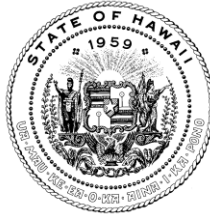


DAVID Y. IGE  
GOVERNOR OF HAWAII



**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  
JUDICIARY**

**Thursday, February 27, 2020  
10:30 AM  
State Capitol, Conference Room 016**

**In consideration of  
SENATE BILL 2717, SENATE DRAFT 1  
RELATING TO SHARK PROTECTION**

Senate Bill 2717, Senate Draft 1 proposes to establish an offense of knowingly capturing, possessing, abusing, entangling, or killing a shark in state marine waters, along with penalties and fines; and provides certain exemptions. **The Department of Land and Natural Resources (Department) supports this measure.**

The Department recognizes the important role sharks 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.

Thank you for the opportunity to comment on this measure.

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

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
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



**THE HUMANE SOCIETY  
OF THE UNITED STATES**



**HUMANE SOCIETY  
INTERNATIONAL**

**TO: Honorable Chair Karl Rhoads & Members of the Committee on Judiciary**

**February 26, 2020**

**FROM: Heather Carpenter, Western Regional Director, The Humane Society of the United States, [hcarpenter@humanesociety.org](mailto:hcarpenter@humanesociety.org), Phone number: 702.929.2999**

**RE: SUPPORT FOR SB 2717 SD1; Relating to Shark Protection**

On behalf of The Humane Society of the United States, Humane Society International and our members and supporters across Hawaii, we urge your support of SB 2717 SD1, which would impose penalties for anyone who knowingly captures, takes or kills sharks in state waters except for a few specific exemptions, such as research purposes, under DLNR issued Special Activity Permits, exercising native Hawaiian gathering rights and cultural practices and at the discretion of DLNR for specific, emergency public safety reasons.

**Why sharks need protection:**

- Hawaii is one of the first states to prohibit shark finning. In 2010, Hawaii became the first state to enact a ban on the sale of shark-fins or fin products. To this date, 14 states have adopted similar measures following Hawaii's footstep. SB 2717 SD1 would further complement existing law, which has now become a global initiative, and further maintain Hawaii's global conservation leadership 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, abuse or killing of sharks in state waters.
- The number of shark and ray landings globally increased by 227% from 1950 to 2003.<sup>1</sup> However, actual number of animals killed is much larger since these data represent when animals are caught and brought to shore (landed) and do not account for illegal catches or discards.
- One quarter of shark and ray species are threatened with extinction due to overfishing and other fishing threats.<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

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

<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>

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 2717 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 sharks, 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 ecosystem. Research has found that massive removal of sharks has a cascading effect throughout the ecosystems that they inhabit.
- Sharks share life history traits that make them particularly vulnerable to overexploitation and population collapse.<sup>7</sup> These include slow growth; low fecundity; few, well-formed young; long gestation period; and delayed age at first reproduction that together are known in the ecological literature as a “K-selected life history”.<sup>8</sup>

**Thank you for the opportunity to testify on this important marine conservation issue. We urge swift passage of SB 2717 SD1.**

Below is a list of species of sharks that may be found in Hawaii waters.

**Hawaii Shark 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

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

<sup>8</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 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 Psedocarchariidae**

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



February 25, 2020

To: The Honorable Karl Rhoads, Chair,  
The Honorable Jarrett Keolokalole, Vice Chair, and Members of the  
Senate Committee on Judiciary

Re: **SB 2717, SD1– relating to sharks**

Hearing: Thursday, February 27, 2020, 10:30 a.m. Room 016

Position: **Strong Support**

Aloha, Chair Rhoad, Vice Chair Keolokalole, and Members of the Committee,

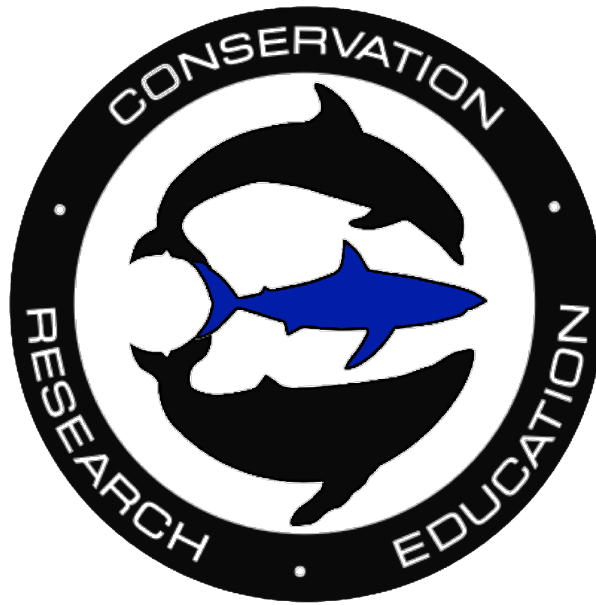
The HAWAI'I REEF AND OCEAN COALITION – HIROC – was formed in 2017 by coral reef scientists, educators, local Hawaii environmental organizations, elected officials, and others to address a crisis facing Hawaii's coral reefs and ocean – namely, the pollution of our near-shore environment by sunscreens that are literally killing our marine life. We are currently asking the Legislature to pass a handful of very important bills to save our coral reefs – they are bills relating to sunscreens, plus bills on cesspools, plastic marine debris, the climate crisis and sea-level rise, and fishing of species important for reef and ocean health.

