	Support	No

Comments:

Wanted you to know I support SB 2079.

**SB-2079-SD-1**

Submitted on: 2/23/2018 4:12:50 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Anjie Pham	Individual	Support	No

Comments:

***In support of SB2079, I hope that it is allowed to take effect as soon as possible rather than some far distant future date of 2050 as listed in the bill.***

**SB-2079-SD-1**

Submitted on: 2/23/2018 4:48:47 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
hannah	Individual	Support	No

Comments:

I strongly support SB2079. The things done to sharks and rays are cruel and horrific, they deserve compassion and empathy

**SB-2079-SD-1**

Submitted on: 2/23/2018 9:24:01 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jaunette Itsuno	Individual	Support	No

Comments:

I strongly support SB2079 and the amendments made in in SD1 which extends the protection to all members of the rays of the elasmobranchii subclass. Please pass this bill to protect Hawaii's ecosystems.



**SB-2079-SD-1**

Submitted on: 2/23/2018 11:15:39 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Michael Amrhein	Individual	Support	No

Comments:

As stated in the bill, sharks and rays play vital roles in Hawaii's ecosystem, culture, and economy, and I believe it is critical for the state to continue taking measures that will protect and preserve these species. I hope that Hawaii can remain at the forefront of environmental consciousness and pass important measures like the bill proposed here to serve as an example for the rest of the country. Beyond the importance of sharks and rays in preserving the well-being and health of our ocean, the data has consistently demonstrated that, from an economic standpoint, sharks are worth more alive than dead due to their role in the ecotourism industry. For these reasons (not too mention sharks and rays are just plain cool), I offer my full support for this bill.

**SB-2079-SD-1**

Submitted on: 2/24/2018 8:48:36 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Erin Anderson	Individual	Support	No

Comments:

Sharks and Rays are vital to our marine eco system. Please, please pass this bill, giving them further protection and hopefully, allowing populations to grow in and around the Hawaiian waters. Mahalo Nui Loa.

**SB-2079-SD-1**

Submitted on: 2/24/2018 9:28:16 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Rene Umberger	Individual	Support	No

Comments:

**SB-2079-SD-1**

Submitted on: 2/24/2018 12:21:54 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Erik Anderson	Individual	Support	Yes

Comments:

The Hawaiian islands are an oasis in an ocean desert. The chain rises steeply from the ocean floor interrupting currents and bringing deep water nutrients to the surface. At the top of this food chain are the apex predators which balance the eco systems. Imagine fighting an illness without white blood cells. This is currently the case in our oceans. Sharks are being killed at a rate of an estimated 70-100 million animals per year mostly due to shark finning and by catch. Sharks are rays and toxic to consume due to the amount of toxins in their bodies due to pollution in the ocean. The fear based lack of regard for these animals needs to stop. We need sharks and rays, they balance the ecosystem in which the planet receives 60% of its oxygen.

**SB-2079-SD-1**

Submitted on: 2/24/2018 3:07:15 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Morgan Esarey	Individual	Support	No

Comments:

Oceans provide the majority of our oxygen. We need oxygen. Sharks sustain the oceans. Without them, we, ourselves, could not sustain. If you won't support sharks for the mere fact that it is right to respect all creatures, whether their importance to us (as stated in Hawaii's adaptation of the sustainable development goals), then please support sharks for the fact that they are imperative to our survival too.

**SB-2079-SD-1**

Submitted on: 2/24/2018 3:26:26 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Shawn	Individual	Support	No

Comments:

Helping the rapidly declining population of sharks to recover.

**SB-2079-SD-1**

Submitted on: 2/24/2018 4:53:00 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Bonnie Sharkey	Individual	Support	No

Comments:

Please support this bill to protect sharks and rays from intentional killing. Many of these species are already endangered and we desperately need protections to safeguard their lives. Sharks are apex predators that are absolutely vital to the health of the ocean. We need healthy oceans to have a healthy planet. Thank you very much for your time!

Aloha Ways & Means Committee,

Our kupuna understood the important role our Mano (sharks) play in our marine ecosystem. We have many heiau throughout our island chain where our kupuna would pay respects and feed the many shark species in our archipelago. If your 'aumakua is the mano, it is likely that you had one or more kupuna who's responsibility was to Malama or care for the sharks on their Moku (island).

The heaviest marine ecosystems are rich in top predators such as Mano (Sharks). Some of the sharks you may see in our nearshore waters are: Mano pa'ele (Black tip reef shark), Lalakea (white cap reef shark), Mano Kihikihi (scalloped hammerhead shark), & the Niuhi (tiger shark).

My 'ohana have been monitoring our mano in the ahupua'a of Ko'olau for eight generations. I support this Bill to protect our Mano from being captured or killed.

Mahalo for your time,

Mary Ann Pahukoa

East Maui 'Ohana



**SB-2079-SD-1**

Submitted on: 2/24/2018 7:37:46 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ashlie McGuire	Individual	Support	No

Comments:

I strongly support SB 2079. I grew up in Kihei where I saw many types of sharks and rays as a child. They were always seen as a welcome presence and respected as an important part of life here in the island's. Sharks and rays are a vital part of healthy marine ecosystems that have experienced rapid declines throughout the last decades. As apex predators sharks are at the top of the food chain, therefore maintaining balance of the the ecosystem by regulating abundance of marine life in lower trophic levels and acting as the immune system of our oceans by picking off the weak, sick and overpopulated keeping fish stocks healthy. To allow the legal killing, or simply not supporting the ban of killing, these important creatures would be illogical, impractical, and later be seen as a huge mistake on the part of the government. Please do not make the mistake Australia did with the allowing of shark culling! Please do some research and have the foresight to protect these integral creatures in Hawai'i. Mahalo for your Kokua!

February 25, 2018

Aloha,

As a Native Hawaiian of Ko Hawai'i Pae 'Āina, I am in full support of SB 2079 SD1, protecting sharks and rays from being purposefully killed within Hawaiian waters.

Sharks and rays have graced the waters of these islands and earth for millions of years. They deserve our protection and utmost respect. Anything less is a desecration towards a species that has outlived our very own existence.

In Hawaiian culture we believe the spirits of our ancestors live on through animals that range from the graceful *māno* (shark), to the witty *pū'eo* (owl), to the small yet unassuming *mo'o* (gecko). These "guardians" are called "*aumākuā*". They appear to us in times of need to guide and protect us. In turn, by protecting these keepers of the sea we ensure a healthy ecosystem and sustainable lifestyle for the entire food chain, including ourselves.

While the population of sharks and rays have plummeted in the last century, we must do the best we can to restore natural order to the disruption we have caused. It is our *kuleana* to act upon the changes we see happening in our world. Values that were once heavily incorporated into Hawaiian society such as *mālama 'āina* are becoming foreign to many. Please consider supporting SB2079 SD1 to ensure the future of Hawai'i's pristine marine ecosystem and the future of our *hōnua*.

Sincerely,

Ku'uilei Gunderson  
Waimānalo, 'O'ahu.

**SB-2079-SD-1**

Submitted on: 2/25/2018 11:35:05 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Richard Reed	Individual	Support	No

Comments:

Section 1 does a very clear job of why Sharks and ray are deserving of more protection and I agree wholeheartedly. The bill is very clear that it only is aimed at "knowingly" killing or entangling only . I urge passage.

**SB-2079-SD-1**

Submitted on: 2/24/2018 8:25:35 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Shannon Murphy	Individual	Support	No

Comments:

**From:** [Anita Wintner](#)  
**To:** [WAM Testimony](#)  
**Subject:** 2-28-18 Support for SB 2079  
**Date:** Friday, February 23, 2018 4:25:36 PM

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I strongly support this bill. There is no reason to allow people to kill sharks or rays.  
Anita Wintner Maui resident  
Sent from my iPad

**From:** [Austen Stone](#)  
**To:** [WAM Testimony](#)  
**Subject:** Support for SB2079, shark-Ray protection bill  
**Date:** Friday, February 23, 2018 4:33:41 PM

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Dear Legislators:

I urge you to support SB2079, a shark-ray protection bill. As a longtime scuba diver and lover of the oceans, I know these creatures need and deserve our action to aid their situation.