Coral reefs, seabirds, turtles and many other marine species are in crisis! They are suffering damage from marine debris, including plastics and the microplastics that result when plastics break down. Corals and many marine species also face assaults from rising ocean temperatures, increasingly acidic oceans, sewage and polluted runoff, sunscreens and depleted fish stocks. Coral bleaching and death are widespread. This is an existential problem for our State because reefs are critical in protecting Hawai'i beaches and shorelines.

This bill would establish an offense of knowingly capturing, possessing, abusing, entangling, or knowingly harassing or taking sharks, or killing a shark in state marine waters, along with penalties and fines, except within reasonable exemptions. Sharks are apex predators in the natural ecosystem. Sharks are critical to a healthy marine ecosystem because, as predators, they help to regulate marine life and ensure healthy fish stocks. Sharks help maintain the balance that makes reefs stronger and better able to withstand the multiple stressors that reefs now face.

Please pass this bill to help maintain healthy reefs and marine ecosystems. Thank you for considering this testimony. Thank you for the opportunity to testify.

Alan B. Burdick, for HIROC  
[Burdick808@gmail.com](mailto:Burdick808@gmail.com) 486-1018



## One Ocean Conservation #SaveTheOcean

Aloha honorable chair and senators of the committee,  
We appreciate and value your time and consideration in the effort to solidify more protection for manō.

Our organization is based around conservation efforts for manō and other marine life. We employ over twenty Kama'aina and work with countless local volunteers for our reef and beach clean up programs and free educational outreach programs and research intern programs for non-invasive studies.

Manō are culturally important to us as well as ecologically valuable to local marine ecosystems and economically valuable to the state of Hawaii and residents. We ask that you adopt the following amendments or similar language to assure that sharks and kama'aina are protected and considered in this bill:

Please consider defining abuse as “Intentionally touching or chasing unless for life-saving or disentanglement. ”

If its not too much trouble for DLNR it would be nice for the public to know how many sharks are accidentally caught or killed in state waters so they can monitor human impact for future conservation considerations. Perhaps the legislation could suggest a record be kept and accidental take (killing) of sharks be required to be reported for a public record.

Lastly, we ask that SB2717 acknowledges the economic value of sustainable ecotourism (which brings multiple millions of dollars into the state's economy and employs hundreds of kama'aina in a non-harmful and sustainable industry that makes Hawaii a unique destination of choice) and adopt language that states it is not the bill's intent to negatively impact responsible shark and dive ecotourism that supports conservation efforts and educational safety programs for the community.

Mahalo nui loa,

One Ocean Organization





**SB2717 SD1**  
**RELATING TO SHARK PROTECTION**  
**Ke Kōmike ‘Aha Kenekoa o ka Ho‘okolokolo**

Pepeluali 27, 2020

10:30 a.m.

Lumi 016

The Office of Hawaiian Affairs (OHA) **SUPPORTS** SB2717 SD1, which would prohibit the killing, capturing, or otherwise harming of any shark in state waters.

**OHA supports strong protections for culturally important species that also serve critical ecological functions.** As this bill recognizes, Hawai‘i’s shark species may hold special cultural significance for Native Hawaiians. For example, sharks are recognized as kinolau for Kū and Kanaloa, and certain individuals and species can be regarded as ‘aumakua by some families. Sharks are also featured in mo‘olelo, ‘ōlelo no‘eau, and other cultural narratives that inform the Hawaiian understanding of the world and our natural environment. OHA also understands that the ecological services provided by apex predators such as sharks promote a healthy ocean environment, which is necessary for the continuation of Native Hawaiian cultural and subsistence practices. **Accordingly, OHA appreciates the proposed enhanced protections for sharks in state waters.**

OHA notes that sharks are also used for traditional and customary practices, including in the crafting of implements, weapons and ceremonial objects; OHA accordingly further appreciates the proposed statutory language explicitly allowing for the continuation of such cultural practices.

Accordingly, OHA urges the Committee to **PASS** SB2717 SD1. Mahalo nui for the opportunity to testify on this measure.

**SB-2717-SD-1**

Submitted on: 2/24/2020 7:12:09 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Benton Kealii Pang, Ph.D.	Individual	Support	No

Comments:

**SB-2717-SD-1**

Submitted on: 2/24/2020 10:15:19 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Climate Protector	Testifying for Climate Protectors Coalition	Support	No

Comments:

**SB-2717-SD-1**

Submitted on: 2/25/2020 8:02:52 AM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Mike Nakachi	Testifying for Moana Ohana	Support	No

Comments:

Aloha mai kakou,

I Mike Nakachi, long supporter of Mano protection thrououghout the Hawaii Pae Aina, Mano need protection, Mano need to recognized as a intergral part of our Hawaiian Culture. Long have Mano been unrecognized, forgotten, killed by state intituted culls, AOLE' NO more! We the Kanaka and members of Moana Ohana, say let them live, let them thrive, let Mano be the Chief and chiefesses of the sea as they have always been to us. We as man have done enough damage. To Western Science, you came far after Kanaka and have benefited enough, the days of unsupervised reign on hawaiian Waters, you need to be help accountable for you actions and this bill is a step in the right direction. We all can work together on this. This is my duty in life, this is my Ohana and this is who I am. I am Kahu Mano and we will NOT stop until all Mano are recognized! Please recognize all this is Hawaii, not Florida, not California, we as indigenous people were at symbience with Mano. With the foundation of who I am. I come with Aloha for you all, with aloha for place, with Aloha for Mano. Malama Aina for Mano is first and foremost, time for Mano to become Momona is NOW! Please all unanimously support this bill moving forward. A hui hou, mlke

**SB-2717-SD-1**

Submitted on: 2/25/2020 8:40:24 AM

Testimony for JDC on 2/27/2020 10:30:00 AM

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

Comments:



Aloha Chair and Members of the Committee,

Thank you for taking the time to read and consider testimony for this bill.