Thank you,  
Austen Stone  
Kamuela, HI 96743

Sent from my iPad

**From:** [Taylor Cunningham](#)  
**To:** [WAM Testimony](#)  
**Subject:** Support for SB2709!!!  
**Date:** Friday, February 23, 2018 4:35:36 PM

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To whom it may concern,

I'm sure that you have been told in many other testimonies about the incredible importance of sharks to keeping ocean ecosystems healthy but I urge you to consider their economic importance. Sharks act as the "white blood cells" of the ocean by eating the sick, injured, or dying animals and leaving behind a healthy ecosystem. Without sharks are fisheries would be plagued with diseased fish. The fishing industry in Hawaii accounts for a significant portion of the economy. A quarter of the Hawaiian population takes part in fishing activity at least once a year and Hawaii's commercial fishermen have brought up to \$64.3 million in fish in previous years. The Hawaiian fishing industry is the 6<sup>th</sup> largest in the US and without the presence of sharks, it could potentially collapse. Tourism is the largest source of private capital into the Hawaiian Islands and contributes \$1 billion in tax revenue. Ecotourism accounts for a large portion of tourism within Hawaii, much of which involves sharks or coral reef ecosystems. It has been proven that by protecting sharks, overall reef health improves. For example, the protection of sharks in the Bahamas has led to a healthier food chain and increased shark-related ecotourism, earning the title of "Shark Diving capital of the world". The shark diving industry in the Bahamas brings in approximately \$78 million a year to the local economy. The protection of sharks and rays in the Maldives has led to a huge ecotourism business among the islands. In Palau, each living reef shark contributed almost \$2 million to the economy within their lifetime via ecotourism. On the other hand, that same shark would be worth a one-time pay out of a couple hundred dollars if killed by a fisherman in Palau. A LIVING SHARK IS WORTH MORE THAN A DEAD ONE! Even if you ignore all the biological and ecological benefits of the presence of sharks & rays within the Hawaiian reef and ocean ecosystems there is an extremely compelling economic reason to protect sharks and rays in Hawaiian waters. I urge you to pass bill SB 2079 and join the Maldives, Honduras, and the Bahamas in efforts to prevent the recreational fishing of sharks.

Mahalo,

Taylor Cunningham

**From:** [Tracie Sugo](#)  
**To:** [WAM Testimony](#)  
**Subject:** In Support of SB2079  
**Date:** Friday, February 23, 2018 5:28:26 PM

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Please pass SB 2079 for further protection of sharks and rays. Hawaii is home to a rich marine ecosystem, which in turn supports one of Hawaii's largest sources on income (tourism). Sharks and rays are predators and play a vital role in balancing the food chain. Without them, the ecosystem could collapse and impact a huge amount of marine species. Please give sharks and rays more protection!

Thank you,

--

Tracie Sugo  
Keiko Conservation Japan Chapter



**SB-2079-SD-1**

Submitted on: 2/25/2018 5:33:10 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Wai'ala Ahn	Individual	Support	No

Comments:

Aloha,

I'm submitting testimony in strong support for SB2079 related to shark and ray protection. These marine creatures are vital to our oceans sensitive ecosystems. They are our ocean kupuna and many of our amakua; our anestors knew their importance to the health of our sea and lived, hunted and thrived with the relationship they shared with them. These creatures need to be protected and I ask that you strongly support SB2079.

Mahalo,

Wai'ala

**SB-2079-SD-1**

Submitted on: 2/25/2018 8:54:01 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ashley Lister	Individual	Support	No

Comments:

I am in FULL support of SB2079. Mahalo!

**SB-2079-SD-1**

Submitted on: 2/26/2018 1:57:49 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Brandi Marlowe	Individual	Support	No

Comments:

I am submitting testimony in full support of SB 2079, regarding the protection of sharks and rays.

Last year I came across a dead scalloped hammerhead pup discarded in a tide pool. It was very sad to see because they are an endangered species. Many sharks and rays are quickly becoming endangered; we need to do everything we can to revive their numbers. Being an apex predator, they play an important role in the marine ecosystem. They swim at the top the the ocean food chain, keeping balance and order; without them, there is great potential for chaos.

Sharks and rays are *both* peaceful creatures. They eat when nourishment is needed, just like any other creature. Although most may not see past the surface of the water, there is a lot going on beneath the surface. Sharks and rays are a sign of a thriving marine ecosystem, without a healthy ecosystem in our oceans, we cannot have a healthy ecosystem on land.

Please help keep our environment safe and give our next generations the opportunity to know and swim with these magnificent animals. I'd hate for them to become no more than a creature of myth and legend. Please pass this ban.

**SB-2079-SD-1**

Submitted on: 2/25/2018 8:27:13 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Alexis Thomas	Individual	Support	No

Comments:

**SB-2079-SD-1**

Submitted on: 2/26/2018 1:13:57 AM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Joan Gannon	Individual	Support	No

Comments:

SB 2079 WAM 2/28/18 11:00 am room 211

dear WAM Committee please pass SB 2079. Protect sharks and rays

thank you

Joan Gannon snorkler

February 26, 2018

Clair Lueke  
84-400 Ikuone Place  
Waianae, Hawaii 96792

Chair Donovan M. Dela Cruz  
Hawaii State Capitol Room 208  
Honolulu, Hawaii 96813  
*Transmitted via electronic mail to WAMTestimony@capitol.hawaii.gov*

RE: Committee Hearing SB2079 SD1

Dear WAM Committee:

I am writing this testimony to voice my **support of SB2079** related to the protection of sharks and rays in nearshore Hawaiian waters. Sharks and rays are extremely vulnerable because of the late age at which they reach sexual maturity combined with habitat loss and current lack of viable protections. Sharks and rays are economically vital for tourism; most of our visitors are expected to enter the ocean for recreation so it is important for our oceans to be healthy, vibrant, and diverse. Sharks (mano) are also respected as Aumakua within the Hawaiian culture, giving them important cultural value when they are *alive*. It would be negligent to not give sharks and rays legal protections that are warranted to preserve their numbers in Hawaiian waters.

I believe that a policy change in the form of a new law, combined with strict enforcement, will ensure that protections are granted to sharks and rays to prevent inhumane capture, abuse, possession, or intentional entanglement. While this bill is not the only way to ensure that sharks and rays are able to maintain healthy population numbers, it is a start. Sharks and rays are vital to a healthy ecosystem and without them, the food chain is irrevocably disrupted, resulting in unhealthy reefs.

I urge your committee to pass SB 2079. As a concerned citizen, thank you for the opportunity to testify in full support of this important bill. Let us in Hawaii lead by example, to protect sharks and rays and the ecosystems that they inhabit.

Sincerely,



Clair Lueke  
Registered Voter

**SB-2079-SD-1**

Submitted on: 2/26/2018 1:15:52 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mike Coots	Individual	Support	No

Comments:

I am a Hawai'i resident born and raised on the island of Kaua'i. I lost my right leg to a tiger shark at the age of 18 surfing. I strongly believe sharks play a vital critical role in a healthy marine ecosystem. A healthy ocean is one with a healthy shark count. We must do all we can to help ensure strong shark counts in our near- shore waters, and this bill does so. As a keystone species that has evolved for millions of years, we must keep them around. Thank you.

**From:** [Mary & Robert](#)  
**To:** [WAM Testimony](#)  
**Subject:** 2-28-18 Support for SB2079  
**Date:** Monday, February 26, 2018 2:48:52 PM

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Please pass SB2079.

Mahalo, Mary Menacho



**From:** [Judy Mick](#)  
**To:** [WAM Testimony](#)  
**Subject:** 2-28-18 Support SB 2079  
**Date:** Friday, February 23, 2018 7:52:54 PM

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Please pass this bill to ensure sharks and rays have the protection they deserve as important members of our oceans. Mahalo Judy Mick, Kailua

**From:** [Anna volpato](#)  
**To:** [WAM Testimony](#)  
**Subject:** I support SB 2079  
**Date:** Sunday, February 25, 2018 10:42:13 AM

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I support SB 2079

**From:** [venture aloha](#)  
**To:** [WAM Testimony](#)  
**Subject:** I support SB 2079  
**Date:** Monday, February 26, 2018 12:17:41 PM

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Protect our Marine life!

Steven Chavez

Sent from my iPhone

**From:** [Anna Lesniak](#)  
**To:** [WAM Testimony](#)  
**Subject:** I support sb 2079  
**Date:** Sunday, February 25, 2018 10:01:27 AM

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**From:** [Madison Masek](#)  
**To:** [WAM Testimony](#)  
**Subject:** In Support of SB 2079  
**Date:** Sunday, February 25, 2018 5:22:37 PM

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Aloha,

My name is Madi Masek and I am a student at Hawaii Pacific University studying Environmental Science, Political Science, and International Studies, and I want Hawaii to protect sharks and rays in our waters. Sharks and rays are vital to marine ecosystems, their death brings the death of the beautiful Hawaiian fishes and reefs that surround the islands. Stopping the purposeful killing of sharks and rays in Hawaiian waters will save the marine ecosystem Hawaii is known for. Please support SB 2079 and save sharks and rays.