I am in support of SB2717 for the protection of sharks in Hawaiian waters, but only if the following amendments below be made:

I suggest for the amendment language to clarify & define “abuse” as intentionally touching or chasing sharks within state waters, with the exception of safety for life-saving situations or to save a shark from entanglement. If a distance limit must be set, we suggest something similar to DAR’s 10ft recommendation for turtles applied for sharks—although these are very different animals—but this is a realistic and safe practice distance.

I would also like to make the suggestion that the accidental take (kill) of a shark be reported to DLNR, as well as the taking (capture and possession) of a shark require a permit for any circumstance.

Lastly, I ask that SB2717 acknowledges the economic value of sustainable ecotourism (which brings multiple millions of dollars into the state’s economy and employs hundreds of kama’aina in a non-harmful and sustainable industry that makes Hawaii a unique destination of choice) and adopt language that states it is not the bill’s intent to negatively impact responsible shark or dive ecotourism and subsequent non-invasive research and conservation efforts.

Mahalo nui loa for helping save sharks in Hawaiian waters, as they are essential animals to the ocean.

**SB-2717-SD-1**

Submitted on: 2/25/2020 12:50:28 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kayleigh Nicole Burns	Individual	Support	Yes

Comments:

Aloha & good morning.

Thank you for reading my testimony regarding Senate Bill 2717.

I am in support of this bill, however only if the amendments below are made:

- 1.the language of the bill clarify the term “abuse” as “intentionally touching or chasing sharks within state waters unless defending a life or assisting an entangled shark.” If a distance of approach is to be defined, we support NOAA/DAR’s recommendation for 3 meters/10ft, like with sea turtles, because that would be readily enforceable, easy to avoid for any diver or snorkeler, and would be safer.
2. the accidental killing of a shark be reported to DLNR
3. the purposeful capture and possession of a shark require a permit for any circumstance
4. the bill acknowledge ecotourism’s economic value here in Hawaii and add language that states the bill’s intent is also not to negatively impact responsible shark or dive ecotourism that supports non-invasive research, public educational and safety programs, and conservation.

Mahalo nui loa for your time and consideration.

Kayleigh Burns



February 27, 2020, 1030am

TO: Honorable Chair Rhoads and Senate Judiciary Committee

SUBMITTED BY: Inga Gibson, Policy Consultant, For the Fishes PonoAdvocacy@gmail.com, 808.922.9910

**RE: STRONG SUPPORT for SB2717; Relating to Shark Protection**

For the Fishes respectfully urges your support of SB2717 which would prohibit the intentional/known capture or killing of sharks 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 any specific, emergency purposes. *We thank the AEN Committee for their earlier amendments on this measure, thus, NO additional amendments are needed at this time.*

The bill does NOT apply to those who, in the lawful course of fishing, may accidentally capture and subsequently release a shark. 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 our 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 intentional capture or killing of sharks. Most notably, there have been a number of cases in recent years where sharks appear to have been intentionally entangled, injured and harmed and current law does not provide for adequate enforcement or prosecution of such cases. 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 human interactions and pollution. Further, sharks are apex predators; when they are removed our entire marine ecosystem is negatively impacted.

Fortunately, there is no longer any directed shark fisheries (for their meat/fillets) and sharks are not a staple human food source as other fish species are. DLNR notes that it is difficult to distinguish between certain species of shark thus this measure applies to all shark species.

Thank you for your support of SB2717.



**SB-2717-SD-1**

Submitted on: 2/25/2020 4:34:30 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

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

Comments:

I support this bill

**SB-2717-SD-1**

Submitted on: 2/25/2020 4:47:10 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Taylor Cunningham	Individual	Support	No

Comments:

Aloha Chair and Members of the Committee,

Thank you for taking the time to read over my testimony for this bill.

I am in support of SB2717 for the protection of sharks in Hawaiian waters, but only if the following amendments below be made:

I suggest for the amendment language to clarify & define “abuse” as intentionally touching or chasing sharks within state waters, with the exception of safety for life-saving situations or to save a shark from entanglement. If a distance limit must be set, we suggest something similar to DAR’s 10ft recommendation for turtles applied for sharks—although these are very different animals—but this is a realistic and safe practice distance.

I would also like to make the suggestion that the accidental take (kill) of a shark be reported to DLNR, as well as the taking (capture and possession) of a shark require a permit for any circumstance.

Lastly, I ask that SB2717 acknowledges the economic value of sustainable ecotourism (which brings multiple millions of dollars into the state’s economy and employs hundreds of kama’aina in a non-harmful and sustainable industry that makes Hawaii a unique destination of choice) and adopt language that states it is not the bill’s intent to negatively impact responsible shark or dive ecotourism.

Mahalo nui loa for helping save sharks in Hawaiian waters, as they are essential animals to the ocean.

**SB-2717-SD-1**

Submitted on: 2/25/2020 8:35:12 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kaikea Nakachi	Individual	Support	No

## Comments:

This bill will be a long overdue restoration of protection to a culturally and ecologically important species. Past shark culling efforts combined with heavy fishing pressure have reduced overall apex-predator biomass in the Main Hawaiian Islands (MHI) relative to that in the protected Northwestern Hawaiian Islands (NWHI; Friedlander and Demartini 2002). The impact of the loss of apex predators from the nearshore habitats in the MHI can cascade through the ecosystem and lead to detrimental changes in fish assemblage structure, nutrient dynamics, and coral reef resilience (Sandin et al. 2008; Barley et al. 2017). Ensuring healthy populations of apex predators is important to maintain the ecological integrity of nearshore habitats in the MHI, particularly following human-induced trophic shifts of fish assemblages and the recent unprecedented bleaching of coral in Hawai'i (Friedlander and Demartini 2002; Couch et al. 2017). Furthermore, sharks have tremendous value in traditional Hawaiian cultural practices. Sharks were among the most universally worshipped organisms as '*aumakua*, or ancestral family deities (Emerson 1892), and Tiger Sharks were likely one of the more prevalent species of potential '*aumakua* sharks (Beckwith 1917). The cultural importance of sharks to Native Hawaiians is highlighted by the existence of *kahu manā*, or shark keepers, who were responsible for the care of patron sharks and in turn were granted protection and fruitful fishing by them. The *kahu manā* ensured that the names, roles, stories, territories, and physical appearances of these patron sharks were well known to Hawaiian people (Emerson 1892; Beckwith 1917). We cannot allow further desecration of such an important species in Hawaiian waters.

## Literature Cited

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**SB-2717-SD-1**

Submitted on: 2/25/2020 10:15:32 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Juan Oliphant	Individual	Support	No

Comments:

Aloha,

I am in support of this bill, but I would like to request amendments below are made:

I suggest for the amendment language to clarify & define “abuse” as: intentionally touching or chasing sharks within state waters, except for safety or life-saving considerations. If a distance of approach is to be defined, I suggest Noaa/DAR’s recommendation for 10ft for turtles, although these are very different animals, this is a realistic and safe practice distance

I would also like to suggest that the accidental take (kill) of a shark be reported to DLNR, as well as the taking (capture and possession) of a shark require a permit for any circumstance.

I would also like to suggest the bill acknowledge the economic value of sustainable ecotourism (brings multiple millions of dollars into the state’s economy and employs hundreds of kama’aina in a non-harmful industry) and adopt language that states it is not the bill's intent is not to negatively impact shark ecotourism that supports non invasive research and public educational and safety programs.

Thank you for taking the time to help save sharks and our ocean ecosystem.

Mahalo nui loa

Juan

**SB-2717-SD-1**

Submitted on: 2/25/2020 11:35:59 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Andriana Fragola	Individual	Support	No

Comments:

Aloha Chair and Members of the Committee,

Thank you for taking the time to read over my testimony for this bill.

I am in support of SB2717 for the protection of sharks in Hawaiian waters, but only if the following amendments below be made:

I suggest for the amendment language to clarify & define “abuse” as intentionally touching or chasing sharks within state waters, with the exception of safety for life-saving situations or to save a shark from entanglement. If a distance limit must be set, we suggest something similar to DAR’s 10ft recommendation for turtles applied for sharks—although these are very different animals—but this is a realistic and safe practice distance.

I would also like to make the suggestion that the accidental take (kill) of a shark be reported to DLNR, as well as the taking (capture and possession) of a shark require a permit for any circumstance.

Lastly, I ask that SB2717 acknowledges the economic value of sustainable ecotourism (which brings multiple millions of dollars into the state’s economy and employs hundreds of kama’aina in a non-harmful and sustainable industry that makes Hawaii a unique destination of choice) and adopt language that states it is not the bill’s intent to negatively impact responsible shark or dive ecotourism.

Mahalo nui loa for helping save sharks in Hawaiian waters, as they are essential animals to the ocean.

**SB-2717-SD-1**

Submitted on: 2/26/2020 12:27:29 AM

Testimony for JDC on 2/27/2020 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Gerard Silva	Individual	Oppose	No

Comments:

My Name is Kim Holland. I am the founder of the Shark Research Group at the Hawaii Institute of Marine Biology. I am presenting this testimony as a private individual.

Like many other professional marine biologists working in the area of shark research, I feel that this bill is unnecessary and unenforceable. Sharks populations in Hawaii state waters are NOT under threat from people "knowingly fishing" for sharks. On the other hand, scientific research into shark biology has made significant and demonstrable contributions to the conservation and protection of sharks in Hawaii and this essential research could be negatively impacted by this legislation.

Shark research conducted by universities already requires a rigorous screening process to obtain permits such as those issued by an Institutional Animal Care and Use Committee (IACUC). These committees are comprised of veterinarians, scientists and non-scientists who evaluate the value of the research and the way in which it conducted. I feel that an IACUC permit should be a legitimate exemption from the regulations in the proposed legislation.

Scientific research requires a predictable and objective permitting process in which to operate and I recognize that changes have been made to the language of proposed legislation in an attempt to facilitate research. However, the current language requires that permits be "reviewed by the institution's designated native Hawaiian cultural practitioners". This introduces a level of uncertainty and subjectivity to the that runs counter to other language in the bill that promotes objectivity and predictability. Not only do we not know the qualifications that would allow these cultural practitioners to evaluate scientific research but these individuals could change from year to year and bring a continuously changing perspective. Further, other research groups working in Hawaii (such as mainland universities) will not have designated native Hawaiian cultural practitioners.