Mahalo,  
Madi Masek

**From:** [Jonathan Pastor](#)  
**To:** [WAM Testimony](#)  
**Subject:** In Support of SB 2079  
**Date:** Saturday, February 24, 2018 11:55:06 PM

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Dear Sirs:

I love to travel, and I have read the news about the SB 2079 that is a bill to further protect Hawaii's sharks and rays by prohibiting the recreational fishing of these animals.

I want to remember you that sharks play a pivotal role in keeping our oceans healthy, as predators they control the marine food chain, and there a second reason too, if you keep sharks and rays alive you can raise your economy with the business of diving companies, I am a diver, I have been diving in different places around the World, and I would like to visit Hawaii and watch sharks while I am diving, in other places is a good business maybe you know it.

Cordial greetings,  
Jonathan Pastor.

**From:** [Joy Bitonio](#)  
**To:** [WAM Testimony](#)  
**Subject:** In support of SB2079  
**Date:** Monday, February 26, 2018 5:55:56 PM

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Aloha,

I am writing in support of SB2079 to protect sharks and rays. They are critical players in sustaining a healthy ocean ecosystem.

They are already facing significant threat from shark finning, by-catch due to unsustainable fishing practices, and toxic microplastic pollution.

If we do not stand to protect them, it would be a butterfly effect to the entire ocean. The ocean we need, that provides us with oxygen, a place to enjoy the natural beauty of our islands, and enjoy and respect observing marine life in their wild habitat. They have survived many mass extinctions and it would be a shame if they went extinct as a result of the hands of humans who could have done something to change this fate.

These marine creatures are so misunderstood, they need us now more than ever to protect them and re-educate people about them so we can learn to co-exist. Hawai'i has been at the forefront of many victories for the preservation of the aina and it's natural inhabitants. Let's continue to forge the path and lead by example for the rest of the world.

Mahalo,



**Joy Bitonio**  
Founder | Aloha Spreader  
818.355.2824



Sent with aloha.

**From:** [M. Markl](#)  
**To:** [WAM Testimony](#)  
**Subject:** Plesase Support SB2079 on 2/28/18  
**Date:** Monday, February 26, 2018 6:10:44 PM

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Hello Committee Members And Chair(s):

Please make this a priority to pass this important bill in your committee(s) now and onward until it becomes law this session.

These animals lives depend on each of you using your power to stop the greed, abuse, etc. that unnecessarily destroys each of

their one lives. Please give them your protection, Aloha and mercy now that you'd want if you were in their place as we are all

connected.

Thank you.

M. Markl



**From:** [Debanjolee Das](#)  
**To:** [WAM Testimony](#)  
**Subject:** Support SB 2079  
**Date:** Monday, February 26, 2018 4:37:52 PM

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Dear Chair Dela Cruz,

My name is Debanjolee Das and I am engineering student in Texas. All my life, I have admired and loved marine life. Living in Katy, Texas with absolutely no access to the ocean, my obsession for marine life has only grown over the years.

It breaks my heart to know that one day in my lifetime, sharks and rays could very well go extinct. Their population numbers are decreasing rapidly from humans merciless hunting tactics along with illegal fishing lines and other dangers that are posed to these creatures. Please help protect sharks and rays as they play a crucial role in our oceans ecosystem. Politicians and committees have a great opportunity to stand up for what is right, and I know that this is one area of concern where people must speak out.

Thank you for your time and consideration. Have a wonderful week.

Sincerely,  
Debanjolee Das

**SB-2079-SD-1**

Submitted on: 2/26/2018 8:57:07 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Alohi Nakachi	Individual	Support	No

Comments:

Aloha,

I am emailing to support SB 2079 to protect rays and sharks from purposeful catch and killing in Hawaii. Being both Kanaka Maoli as well as a scientist I am greatly aware of the importance of sharks and rays in Hawaii. They truly are ali'i of the sea and should be treated as such. Elasmobranchs in Hawaiian culture have always been revered and protected.

Sharks and rays also play an important ecological role on coral reefs. Without sharks in particular coral reefs would die. With climate change, pollution/runoff, development, and all the other stressors that impact the reefs today we really cannot afford to add to them. Elasmobranchs are already in trouble from overfishing with many different species dwindling down to concerning levels because of humans.

We cannot afford to harm and kill sharks and rays with unnecessary catch. There is no reason for these species to be caught as they are extremely dangerous to eat containing high levels of toxins as well as mainly being cartilaginous. As such catch is completely wasteful and ecologically damaging. Even catch and release for many species is damaging to their physical health and can even result in death. Frankly, catch and kill of these species is culturally inappropriate and disrespectful. It should not be allowed especially when my own encounters of people catching sharks are tourists or non-local residents (not born or raised in Hawaii) who have little knowledge or respect of Hawaiian culture.

So I urge you, please support and pass SB 2709.

Mahalo,  
Alohi Nakachi

**LATE**

**SB-2079-SD-1**

Submitted on: 2/27/2018 3:22:15 PM

Testimony for WAM on 2/28/2018 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Stephanie McLaughlin	Individual	Support	No

Comments:

Dear Hawaii State Legislature,

Aloha. I write to you during a week when the Marine Mammal Protection Act, an act that costs U.S. taxpayers merely a penny a year, is in talks to be gutted.

I write to you during a week when sharks are being killed by the hundreds of millions, literally 100,000,000 were killed last year for sharkfin soup.

(<https://www.onegreenplanet.org/animalsandnature/7-alarming-facts-about-the-shark-fin-trade/>)

I write to you during a week when the going price for sharkfin is only on the black market, and is \$300/pound. Where that money goes and how it is kept is likely illegal.

(<https://www.nationalgeographic.com/magazine/2016/07/shark-fin-soup-campaign-illegal/>)

I write to you during a week when cownose sting rays are migrating to the warm waters of the Chesapeake Bay to give birth to pups, only to be met by whirring engines and people with automated hunting bows (<http://www.takepart.com/article/2014/12/16/east-coast-killing-contests-threaten-wipe-out-cownose-stingray>)

I write to you during a week when thousands of Hawaiian seabirds, seals and whales are dying from ingested plastic and microplastic off Kamilo Point

([https://www.huffingtonpost.com/entry/kamilo-beach-hawaii-dirtiest-beach-america\\_us\\_58e99a38e4b05413bfe3792d](https://www.huffingtonpost.com/entry/kamilo-beach-hawaii-dirtiest-beach-america_us_58e99a38e4b05413bfe3792d))

I write to you in Support of SB 2079 -- save and protect Hawaiian sealife and Hawaiian sharks!

Thank you. Mahalo.

Sara Sass

To whom it may regard,

I am writing to say that I support SB 2079 SD.

Sharks & rays need our protection, they are being killed faster than they can reproduce. They are a vital part of the ocean eco system helping to rid the seas of weak & dying fish allowing healthy ones to thrive. By doing this they help to keep the ocean healthy, & a healthy ocean helps provide oxygen. Sharks & rays are worth so much more alive than dead. Besides helping in the sea as well as with the air we breathe, they also are a great source of ecotourism. They are beautiful, peaceful, timid creatures who have unfairly earned a bad reputation due to wrongful media portrayals. I love sharks & rays, and the world needs them. That's why I support SB 2079 SD & encourage you to do the same.

Sincerely,  
Becky Faulkner

SAVE THE SHARKS AND THE OCEAN AND PLANET AND THE MARINE LIFE  
Support SB 2079 SD1  
Sincerely,  
Ellen Groseclose from Alaska

Support SB2079

Thank you

Stephanie Gray

I strongly support SB2079 SD1 in granting more protection for sharks and rays in Hawaiian waters. As a shark naturalist for One Ocean Research & Diving, I understand the ecological importance of sharks in marine ecosystems, the economic benefit to “swim with shark” programs, and the cultural value of sharks in Hawaiian tradition.

From 2000-2010 Sharks around the world have been decimated at a rate of about 100 million sharks per year (Worm & Gruber 2013). With only about 3% of the world's ocean as a marine protected area (MPA) there exists few safe havens for these animals around the globe (Department of State Bureau of Oceans and International Environmental and Scientific Affairs 2016).

Sharks and rays are especially vulnerable to exploitation due to slow growth rate, late attainment of sexual maturity, long life spans, & low fecundity (Stevens et al 2000)

As apex predators, sharks are at the top of the food chain, therefore maintaining the balance of the ecosystem by regulating the abundance of marine life in lower trophic levels while acting as the immune system of our oceans by picking off the weak, sick and overpopulated keeping fish stocks healthy.