For these reasons (among others) I respectfully suggest that this cultural review process be removed from the language of the proposed legislation and thereby promote a climate in which legitimate and essential shark research can continue be conducted.



**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 12:15:42 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
David Itano	Individual	Oppose	No

Comments:

SB2717 if passed into law would severely hamper legitimate research on sharks that is needed for the conservation and protection of these very same species. The legislation is poorly written and not well thought out and does not consider that fact that university researchers already have stringent oversight in their activities through an animal protocol board and permitting system. The 150 foot approach ban is also unreasonable. I strongly oppose this bill.

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 1:20:54 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kevin Weng	Individual	Comments	No

Comments:

Aloha Legislators:

I'm writing with regards to SB2717 relating to shark protection. My name is Kevin Weng, I am an associate professor at the College of William & Mary, Virginia Institute of Marine Science, and an affiliate faculty member at UH Manoa. I have conducted research in Hawaii for two decades, including research on sharks.

In reading the testimony submitted to HB2414, the House version of this bill, it is notable that all testimony, both for and against the bill, endorses the protection of the marine environment and the animals within it, in this case, sharks. There is no disagreement among testifiers about the need to protect sharks; there are only disagreements about the language of the bill.

In order to develop the most effective management and conservation policies, we must have the best available science, so it is imperative that any bill passed by the Legislature maintains a predictable and stable environment for scientific research. The part of the bill providing research exemptions ( line (e) (1) ) should ensure that researchers are not subjected to variable and onerous bureaucracy or permitting requirements. University researchers are required to undertake exhaustive reviews of their research plans before being permitted to work on animals, by Institutional Animal Care and Use Committees. The bill should also avoid curtailing the international stature of research in Hawaii by placing barriers to the participation of international or mainland universities. Hawaii is a powerhouse of ocean science with many and varied collaborations, and many mainland and international researchers visit Hawaii to conduct research.

Respectfully,

Kevin Weng, PhD

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 2:15:37 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

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

Comments:

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 2:31:42 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Derek Kraft	Individual	Comments	No

Comments:

Aloha Legislators:

I'm writing with regards to SB2717 relating to shark protection. My name is Derek Kraft, I am a PhD Candidate at the University of Hawai'i focused on conservation of sharks in our waters and around the globe.

In reading the testimony submitted to HB2414, the House version of this bill, it is notable that all testimony, both for and against the bill, endorses the protection of the marine environment and the animals within it, in this case, sharks. There is no disagreement among testifiers about the need to protect sharks; there are only disagreements about the language of the bill.

In order to develop the most effective management and conservation policies, we must have the best available science, so it is imperative that any bill passed by the Legislature maintains a predictable and stable environment for scientific research. The part of the bill providing research exemptions ( line (e) (1) ) should ensure that researchers are not subjected to variable and onerous bureaucracy or permitting requirements. University researchers are required to undertake exhaustive reviews of their research plans before being permitted to work on animals, by Institutional Animal Care and Use Committees. The bill should also avoid curtailing the international stature of research in Hawaii by placing barriers to the participation of international or mainland universities. Hawaii is a powerhouse of ocean science with many and varied collaborations, and many mainland and international researchers visit Hawaii to conduct research.

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 2:36:31 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Danielle Bartz	Individual	Oppose	No

**Comments:**

I strongly oppose SB2717 SD1 on the basis that scientific researchers already undergo stringent institutional permitting requirements to conduct research involving the capture and release of sharks. Scientists already take various precautionary measures to ensure the well-being of all sharks hooked and handled, spend their entire careers working to perfect their methodology, and strive to make the process as minimally stressful as possible for the animal. The additional permits regarding a Hawaiian cultural review sound good in theory but would be very difficult to implement in practice due to the ambiguous criteria and the difficulty for universities (especially affiliates outside of Hawai'i) to supply a certified Hawaiian cultural practitioner. I see many flaws in the language of this bill and although I see the intentions of protecting sharks, I believe the best way to go about the protection of these apex predators is to allow qualified expert scientists to conduct research to better understand their life histories, home ranges, population dynamics, etc. Considering this type of research often utilizes techniques such as implanting acoustic transmitters in the animals through very minimally invasive small surgical procedures, therefore additional laws to make it more difficult for scientists to obtain permits to do this would only hinder the advancement of the scientific community's efforts in preserving these species.

**SB-2717-SD-1**

Submitted on: 2/26/2020 2:37:58 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

**LATE**

Submitted By	Organization	Testifier Position	Present at Hearing
Carl Meyer	Individual	Comments	No

Comments:

Aloha JDC committee members,

My name is Carl Meyer. I have studied sharks in Hawaii and elsewhere around the globe for almost 30 years and published numerous scientific papers based on these studies that focus on the effective conservation and management of sharks.

I entirely agree that it is important to protect and conserve sharks but the current version of the bill contains language that has the potential to obstruct and undermine empirical research crucial to understanding the health of shark populations in Hawaii.

SB 2717 SD1 contains the following clause:

“....Special activity permits allowed under section 187A-6 or research permits authorized by law; provided that the research conducted is overseen by an institutional animal care and use committee and has been reviewed by the academic institution's designated native Hawaiian cultural practitioners”

This requires researchers to obtain a Special Activity Permit before engaging in scientific research on sharks in Hawaii state waters. **There is no evidence whatsoever to suggest that scientific research threatens the health of Hawaii shark populations and therefore no *a priori* reason to hamper bona fide research or education by adding additional layers of unnecessary bureaucracy.**

Shark researchers operating under the auspices of nationally qualified educational institutions are already subject to professional oversight via federally-mandated Institutional Animal Care and Use Committees (IACUCs). In order to qualify for an IACUC permit, researchers must clearly justify the use of sharks in their studies, justify the species and numbers used and ensure ethical practices are followed.

Further, the acquisition of a Special Activity Permit under SB2717 would be contingent on review of research by a designated native Hawaiian cultural practitioner. This requirement is not applied to scientists studying other marine animals in Hawaii and would also place bona fide researchers and educators from elsewhere in the nation at a significant disadvantage because their institutions are unlikely to have any native

Hawaiian cultural practitioners and thus they would struggle to fulfill this requirement when seeking a permit to conduct shark research in Hawaii.

The metrics by which the Special Activity Permit applications would be evaluated remain entirely undefined and thus there is no guarantee of fairness or transparency in the process. The permitting process would be inherently vulnerable to ideological bias unrelated to the actual status of shark populations in our waters.

The house version of this bill (HB2414) **exempted nationally qualified educational institutions from the requirement to obtain a special activity permit to conduct scientific and educational research activities on sharks.**

I urge you to similarly amend SB2717 by replacing the current requirement for Special Activity Permits with language included in HB2414:

*“(5) Expanding the exemptions from the prohibition and fines and penalties proposed to:*

*(A) Research conducted by nationally qualified educational institutions;*

*(B) Sharks currently held in captivity;*

*(6) Exempting nationally qualified educational institutions from the requirement to obtain a special activity permit to conduct scientific and educational research activities on sharks;”*

Including this language in the bill will protect bona fide shark research that is vital for effective shark conservation and management in Hawaii.

Thank you,

Carl Meyer

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 2:40:47 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Damien Kenison	Individual	Support	No

Comments:

Testimony in support of Senate Bill 2717

Aloha, my name is Damien Kenison, my wife Glendora and I live in Ho'okena, South Kona on Hawaii Island. Our families, the Alani and Kaleohano Ohana are opelu fishermen. Our belief that the mano (tiger shark) is our revered aumakua (departed ancestor) is a concept that most non-Hawaiians cannot understand.

A kupuna, Aunty Annie Crisafi once told me a story about a time where she was harvesting opihi on the shoreline as her husband, Uncle Roland, sat in the canoe waiting for her. A mano, larger than the canoe swam between the canoe and Aunty Annie on the shoreline. Uncle Roland yelled at her to watch out for the shark. Aunty Annie laughed, jumped in the water swam past the shark and told Uncle Roland that she was not afraid because that was her aumakua.

We respect the mano and do not hana inu (bother) them. While fishing for opelu I have seen large sharks nearby but they did not interfere with our harvesting. We respect the mano and believe that they have a role in the way opelu congregate at our ko'a.

This bill is intended to be an educational tool that will enlighten those who are ignorant of our beliefs, and will pass it on to future generations. Speaking on behalf of our ohana, I humbly ask you to support Senate Bill 2717.



**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 3:20:18 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Mark Royer	Individual	Oppose	No

Comments:

Aloha JUD committee members,

My name is Mark Royer. I am a PHD candidate at the University of Hawai'i at Mānoa and have studied sharks in Hawaii and on the mainland for over 11 years and published numerous scientific papers based on these studies. The objective information from these studies is used for the conservation and management of these species. The majority of the species of sharks and rays that occur in Hawai'i are found around the world. Many of the regional populations of these species outside Hawai'i have faced drastic declines to the point of collapse. Past and on-going research in Hawai'i has been applied to inform effective conservation and management strategies of these species, both within Hawai'i and abroad. For example, studies on the life history and ecology of scalloped hammerhead sharks in Kāne'ohe Bay were cited in the proposal and determination to list scalloped hammerhead sharks under the US Endangered Species Act. Crucial information on the life history, behavior, ecology, and physiology of various species are needed to create effective species management plans, and scientific studies conducted in Hawai'i are critical to management of shark and ray species. Such nuanced information is also needed to predict how a changing ocean will affect these species and marine ecosystems as a whole.

While the intentions of this bill are good, with the purpose of seemingly providing protections to these species in Hawai'i, **the bill in its current form is in need of specific changes**. Particularly, the exemption statement on line (e(1)) should not subject researchers from institutions to additional ambiguous and onerous bureaucracy. University researchers are required to undertake exhaustive reviews of their research plans before being permitted to work on animals, by Institutional Animal Care and Use Committees (IACUCs). University shark researchers already have oversight of their activities via an IACUC. If this bill in its current form is passed, permits could be denied and research could shut down based on someone's subjective opinion that is not grounded in any true scientific or conservation principles. The approval from institutional cultural practitioners is not mandated for any other species in Hawai'i, including the many animal and plant species here that are endangered, indigenous and/or endemic, and that serve as 'aumakua to families. There is no precedent to establish this requirement solely for sharks. The process of opening and maintaining a connection between research and Native Hawaiian and local communities is an important

relationship building step in both informing research efforts and making the findings available to the community, it should not be relegated to a bureaucratic process.

As a suggestion, this bill would benefit from adopting the wording from the house version regarding the research exemption. Specifically, the following amendments from HB2414 would benefit this bill:

“(5) Expanding the exemptions from the prohibition and fines and penalties proposed to:

(A) Research conducted by nationally qualified educational institutions;

(B) Sharks currently held in captivity;

(6) Exempting nationally qualified educational institutions from the requirement to obtain a special activity permit to conduct scientific and educational research activities on sharks;”

Please change this language in the bill to protect legitimate shark research that is vital for effective shark conservation and management in Hawai‘i and abroad.