Additional research indicates that the removal of shark and rays may alter size, structure and population parameters in response to changes in species abundance (Stevens et. al 2000).

Sharks are a clear sign of a healthy reef and marine ecosystem due to their predatory status. Hawaiian tourism relies greatly on our natural environment. It is our



responsibility as a community to conserve our natural world for generations to come and those around the globe to enjoy. I have personally interacted with countless tourists from around the world traveling specifically for aquatic tourism with a focus on sharks and rays between Oahu and Hawaii island. Studies in the Maldives, Bahamas, and South Africa have clearly outline the value of a live shark to severely outweigh the value of a dead shark.

“In the Maldives, for example, divers engaged in over 76,000 shark-observing dives in just one year, bringing in an estimated US \$2.3 million to the local economy in 1993 alone (Anderson & Ahmed, 1993; Anderson & Waheed, 2001). This same study also estimated that a single grey reef shark was worth an average of \$3,300 per year, and over \$35,000 per year at the most popular dive sites.”

Anderson and Ahmed (1993) concluded a grey reef shark was worth 100 times more when alive than dead.

Our team of conservationists at Keiko Conservation and One Ocean Research and Diving urge your committee to lead by example not only for the state of Hawaii but the entire nation and preserve Hawaii’s natural assets by passing SB2079 SD1.

Mahalo nui loa,

**Kayleigh Burns**  
**PADI Divemaster**  
**One Ocean Diving**  
**Water Inspired Conservationist**

The earth pleads for this act of protection. I am in support of SB2079 SD1, for I advocate the crisis of shark depletion. Without sharks there is no ecosystem. No ecosystems no ocean. No ocean NO EARTH. America's economy is at stake without sharks. The bahamas has gained \$800 million in 20 years from shark tourism. Please, keep these creatures thriving and protected.

June Robertson

Dear Chair Dela Cruz and committee,

Thank you for the opportunity to voice my support of SB 2079 which would protect sharks and rays in Hawaii's waters. Sharks and rays are key components in a healthy marine ecosystem. Sharks are apex predators (at the top of the food chain), which means they play the vital role of managing populations below them in the food chain, remove disease and carrion from the environment, and help select for stronger, healthier fish and thus a stronger ecosystem.

Hawaii's beaches are one of the main allures to tourists around the world and the tourism industry is a huge contributor to Hawaii's economy. Shark ecotourism is a huge attractant to tourists around the world. In a study conducted at Duke University in 2004, American SCUBA divers were asked to state their WTP (willingness to pay) to see healthy corals, turtles, sharks, etc. (White 2008). 71% of the divers were willing to pay more money to see sharks than any other species. A study based on the Maldives found that in 1993, "shark-observing dives" brought in \$2.3 million to the local economy. It also estimated each grey reef shark brought in anywhere from \$3,300 to \$35,000 (Anderson & Ahmed 1993, Anderson & Waheed 2001). The Bahamas is a prime example of what can happen when sharks are protected. According to the Pew Environment Group, each reef shark in the Bahamas is worth about \$250,000. In the last 20 years, the Bahamas generated about **\$800 million** from shark-diver encounters (Cline 2008). From these numbers, it is obvious to see the cost benefit of protecting sharks.

Being a research assistant for One Ocean Diving, I have heard many customers inform us that they have flown to Oahu/Hawaii just for the experience to swim with sharks. This means revenue gained from their stay through hotels, flights, rental cars etc., is solely due to the sharks we have here. It's proven that sharks are worth more alive than dead and Hawaii has the opportunity to become "the next Bahamas" by passing this bill.

There are demonstrable examples of what happens in an ecosystem where sharks are removed. For example, in the Atlantic where shark fishing is widespread, the scallop industry collapsed following the depletion of shark populations. Cownose ray (*Rhinoptera bonasus*), which feed on scallops, catch rates increased 9% each year (indicating population increase) while shark populations declined, effectively wiping out the scallop *Argopecten irradians* many animals, including humans, feed on (Heithaus et al. 2008). Rays are also an important link in the food chain, often feeding on and managing bottom-dwelling fish and invertebrates. Hawaii has only 4 species of ray; the reef manta ray, the rare giant manta ray, the broad stingray (found only in Hawaii), and the eagle ray.

Sharks and rays are vulnerable to a variety of threats, mainly overfishing, bycatch, and the act of shark finning because shark fins are so highly valued in Asia. They are slow to mature (According to Romine et al. (2006), female sandbar sharks, which are present on the North Shore, take at least a decade to reach sexual maturity), have small litter sizes, and some don't reproduce every year, such as the Tiger shark (Whitney & Crow 2007). Sharks are also threatened with ingestion of human generated waste such as plastic, as well as entanglement from ghost nets, fishing line, etc. See attached photos. Even here in Hawaii, sharks are caught for "recreation", which, even if the shark is released, can still kill the sharks, and are also killed for seemingly no purpose at all. Attached below are some photos of sharks killed in Hawaii. If the shark and ray populations continue to decline, reef systems will follow suit. Dead reefs not only mean less food sources for humans, but their protection from large waves will also disappear and our beaches will decline.

The ocean is our life support system and all life originated in the ocean. We breathe more oxygen from the ocean than anywhere else and many populations depend on it for food. Following suit with the shark fin ban in 2011, Hawaii can once again be a national and world leader in protecting sharks, and therefore, the marine ecosystem. I urge you to pass this bill, which can help turn the tide on declining shark populations around the world.

Mahalo nui loa for your time and consideration of this bill,  
Michelle Bennett

Anderson, R.C., & Ahmed, H. (1993). The shark fisheries of the Maldives: A review (Report to Ministry of Fisheries and Agriculture, Republic of Maldives and Food and Agriculture Organization of the United Nations, 76 pp)

Anderson, R.C., & Waheed, A. (2001). The economics of shark and ray watching in the Maldives. Shark News, 13, 1–3.

Cline, W. 2008. Shark diving overview for the islands of the Bahamas (p. 11). Nassau, Report of the Bahamas Ministry of Tourism. Nassau, Bahamas: Cline Marketing Group.

Heithaus, M., A. Frid, A. Wirsing, B. Worm. 2008. Predicting ecological consequences of marine top predator declines. 23:4., 202-210.

White, L. (2008). Sea, the value: Quantifying the value of marine life to divers North Carolina, (Master's thesis, Duke University). Retrieved from [http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/479/MP\\_lcw6\\_a\\_200805.pdf;jsessionid=7D7F6477F4062E0CDC0FA5E1D9E1F286?sequence=1](http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/479/MP_lcw6_a_200805.pdf;jsessionid=7D7F6477F4062E0CDC0FA5E1D9E1F286?sequence=1).

Whitney, Nicholas M. & Gerald L. Crow. 2007. Reproductive biology of the tiger shark (*Galeocerdo cuvier*) in Hawaii. 151:1 pp. 63-70.



These sharks were found dead at Waimea Bay around Sept. 2017 where there were large bait balls occurring inside Waimea Bay and sharks were spotted feeding on them. It's not known if the men in the left photo were the ones that killed the shark (via Instagram under @kala\_\_grace). The female sandbar shark on the right was found after presumably being dragged on shore with the rope around her tail and tied to a sand spike.



This is Roxanne, a juvenile tiger shark found Feb. 2016 on the North Shore. As you can see from the hook, this was a targeted attack. She was also tagged for a study by researchers on Oahu.



A sandbar shark found dead on the West Side Dec 2017



Man using a juvenile hammerhead as bait. In video the dialogue is "Guys, isn't that hammerhead?" "Yeah." "Aren't you supposed to let it go?" "Are you silly? I'm still gonna send it.". The shark was still alive and struggling, as seen in the first two screenshots.

**LATE**

As a three time visitor to Hawaii in the last year I applaud you for passing SB2079 and hope that it will become the law. Hawaii is the most special place I have visited on earth and I hope that you take all the possible actions to keep it that way. That would include protective measures for the sharks and rays which share the beautiful ecosystems that the islands have. Thank you.

Ayca Ergeneman

We must protect our sharks, their survival and ability to thrive is essential to healthy ocean.  
Please be a hero.  
Thank you!

Sara Gernsbacher



Hawaii should further protect sharks and rays! Please support bettering our planet

Candace Hang

Aloha Committee Members,

I strongly support SB2079 SD1 in granting more protection for sharks and rays in Hawaiian waters. As a shark naturalist for One Ocean Research & Diving, I understand the ecological importance of sharks in marine ecosystems, the economic benefit to “swim with shark” programs, and the cultural value of sharks in Hawaiian tradition.