Thank you,

Mark Royer

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 4:29:04 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Wayne	Individual	Support	No

Comments:

Please support this measure to provide appropriate recognition and protection for our ecologically and culturally significant shark species. Mahalo!

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 4:36:43 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Cathy Goeggel	Testifying for Animal Rights Hawai'i	Support	Yes

Comments:

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 6:12:27 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ku'u lei	Individual	Support	No

Comments:

Aloha mai,

I ask you to look with favor upon SB2717 as it pertains to the malama (care) of mano. As a kanaka connected to places within my ancestral homeland of North Kona that bear names with strong association with mano, I ask that any and all measures that ensure their safety will be considered and fulfilled by you who are the decision makers. I'd like to name a few of these places that are the birthing sands of the elders that I descend from and inasmuch as you are able to hear, see and feel the connection I have to these kupuna, I ask your careful thought of this bill; Kalaemano, Keawamano, and Kiholo are a few coastal sections that my genealogy connects me to. Please help me in re-building my faith in this system that my testimony is but a reflection of democracy and that it can and will make a difference.

Mahalo, Ku'u lei Keakealani

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 7:56:25 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Cory Fults	Individual	Oppose	No

**Comments:**

I am in opposition of SB 2717 because the bill in its current form is an ineffective blanket regulation. This bill seems to have been written out of people's passion for sharks and while that's great, there's no scientific reasoning behind it. There is no shark fishery in Hawaii. I believe it's best we take advice from the people who have dedicated their entire careers to conducting research that is used to create effective conservation measures. The marine biologists. Not people who claim they are a marine biologist for attention on social media, or to make their for-profit ecotourism business seem more legitimate. Researchers already have to get approval for their research plans through IACUC, why would they need to get additional approval based on someone's opinion/worldview. We should be promoting the real research, not hindering it.

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 8:35:27 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Angel Seery	Individual	Support	No

Comments:

Aloha!

I'm going to get right to the point. It is time that we do what is pono for a species that is both culturally and ecologically significant! It is time we stop unsustainable practices to once again protect cherished aumakua. Please see this bill through. There has all ready been too much loss of culture. It is time to ride this revival wave of Hawaiian culture and protect our loved ones, the manā• . MÄ• lama manā• .

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 8:39:22 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Fern Anuenue Holland	Individual	Support	No

Comments:

Strong Support! Mahalo!



**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 9:22:46 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Paige Wernli	Individual	Oppose	No

Comments:

Aloha JUD committee members,

My name is Paige Wernli. I am a Master's student at the University of Hawaii. I am writing to oppose SB2717 in its current form. Shark reserachers who conduct legitimate studies under nationally qualified educational institutions are already required to qualify for an IACUC permit. This ensures that researchers justify the use of sharks in their studies, the species and numbers used, and that ethical practices are followed. The language of this bill is not only an ineffective attempt at a conservation measure, but would hamper and potentially shut down the exemplary research that is being conducted in Hawaii.

In order to create the most effective conservation policies, we must be able to conduct the most effective research. As a suggestion, this bill would benefit from adopting the wording from the house version regarding the research exemption. Specifically, the following amendments from HB2414 would benefit this bill:

“(5) Expanding the exemptions from the prohibition and fines and penalties proposed to:  
(A) Research conducted by nationally qualified educational institutions;  
(B) Sharks currently held in captivity;  
(6) Exempting nationally qualified educational institutions from the requirement to obtain a special activity permit to conduct scientific and educational research activities on sharks;”

As a young woman at the start of her professional career in science (pursuing an advanced degree under the supervision of some of the world's leading shark researchers) I urge you to give me the opportunity to conduct the sound research that is needed to create effective species management plans in Hawaii and abroad. This vital research requires a stable permitting environment that is grounded in true scientific and conservation principles.

Thank you,

Paige Wernli

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 9:25:22 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Hannah Kihalani Springer	Individual	Support	No

Comments:

Me ka ha'aha'a,

The legislature's findings and recommended protections (Chapter 188, HRS) presented in SB 2717 are in keeping with Hawaiian sensibility and culture as well as the science of ecology and progressive resources management. The sensibility and the science are harmonious in ways that are both practical and wise, contemporary and generations deep. And, SB 2717 honors both. I pray you approve this progressive step towards improving resources management in Hawai'i nei. E ola mau ka manā• !

Mahalo, Hannah Kihalani Springer

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 9:42:47 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
julia hartl	Individual	Oppose	No

Comments:

Aloha to the State of Hawai'i Senate,

I am a Masters candidate at the University of Hawai'i at Manoa. I have spent the last 6 years studying sharks in Hawai'i and abroad. I have local experience in the field, with conservation groups, as a tour guide and as a contributor to bona fide research resulting in peer reviewed articles.

I think that much of the testimony regarding this bill may pertain to the kind intentions toward protecting local sharks. A few years ago I testified in support of a previous draft of a very similar bill in regards that the state of Hawai'i continue to be a leader in marine conservation.

In fact, Hawai'i remains a standing example of national and global shark protection for passing legislation against shark finning in 2010. Largely, this state puts very low nearshore fishing pressure upon sharks. Much of the standing protection of these animals (as important living ecological, cultural or economic resources) is based in Native Hawaiian and Pacific Island roots.

As a budding researcher in the community, and as an acting citizen, I oppose the bill because in its current form it presents false hope for action that remains unrealistic to manage and because much of the language remains unclear.

If the question remains regarding unpermitted and undue harassment to the shark then they may hold the same protections given for other local marine species the state deems to conserve (whales, birds, seals, dolphin, etc). That should also be the same

standard held for all animals under unpermitted research. At the University of Hawai'i, scientific research regarding the study and use of live animals are held to IACUC standards with the animals utmost care in mind (Institutional Animal Care and Use Committees). No other animal in the state currently requires Native Hawaiian approval for study. More importantly, that type of approval is very unclear in the language and format of the current bill in regards to specifically whom this would be.

In regards to shark research, my research project has a zero mortality rate. This is due to the available methods for more easily accessible species under the guide of Dr. Carl Meyer and Dr. Kim Holland experience in permitted shark research in the state of Hawai'i ( studies). In general shark may be hard to happen upon naturally and even harder to hold still and measure or implant with a modern tracking device (many of which are attached in a matter of minutes, some externally and some entirely noninvasive depending on objective parameters). The matter remains that fishing is inherently risky unto the fish but that a good fisher may even want to let his/her catch go with expensive monitoring equipment to learn more about these living and wild resources. This is the type of research that has contributed to the world history of sharks for the last few decades at least including population abundance and monitoring, fishery management, acoustic telemetry etc.

Unfortunately not all methods carry zero risk but the intentions remain sound that most testifying in regards to this bill actually do care about the well being of the over 40 species

(ref. DLNR) of shark that inhabit Hawai'i state waters (both MHI and NWHI).

I oppose the bill with the sentiment that much of this public appeal be motivated toward the preservation of sharks by reducing the real pressures of the modern world, anthropogenic waste. There are many other efforts going through legislation that I believe would serve as much stronger appeal to shark conservation. Current examples include the protection of marine herbivores, removal of microbeads and the recent success at eradicating sunscreens that are not reef-safe. Other subjects may include standards for wastewater, ocean dumping and pressures to remove non recyclable forms of single use consumption.

Thank you for your time,

Julia M. Hartl

Masters candidate

University of Hawai'i at Manoa

Hawai'i Institute of Marine Biology

Kim Holland Pelagic fish/Shark lab

natural ecology of pelagic sharks (and other reef predators)

**LATE**

**SB-2717-SD-1**

Submitted on: 2/26/2020 11:20:34 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Brittany Evans	Individual	Oppose	No

Comments:

Aloha Legislators,

My name is Brittany Evans and I am a Master's student in the Marine Biology Graduate Program at the University of Hawaii. I actively study the behavior and horizontal movements of Hawaiian deepwater sharks.

While I greatly appreciate the efforts of the public community and legislators to create regulations to better protect our sharks, I fear components regarding additional permitting for shark research in the SB2717 would do more harm than good. As such, I am writing to **oppose the bill in its current form**.

In order to perform proper scientific research, scientists must go through several rigorous forms of review from various individuals, committees, and departments for their proposed project, including but not limited to approval from an animal ethics board: the Institutional Animal Care and Use Committees (IACUCs) and valid permitting from various state and/or federal departments. Scientists must always defend their research methodology with the welfare of their study organisms as the top priority. Research through university institutions is also heavily regulated through peers in the scientific community as the methodology to capture and utilize any study organisms during projects are always noted and subjected to review during approvals from nationally qualified research and educational institutions, scientific conference or symposium presentations, and paper publishing through peer-reviewed scientific journals. At the heart of it, shark researchers have one goal: to contribute to the conservation and management of these amazing predators of the marine environment through the efforts of their scientific research.

The idea of regulations needed for scientific research is a fantastic idea, but it is already fully covered through the research and educational institutions, state and/or federal departments, and the scientific community as a whole. Subjecting scientists to additional regulations would be redundant and in fact limit or, worse case, inhibit research specifically aimed at broadening our understanding of sharks and providing important information to be utilized in their conservation and management. As such, I propose that nationally recognized research and educational institutions should be exempt from the special activity permit to conduct scientific and educational research activities on sharks as stated in the current form of the bill.

Thank you for your time,

Brittany Evans

**LATE**

**SB-2717-SD-1**

Submitted on: 2/27/2020 4:37:49 PM

Testimony for JDC on 2/27/2020 10:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kady Lyons	Individual	Oppose	No

**Comments:**

I'm writing with regards to SB2717 relating to shark protection. My name is Dr. Kady Lyons and I am a shark research scientist at a non-profit. Most of our work focuses on large, highly mobile sharks where we require partnering with various institutions from the state and federal levels to those in academia.

Currently, we have begun partnering with other shark researchers in Hawaii to conduct tiger shark work to examine the potential of microplastics to translocate from the stomach to the blood of these animals where these particles may have negative physiological consequences for health.

I think that most of us can agree that enabling protections against illegal fishing for sharks is a good thing for the ecosystem. However, my concern is in regards to the ambiguous and potentially obstructionist language in the part of the bill regarding research exemptions ( line (e) (1) ). I think it is important that clear guidelines that are not open to interpretation are explicitly spelled out. Many (if not all of us) must gain approval to do any sort of handling and sampling of animals through a multi-faceted animal care and use committee. However, including an additional provision that is open to interpretation I think could cause a large hindrance for not only local research but also stifling opportunities to work with other institutions from the mainland (like myself) and internationally. This would have the opposite effect of the intention of the bill, which is to conserve these animals through best management practices based in science. I would urge the legislature to consider revising the bill to remove this ambiguity.