From 2000-2010 Sharks around the world have been decimated at a rate of about 100 million sharks per year (Worm & Gruber 2013). With only about 3% of the worlds ocean as a marine protected area (MPA) there exists few safe havens for these animals around the globe (Department of State Bureau of Oceans and International Environmental and Scientific Affairs 2016).

Sharks and rays are especially vulnerable to exploitation due to slow growth rate, late attainment of sexual maturity, long life spans, & low fecundity (Steves et al 2000)

As apex predators, sharks are at the top of the food chain, therefore maintaining the balance of the ecosystem by regulating the abundance of marine life in lower trophic levels while acting as the immune system of our oceans by picking off the weak, sick and overpopulated keeping fish stocks healthy.

Additional research indicates that the removal of shark and rays may alter size, structure and population parameters in response to changes in species abundance (Stevens et. al 2000).

Sharks are a clear sign of a healthy reef and marine ecosystem due to their predatory status. Hawaiian tourism relies greatly on our natural environment. It is our responsibility as a community to conserve our natural world for generations to come and those around the globe to enjoy. I have personally interacted with countless tourists from around the world traveling specifically for aquatic tourism with a focus on sharks and rays between Oahu and Hawaii island. Studies in the Maldives, Bahamas, and South Africa have clearly outline the value of a live shark to severely outweigh the value of a dead shark.

“In the Maldives, for example, divers engaged in over 76,000 shark-observing dives in just one year, bringing in an estimated US \$2.3 million to the local economy in 1993 alone (Anderson & Ahmed, 1993; Anderson & Waheed, 2001). This same study also estimated that a single grey reef shark was worth an average of \$3,300 per year, and over \$35,000 per year at the most popular dive sites.” Anderson and Ahmed (1993) concluded a grey reef shark was worth 100 times more when alive than dead.

Our team of conservationists at Keiko Conservation and One Ocean Research and Diving urge your committee to lead by example not only for the state of Hawaii but the entire nation and preserve Hawaii’s natural assets by passing SB2079 SD1.

Mahalo nui loa,

**Kayleigh Burns**  
**PADI Divemaster**  
**One Ocean Diving**  
**Water Inspired Conservationist**  
**Mobile: (215) 208-5432**  
**IG: @mermaid\_kayleigh**  
**FB: Kayleigh Nicole Burns**

Support SB2079

Thank you

Stephanie Gray

I support SB 2079

Sharks are wonderful and misunderstood creatures. They are extremely important in our ecosystems, and they have a right to live and survive just like everyone else. I sincerely have them in my prayers and i hope you understand the significance of this. and you make your decision with careful consideration.

- Faith a Bynum

I strongly support SB 2079. Sharks and rays are a vital component of healthy marine ecosystems that have experienced rapid declines throughout the last decades. As apex predators sharks are at the top of the food chain, therefore maintaining balance of the the ecosystem by regulating abundance of marine life in lower trophic levels and acting as the immune system of our oceans by picking off the weak, sick and overpopulated keeping fish stocks healthy. Help save our oceans! Protect them!

Kendra Nelson

Please save our sharks !!

Natalie Little

Chair deal cruz

Protect Hawaii sharks

MLL

Dear Legislators:

I urge you to support SB2079, a shark-ray protection bill. As a longtime scuba diver and lover of the oceans, I know these creatures need and deserve our action to aid their situation.

Thank you,  
Austen Stone  
Kamuela, HI 96743

To Whom it May Concern:

I am emailing to show my support for SB 2079.

Sharks and rays play a pivotal role in the health of our oceans and have an important cultural significance in Hawaii. These animals are already being wiped out in unfathomable numbers in federal waters around the islands and all around the world. It is unnecessary to fish them for recreation in state waters.

I hope you will make Hawaii the first state to write it into law.

Regards,

Bella Nelson  
[h.bell.nelson@gmail.com](mailto:h.bell.nelson@gmail.com)

Chair deal cruz  
Protect Hawaii sharks

Ana Sophia Serrano Velarde

Please pass SB 2079 for further protection of sharks and rays.

Hawaii is home to a rich marine ecosystem, which in turn supports one of Hawaii's largest sources on income (tourism). Sharks and rays are predators and play a vital role in balancing the food chain. Without them, the ecosystem could collapse and impact a huge amount of marine species. Please give sharks and rays more protection!

Thank you,

--

Tracie Sugo  
Keiko Conservation Japan Chapter

Aloha!

Thank you for giving me the opportunity to submit a testimony today. I greatly appreciate your time.

I would like to ask you to please help pass SB 2079 SD1 so we can protect sharks and rays in Hawaii. As you probably know from other's testimonies, these animals are vital to the health of the ocean & they desperately need more protecting. Without them, the ocean isn't healthy. Without a healthy ocean, we lose a large percentage of our oxygen. Please help Hawaii lead the way in the United States by helping further protect these creatures.

Mahalo for your time and consideration.

Mackenna Cady

Dear representative,

Further protections that make shark fishing illegal in Hawaii need to be put in place today. These animals are an integral part of the health of Hawaii's ocean ecosystems, which provide tourism and food for our islands. We must protect these animals to ensure that future generations will be able to benefit from their role in our ecosystem. Thank you for listening.

Chloe Amos

**As a resident of Hawai'i and long time advocate for healthy seas and sea life I support SB2079.**

**Please place more protections for shark and rays in our Hawaiian waters.**

**You may have seen this graphic story recently of why these careless and brutal treatments, ending in death of vital seal life must end.**

<http://www.hawaiinewsnow.com/story/23421253/tiger-shark-captured-on-video-from-hawaii-island-sparks-controversy>

thank you,

Lorraine Garnier

Hello Char Dela Cruz-

I live in Oregon but wanted to take a moment to write in my support to protect Hawaii's sharks further. I had an amazing trip to Maui last year- my first visit there- for my honeymoon, where I learned to snorkel and fell in love with it. I spent every dive looking for sharks, including asking locals where black tip reef sharks might be found. Sadly, we didn't spot any, but just last month we've booked a trip to O'ahu in May 2018. We picked O'ahu (and Hawaii again) for several reasons but the most important was to go on a trip to snorkel with sharks with an operation that focuses on the animals and does not chum or harm them. I booked that as soon as we booked the trip. We are spending our money and coming to O'ahu specifically for a chance to see sharks so I wanted to pass along this email from a tourist to say I hope you will expand the support these animals need.

This very timely study backs up that this is not just me, and that eco-tourism is important for the animals and local economies: <https://www.sciencedirect.com/science/article/pii/S0308597X17304839>

Thank you for your time,  
Justine Triest

Dear Chair Dela Cruz,

Please help pass this bill to support protection for sharks and rays in Hawaii.

-Passing this bill now would even further make Hawaii an international leader for shark and marine conservation. We are already viewed as leaders for shark research and conservation but this would show the government of Hawaii in the very best way.

-The traditional values support this bill, our science supports the need for this bill, and our social interfaces show a need for this bill for greater protection.

-**Sharks bring in millions to Hawaii's economy** directly through eco-tourism and their environmental benefit to reefs is immeasurable but they are scientifically proven to help keep fisheries and reef ecosystems healthier.

-If there was a need for assistance to fund the enforcement of this bill One Ocean Diving which is a shark research program based but also commercially permitted shark ecotourism program would voluntarily donate \$5 from the fee of each person who wants to go see and learn about live sharks to a "Shark protection fee or tax" for Hawaii's shark protected area.

-I have extensive research data for over six year that documents Hawaii's shark declines at state and federal water lines.

-Think about international headlines to have sharks protected in Hawaii. Every country and nation that established marine protected areas gets good press and that can boost the economy with more tourists. We already have millions of **tourists who fly to Hawaii just to come out with us** to learn about and swim with sharks.

Please let me know if there is anything further I can do or information I can provide to support this bill.

I work with sharks around the world and will publish a book and documentary this year. Feel free to check out my TED talk on "How sharks affect us all"

All my best and mahalo nui loa for your support for sharks, rays, our current and future generations.

Aloha,  
Ocean

Aloha,  
Ocean Ramsey  
1-808-722-0969

Senior Researcher & Dive Safety Officer for One Ocean Research and Diving  
Co-founder of Water Inspired conservation group.  
President of Save The Sea Turtles International.  
Advisor for the International Shark Project and HSC.  
PADI MSDT #197766  
E02 & AED Instructor  
1st Aid & CPR EFR Instructor

Dear Chair Dela Cruz,



Please help pass this bill to support protection for sharks and rays in Hawaii.

-Passing this bill now would even further make Hawaii an international leader for shark and marine conservation. We are already viewed as leaders for shark research and conservation but this would show the government of Hawaii in the very best way.

-The traditional values support this bill, our science supports the need for this bill, and our social interfaces show a need for this bill for greater protection.

-Sharks bring in millions to Hawaii's economy directly through eco-tourism and their environmental benefit to reefs is immeasurable but they are scientifically proven to help keep fisheries and reef ecosystems healthier.

-If there was a need for assistance to fund the enforcement of this bill One Ocean Diving which is a shark research program based but also commercially permitted shark ecotourism program would voluntarily donate \$5 from the fee of each person who wants to go see and learn about live sharks to a "Shark protection fee or tax" for Hawaii's shark protected area.

-Think about international headlines to have sharks protected in Hawaii. Every country and nation that established marine protected areas gets good press and that can boost the economy with more tourists. We already have millions of tourists who fly to Hawaii just to come out with us to learn about and swim with sharks.

mahalos

juan oliphant

co-founder of One Ocean Diving and Research

Dear Chair Dela Cruz,

It is imperative that your legislature pass SB2079 for shark protection. Sharks are apex predators and crucial to the well-being of the ecosystem as a whole. As around 80 million sharks are killed annually worldwide, with many species at risk of extinction, the odds are against them.

*Ecosystem models predict that the removal of sharks can result in complex community changes, including trophic cascades, mesopredator release, and consequent declines in some commercial fish and cascading changes in some coastal ecosystems (Ferretti et al. 2010). Additional research indicates that the removal of shark and rays may alter size, structure and population parameters in response to changes in species abundance (Stevens et al. 2000).*

*In the context of ecosystem level changes specific to Hawaii, a study published in 2000 examined the potential long term impacts of the removal of sharks with the use of a dynamic model ECOSIM that predicts changes in biomasses, yields, and consumption for each group through time. They found that when tiger sharks were removed from the model a total and rapid crash in the abundance of tuna and jacks, and an increase in bottom fishes occurred due to increases in seabird populations which compete with tunas and jacks for food and where no longer subject to top down control by tiger sharks (Stevens et al. 2000). While ecological relationships are very complex and difficult to simulate this study highlights the potential for unforeseen and unintended consequences when sharks are removed.*

As a fellow American, and having visited beautiful Hawaii, I urge your legislature to support this bill and protect the marine ecosystem for future generations!

Sincerely,  
Matthew Lafontaine

Source: Stevens, J. D., Bonfi R.I, Dulvy N. K., Walker P. A. ; The effects of fishing on sharks, rays, and chimaeras (chondrichthyans), and the implications for marine ecosystems, *ICES Journal of Marine Science*, Volume 57, Issue 3, 1 June 2000, Pages 476–494

Aloha Chair Dela Cruz,

I am emailing to submit testimony in support of SB2079. I believe that the intentional killing of sharks and rays around Hawaii should be prevented. Please support this bill.

Mahalo!

Lisha Padilla

It is important to place restriction on the killing of Hawaii's shark and stingray populations, by banning this act it will help to preserve the natural ecosystem of the ocean marine life, and by doing so will also benefit the community of the island. When an keystone species of an ecosystem is eliminated or decreases it throws the entire system out of function. You can see this process in the Yellow stone, gray wolf situation. By preserving the life of these essential creatures it will maintain the island economy and create a sustainable environment for humans to continue to live in.

Thank you,  
Carly Gehm

We need to change the way people see sharks and how we relate to them. Stop the violence against these beautiful and complex animals that mean no threat to us, in fact, they help all of the species in the world by maintaining healthy the ecosystems where they live. Please listen to the voice of experts on this matter and stop the haters who can't connect with the kindness that is within all the species in our planet.

Pablo Vallejos

Support for SB2079 shark-ray protection

Thank you

Melissa Carvalho Franca

**Please support!!! Mahalo**  
Benjamin Martin

Please support Bill, SB2079.

Thank you for supporting the preservation of our Hawaiian wildlife.

John Thomas



To whom it may concern:

I'm writing to express my support of SB2079.

There are a host of reasons that sharks and rays are hugely beneficial to the ocean and environment, such as the fact that as ocean predators near the top of the food chain, sharks keep the ecosystem balanced, regulate populations of other marine life, and ensure healthy fish stock and reefs. Sharks and rays are more vulnerable than most other fish species. They are long-lived and slow-growing, start reproducing at an advanced age, and produce relatively few offspring per year. If the food chain is disrupted by a decline in the shark population, it affects the entire ocean ecosystem, known as a trophic cascade. Protection for sharks and rays ultimately means healthier, more resilient oceans and reefs that are better able to withstand other pressures on the ocean ecosystem from climate change and pollution.

I also want to mention that I lived in Maui for 2016-2017 expressly to study Hawaiian and Polynesian mythology. Sharks are an integral part of those stories and the amount of respect shown to them is truly inspiring. Protecting these animals is absolutely the right thing to do.

Thank you for your time.

-Emma Tresemer, Ph.D.

Dear Senate Committee,

I support SB2079, please pass this important bill to prohibit the future killings of sharks and extend existing protections for all rays.

Sincerely,  
April Blades  
Honolulu, HI  
96814

Chair Dela Cruz,

I would like to voice my support for SB 2079 to protect Hawaii's sharks! Shark populations are in danger and need our help!!!

Thank you,

Melina Pepperling

This bill will protect sharks from the recreational purposeful killing of these animals.  
Please protect Hawaii's sharks and rays

Molly Ancona

Dear Chair Dela Cruz,

My name is Sarah Tutt and I am engineering student in Texas. All my life, I have admired and loved marine life. Living in Dallas, Texas with absolutely no access to the ocean, my obsession for marine life has only grown over the years.

It breaks my heart to know that one day in my lifetime, sharks and rays could very well go extinct. Their population numbers are decreasing rapidly from humans merciless hunting tactics along with illegal fishing lines and other dangers that are posed to these creatures. Please help protect sharks and rays as they play a crucial role in our oceans ecosystem. Politicians and committees have a great opportunity to stand up for what is right, and I know that this is one area of concern where people must speak out.

Thank you for your time and consideration. Have a wonderful week.

Sincerely,

Sarah Tutt

I support SB 2079 SD1. Sharks play an incredibly important role in the Hawaiian ecosystem and are responsible for keeping the oceans beautiful. They regulate populations, clean up detritus, and are a sign of a healthy ocean. Hawaii relies on its natural beauty for economic purposes and shark ecotourism has grown in popularity. Why allow the continuous killing of a species that provides so much for the environment, people, and economy? They are worth more alive than dead. International and illegal fishing is already decimating populations so the protection of sharks from recreational fishing would be a tremendous step forward. I support SB 2079 shark and ray protection.

Alexis Dominguez

Please support this important bill!

Mahalo,

--

Victoria B. Anderson

Hello even though I come from a far away country I would like to ask you to please Protect the sharks from recreational purposeful killing of these animals and keep them in the ecosystem where they belong!

Thank you for your care,  
Alexandra Martins



Aloha,

I would like to speak in favor of the SB 2079 bill. I have been researching Manta rays on Oahu for over 2 years, unfortunately, I have been seeing our local population going down, more of them are affected by humans, most have scarring from boat propellers, while others are tangled in plastic. I would love to see them get more protection! it is so important that we rally to save sharks and rays. I am also an avid freediver and enjoying diving with sharks on a regular basis. I am still here to tell the tales! These apex predators are vital to a strong and healthy ecosystem. Hawaii strives in the tourism industry, as stewards of the 'āina we need to take huge steps toward conservation to ensure that locals and visitors get to enjoy all the beauty that surrounds us. Millions of sharks are killed each year as well as Manta rays to serve in the traditional Chinese medicine, unfortunately, humans have pushed so many creatures to the brink of extinction, but let's reverse what has been done! let's protect sharks, let's take the first step into educating what apex predators are and how essential they are to the ocean. It's time to create a safe haven for our local shark population and educate the keikis to take care of them too. We shall lead the way to a more educated era that doesn't let stigmas stop us from changing tides and take a stand to save sharks and rays. They have been killed for long enough! I hope you pass this bill and this encourages other states and countries to do the same.

Again I fully support the SB 2079 bill.

mahalo nui loa,

Aube Paquet Lamothe  
445 kaiolu st, Honolulu, HI. 96815

As a Hawaiian marine biologist I strongly support bill 2079 to protect our sharks and rays. These apex predators need our protection and there will be severe ecological implications if we continue to reduce the populations on the top of the food chain.

There is no excuse for purposeful killing of ANY animals. But especially sharks, with extremely toxic levels of chemicals making them inedible, fisherman do not need to target sharks for any reason. Thanks for your time!

Lyndsey Tanabe  
91-106 Apuu Place  
Ewa Beach

I support bill SB 2079 because sharks are important for the planet as a whole, and their numbers are quickly declining due to fishing, finning and abuse.

Sincerely,

Rebecca Hoffmann  
Keiko Conservation Norway

To Whom It May Concern,

I believe without a doubt that it is essential to protect sharks and rays, not only in Hawaiian waters, but in oceans all over the world. Hawaii has a deep tie to the ocean and Hawaiians understand that to continue eradicating sharks at the pace we are now doing it, it will forever upset the balance in the ocean. These magnificent creatures deserve our respect and our protection.

Thank You,

Gail Ice

Good day, this is in support of the petition circulation about protecting sharks and rays both. In the event you weren't already aware the entire ecosystem depends on each branch for its survival including us; with all the overfishing we are facing a crisis in health our selves what we resort to eating. Please set an example and ban this practice so we can save more than just fish.

Elliot Dinetz, M.D.

Aloha Committee Members,

I would like to ask you to please support SB 2079. This bill is important to extend the protections to all rays and sharks. I, Alan Espiritu, as an avid snorkeler, diver, reef cleanup volunteer and resident on the island of Maui strongly support this important bill. It is horrendous to witness the harassment and killing of these vital ocean creatures. Please pass this bill to prevent future issues like the one witnessed in the recent news. Please protect the sharks and rays for future generations.

Best Regards,

Alan Espiritu

I strongly support this bill. There is no reason to allow people to kill sharks or rays.  
Anita Wintner Maui resident

Dear Chair Dela Cruz,

I am writing again to say that I support SB 2079 to save Hawaii's sharks. As a marine biologist and shark conservationist, Hawaii is one of my top destinations to come to study sharks with my good friends at One Ocean Diving. Not only have sharks been really good for eco tourism purposes, but they're extremely vital to keeping our ocean's healthy. By picking off the sick, weak, and dying individuals, it leaves the healthier ones to reproduce, making other fish/marine animal populations stronger and more fit.

I sincerely hope you take the proper measures to save Hawaii's sharks!  
Mahalo nui loa!

Much aloha,  
Cassie Paumard



**Protect Hawaii's sharks!!!!**  
Kira moore

Please protect sharks and keep them in the ecosystem! They are too important to be left to die.  
Merritt, Patricia C

To Whom it May Concern,

The ocean is kept in a delicate balance by sharks, they are an incredibly important part of any ocean ecosystem. Protecting them is necessary for all life under water to prosper, and all life on land relies on a thriving ocean. Hawaii has the ability to make a positive change in shark conservation and should take it, especially due to it's prime location as a shark hub which allows it greater positive influence on sharks than most other places.

Please consider furthering protections on sharks, for the good of everyone above and below the surface.

Thank you,  
Emily Shell Gamage

To whom it may concern,

I am writing in full support of this bill to ban the killing of innocent sharks and rays.

They are undoubtedly one of the most crucial parts of our marine ecosystem with sharks being at the top of the food chain, any effect to their numbers cascades into a difficult to reverse imbalance in the entire food chain and the overall health of the environment.

They have remarkably slow reproduction rates making it very difficult for them to regain their once numerous and healthy numbers.

These beautiful animals are all at risk and we have a chance to help them and I sincerely hope we can take the opportunity to put an end to the problem at hand whilst we still can.

I thank you kindly for your attention.

Sincerely,  
Veronica Perez

I support SB 2079. Protect Hawaii sharks and Rays  
Madison Tomlinson

To Whom it May Concern;

Please support SB 2079 to insure that all sharks and rays have full protection in Hawaiian waters and prohibits the harassment and abuse of these creatures.

Mahalo Nui Loa,  
Juliet Pearson

Please pass SB 2079 to save our sharks and rays. They are an integral part of our marine ecosystem.

Anna Hall, Keiko Conservation

Aloha Chair Dela Cruz,

My name is Anjolie Morales and I am a resident of the Ka'u district on Hawaii island. I am writing to testify in support of passing Senate Bill 2079 in order to promote protection of the various shark and ray species and the delicate and vital ecosystems present in our state. I urge all representatives to make the right choice on behalf of future generations, so that they too may enjoy the beauty and magic of the Aloha state. Mahalo for considering my testimony.

Best regards,

Anjolie Morales, RN

Hello,

My name is Ella, I am 7 years old and I love the ocean. I also understand how important it is to protect it. Sharks are the apex predator in the ocean. This means that they keep the balance of everything below them in the ocean in check. Without them, sick and dying fish won't be removed from the ecosystem, the coral reefs will die off faster than they already are, and then eventually that will lead to life on land being affected and in the end it will mean life on land can't exist. You may think saving sharks and rays isn't really a big deal, but if you look at the entire picture you will see that it really is a matter of life and death for humankind. If you don't care enough about the sharks and rays to protect and save them just because they are amazing beautiful creatures, I hope you do care enough about humankind and our future here on this planet to make the right choice and save them!

Thank you for your time.

Sincerely,  
Ella Grace  
Ella Saves The Ocean



I am reaching out to communicate my support for "Sb2079 SD1" prohibiting the intentional catching or killing of sharks and rays in Hawaii. This is a small, local step in addressing and affecting a global shark population crisis.

I provided previous testimony, attended the hearing and am watching this bill closely.

Mahalo,  
David Cady  
Ewa Beach

Dear the government of Hawaii,

I would like to testify in strong support of SB2079 SDI as I know that the purposeful killing of sharks and rays is detrimental to humanity and the future of the Earth as well as being a barbaric process exposing living beings to severe cruelty.

The ocean is the most important ecosystem on Earth with over 60% of the oxygen we breathe coming from the sea. Estimates range up to 85%. This oxygen comes from photosynthesis performed by phytoplankton in the sea. Sharks are crucial to sustaining phytoplankton populations because they feed on and control the populations of smaller fish which feed on phytoplankton. Without sharks the populations of these fish would boom and consequently decimate phytoplankton.

Sharks have become a huge source of income in the ecotourism industry as well, with people travelling from all over the world to swim with them. In Hawaii charters which take locals and tourists to swim with and see sharks are flourishing businesses.

Save the sharks, save the world.

Many thanks,

Juliet Pone

Hawaii has been blessed with majestic marine wildlife among many other blessings that you have in you paradise island.

Sadly it seems the government is not taking good care of it and letting recreational fishing of these animals to happen.

Sharks are captured, left for dead, or used as bait by some fishermen. Unfortunately, with no laws in place, these actions cannot be legally pursued nor ceased.

Sharks and rays play a pivotal role in the health of our oceans and in our own survival in this planet.

These animals are already being wiped out in unfathomable numbers in federal waters around the islands and all around the world. It is unnecessary to fish them for recreation in state waters and I really hope that Hawaii becomes the first state to write it into law.

Thank you for your attention, your compassion and YOUR ACTIONS!

Best regards,  
Mariana Rosas

Aloha,

I am writing in support of SB 2079 to protect sharks and rays from catch and killing. The Mano in particular is cherished in my family. With a deep personal connection to the ocean and growing up with stories of my family and my father I was raised and grew to know sharks to be a part of my family. The relationship I have come to know with the ocean and it's ali'i—the mano—is profound and difficult to explain in words. But from my parents I have passed this knowledge and shared that connection with my kids who have gone on to graduate school to pursue further tools to be able to protect the ocean and sharks specifically.

My family has passed down a history of the mano to me and I have grown and flourished this knowledge into a personal bond that I take with me everyday I go on the water. Having a personal protocol and using this to guide me and uplift me leads me through life. I strive to do better and be better everyday when I go out on the water and know that my ancestors carry me. I do everything I can to help protect the ocean and it's creatures especially.

However, I have seen those who have gone out on the water and see malahini who do not know anything of Hawaii other than a paradise to exploit. Fishers, divers, out there to take and take from Hawaii and give nothing back. Killing sharks because it may interfere with their fishing, or trying to catch them for sport, or the hundreds of people who go out every night to try to see a manta and sit on top of a coral reef. Not only is it harmful, inappropriate, and disrespectful but it is dangerous and someone is going to get hurt. More needs to be done and hopefully this can just be a start.

While you make this decision, you do so likely without the knowledge of what it is like to interact with these creatures in nature or without ever looking them in the eye. So I ask you, take it from someone who has and who knows this feeling, heed my mana'o and support SB 2079.

Mike Nakachi  
Moana Ohana  
[mikenakachi@hawaii.rr.com](mailto:mikenakachi@hawaii.rr.com)  
cell 808-640-3871

Chair Dela Cruz,

I am writing on behalf of the shark-ray protection with the Ways and Means Committee. Hawaii needs to protect these animals - they are a huge part of the tourism in Hawaii which in turn benefits the people of Hawaii. Since they are a huge part of the ecosystem, killing these animals will end up damaging the local people in the area. It might not be a direct impact, but please listen to what the scientists have to say today.

Camille

Attn: Chair Dela Cruz

Aloha,

I support SB2079 which helps protect elasmobranchs in Hawai'ian waters.

Please hear us out when we present how vital these apex predators are to the ocean!

Sharks and rays are extremely important in maintaining healthy marine ecosystems. They are at the top of the food web and many sharks act as the white blood cells of the ocean. They pick off sick, diseased or injured prey and help keep the ocean clean that way. If shark populations CONTINUE to drastically dwindle, more diseased or sick animals will ensue.

Next, many fish or turtle populations will increase if they are not maintained by shark predation. Then, this impacts the NEXT trophic level, where fish or turtles will eat more algae beds, jellyfish, smaller fish, polyps, etc. So, less sharks, more fish or turtles, even LESS algae or reef populations. With decreasing shark populations comes a great impact.

Also, if more disease spreads through prey species typically eaten by sharks, that actually puts US at risk. We eat fish. We love seafood. Hawai'i is KNOWN for delicious & fresh fish. However, what would happen if illness spread across that trophic level, and we didn't even know it until it was too late? Whatever the fish has, we'd be exposed to. OR, even MORE fish would die from disease, so we'd suffer the consequences. Sharks help US this way. We need a healthy, sustainable ecosystem even for our economy and food industry. That's a HUGE part of the Hawaiian Islands and by protecting sharks, we can actually help protect ourselves!!!

We should be doing anything we can to help take care of this planet. PLEASE listen to Ocean Ramsey and Juan Oliphant along with the rest of SB2079 supporters. Many have plentiful experience with sharks & rays, and we all know the damage it can do if the populations diminish.

After all, it's their ocean, not ours.

If anyone is spiritual or religious, it says in Genesis 1:28 that God gave us responsibility to take care of this Earth. He gave us this responsibility because we are conscious creatures. We have the capability for compassion & understanding unlike most animals here. So, it IS our responsibility to take care of this planet, its inhabitants, and ourselves.

Genesis 1:28

28 And God blessed them. And God said to them, "Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth."

Best regards,

Mahalo for your time and consideration,

Dani Guerin

[dguerin@my.hpu.edu](mailto:dguerin@my.hpu.edu)

(815) 353-5825

I strongly support SB 2079. Sharks and rays are a vital component of healthy marine ecosystems that have experienced rapid declines throughout the last decades. As apex predators, sharks are at the top of the food chain, therefore maintaining balance of the ecosystem by regulating abundance of marine life in lower trophic levels and acting as the immune system of our oceans by picking off the weak, sick and overpopulated, keeping fish stocks healthy. Help save our oceans! Protect them!

Kendra Nelson

2-28-18 Support for SB2079  
STEPHANIE MCLAUGHLIN

Please help protect our sharks and rays. They don't have a voice and we need to be their voice!!  
Leslie Glazer

Sharks and rays are a vital and beautiful part of the oceans ecosystem. The purposeful killing of sharks and rays needs to be stopped in order for our oceans to function properly. Being from Australia and growing up with these amazing creatures has taught me so much and was actually the main reason i booked a trip to hawaii- in order to see them in their natural habitat. The killing needs to stop.  
Kaelani Brown

Aloha!  
I strongly support SB 2079. Sharks & rays are a vital component of healthy marine ecosystems that have experienced rapid declines throughout the last decades. As apex predators, sharks are at the top of the oceanic food chain, therefore maintaining balance of the ecosystem by regulating the abundance of marine life in lower trophic levels & acting as the immune system for our oceans, by picking off the weak, sick & overpopulated.. keeping fish stocks healthy!  
Mahalo!

Respectfully,

KyMBERly Keil  
1237 Pikake St.  
Wahiawa, HI.96786  
303-715-8665



Aloha,

I came to Hawaii because I was enamored by the culture, the spirit of aloha, and the reverence for nature that awakens in the eyes of every soul who looks upon this paradise. And of course I came for the sharks; to commune with them and to protect them.

However, in my almost seven years in Hawaii, the number of times I have swam with sharks is still in the single digits. And I have only witnessed two species in the wild, the white tip reef shark and the sandbar shark, unless out with One Ocean Diving at their natural aggregate site on the North Shore of Oahu.

In my almost seven years in Hawaii, I have never found a shark tooth; and I have been taught that being able to find shark teeth along the shore is one way to tell if an area has a thriving shark population. Sharks constantly lose and replace teeth so the logic makes sense. Yet here, not a one.

However I do see social media videos of catching and releasing sharks in Hawaiian waters, claiming no harm no foul as the animal wasn't actually killed. But these animals have a low incidence of surviving catch and release encounters due to the high stress the event causes, the physical exhaustion from the fight, and the weight of our atmosphere crushing their internal organs when forced out of the water. I do see gill nets legally left unattended for up to two hours at a time with a four hour allowed maximum that have snared, suffocated, and killed countless marine animals including baby reef sharks.

Yet none of these folks are breaking the law; the problem is not with them. The problem is with the legislation. So let's change that legislation, let's protect our sharks, our ocean's balance keepers. our amakua. Let's make a difference at the top, where it all starts. Let's begin today and let's begin with this bill. SB 2079.

Mahalo for your time and kokua.

Aloha,

Carrie Trujillo

Owner, Maui Island Mermaids

Lead Ambassador, One Ocean Global Team Maui

808-250-2998

[info@mauiislandmermaids.com](mailto:info@mauiislandmermaids.com)

[www.mauiislandmermaids.com](http://www.mauiislandmermaids.com)

Dear Chair Dela Cruz,

Hello, my name is Zoë Williams and I am an 8 year old shark and ocean conservationist. Some day I will make sure that all sharks & rays are safe. Thank you for letting SB 2079 happen, it is important to help the sharks & rays. Now more than ever we need to help save the sharks & rays. Without them our oceans will become gross because sharks & rays keep the oceans clean. Without them the smaller fish will be at the top of the food chain, the coral will die, the plants will die and all our oceans will be dying.

We have to speak up for these amazing and important animals. We and the sharks will stand together.

Thank you for your important decision. We all hope this law will be passed.

Love,

Zoë "SHARK" Williams

Sharks Are Our Friends

Talent, OR

Zoë's mom:

Kristan Kelly Williams  
541-326-9755

**Support Bill SB 2079 Protect Hawaii's Sharks**

I am writing today representing both of my organizations, The Plastics Project and Hashtag Speak Up Movement, as a One Ocean Ambassador, and most importantly, as a voice for future generations, including my own. The decisions that you make in this hearing regarding the

protection of sharks is just as important as the other bills I fought for last week to help our oceans.

Humans need the ocean to survive. Our lives literally depend on it! Between pollution and humans killing off sharks, their populations are declining and this scares me. It should scare all of us!

In school we learn about photosynthesis as the way that humans get the air we breathe. What I didn't learn until I started doing ocean conservation is that most of the air that we breathe actually comes from the ocean. In fact, around 85% of the air we breathe is from the ocean so I don't understand why ocean conservation isn't more important to everyone.

Losing the apex predator of our seas will cause a domino effect and it won't be good.

Certain sea animals can grow uncontrollably and many fishes and other animals will go extinct  
Mid-level predators will increase and eat most of our algae eaters

Our seas will be overrun with algae and the gross stuff that comes with algae making the water slimy

Sunlight will have a harder time penetrating the water

The overgrowth of algae would also suck the oxygen out of the water and marine life will suffocate to death

Algae can produce toxins that are harmful, even for people, and toxins will lead to mass die offs in the ocean

Coral reefs will start to die and many will go extinct

Without sharks to eat the ill or the weak, diseases will spread among fishes and animals and this could also cause mass die offs

Without sharks controlling other predators, their prey will be overeaten and will cause other species to disappear

The ocean regulates the carbon cycle of the planet because carbon is stored in marine plants.

Without sharks, the animals and fish that eat marine plants would not have a predator and they will grow out of control. They will eat all the marine plants and our carbon levels will go up.

This will speed up global warming and climate change.

So you see, every thing has a role in the ecosystem of the ocean and sharks are one of the most important things keeping that ecosystem functioning. We need to protect sharks! If you enjoy breathing and you want your kids and your kid's kids and generations after that to have air to breathe, we need you to PLEASE protect our oceans. Please pass this bill.

Thank you!

Rylee Brooke Kamahele