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 AGRICULTURE AND ENVIRONMENT

Wednesday, February 5, 2020 1:30 PM State Capitol, Conference Room 224

In consideration of SENATE BILL 2717 RELATING TO SHARK PROTECTION

Senate Bill 2717 proposes to establish an offense of knowingly capturing, taking, 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, subject to the following comments and proposed amendment.

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.

The Department has concerns about the following language beginning on page 3, line 17, which creates an exemption for special activity permits:

- This section shall not apply to: (e)
- (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

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

ROBERT K. MASUDA

M. KALEO MANUEL

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

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;

It is unclear what "the potential biological removal level" means, and the Department lacks the resources and expertise to conduct stock assessments that may be necessary to make such a determination. The Department recommends amending this language to read:

- (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;

The Department already has an existing process to carefully review all Special Activity Permit and other research permit applications to ensure that any permitted activities do not result in unacceptable ecological or cultural impacts. References to "the potential biological removal level" are problematic and unnecessary.

Thank you for the opportunity to comment on this measure.

<u>SB-2717</u> Submitted on: 1/28/2020 3:43:25 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Cathy Goeggel	Testifying for Animal Rights Hawai'i	Support	No

Comments:

gabbard2 - Sydney

From: ONE OCEAN CONSERVATION < teamoneocean@gmail.com>

Sent: Tuesday, January 28, 2020 4:37 PM

To: AEN Testimony

Subject: Testimony in support of SB2717

On behalf of One Ocean Conservation, we strongly support **SB2717**. Globally sharks are facing severe population declines, and the global shark population has declined by 90% of that it used to be in recent decades. Certain species like the oceanic white tip have been depleted by 99% of their former abundance. Sharks are often targeted for the growing list of shark products such as shark fin soup, shark meat sold under various names to mislead consumers, shark liver oil, cartilage supplements, pet food, fertilizer and more. They are also caught inadvertently as by catch by commercial fisheries on a consistent basis.

Here in Hawaii, we are lucky to still have relatively stable populations of sharks, but they still face numerous challenges and threats. It is in the state's best interests to preserve these animals for future generations. Manō (sharks) are widely respected as sacred 'aumakua, yet despite their cultural significance sharks have very little functional enforceable protection. The law should reflect the respect the native Hawaiian community has for these animals. There is a need for this bill as sharks are killed for wasteful reasons. While many incidents are not reported or common knowledge, those of us that work within the community are aware of several instances in which sharks were targeted or killed. Scalloped hammerheads (Sphyrna lewini) are a particular concern, as fishermen are known to use juvenile pups as bait for large fish species like ulua (Caranx ignobilis). An individual was cited this year for illegal lay net use in Kaneohe bay, a well known and important nursey ground for the species, after he killed several baby hammerheads but the penalty was only for illegal net use, not because he killed the sharks. Scalloped hammerheads were also recently reclassified globally as critically endangered as of December 2019, but even though they are known to be so vulnerable very little protection is in place. There are several other instances where sharks were killed or left for dead after they were caught, but this is a clear example of why this type of legislation needs to be implemented.

--

Mahalo and Aloha,
One Ocean Conservation

<u>SB-2717</u> Submitted on: 1/29/2020 10:19:06 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Alexandra Kahn	Testifying for Surfrider Oahu	Support	No

Comments:

gabbard2 - Sydney

From: ONE OCEAN DIVING <oneoceandiving@gmail.com>

Sent: Tuesday, January 28, 2020 4:50 PM

To: AEN Testimony

Subject: Testimony in support of SB2717

On behalf of One Ocean Research and Diving, We strongly support SB2717. Sharks are also not only ecologically important but also economically important. Here in Hawaii, millions of visitors and residents alike participate in ecotourism operations that bring millions into the state economy and employ local residents in a sustainable and educational activity that makes Hawaii a destination of choice for many. In a global context, sharks are worth far more alive according to a 2013 study by Cisneros-Montemayor et. al which estimates participants in the shark ecotourism industry expend > USD 314 million per year and is projected to grow based on current trends to an estimated > USD 780 million in tourist expenditures in the next 20 years (Cisneros-Montemayor et. al 2013). Similarly, a 2012 study by Vianna et. al provides support for the argument of non-extractive resource use based on data from shark ecotourism operations in Palau which generates USD\$18 million per year and states that the estimated value of the population of approximately 100 sharks used in the operation to be at most USD\$10,800 if they were harvested which is a fraction of worth of these animals as a non-consumptive resource (Vianna et. al 2012). The value of a live shark throughout its lifetime greatly outweighs the minimal profit that would otherwise be gained from 1 one time harvest of the animal.

Sharks are also top-level predators with significant value in terms of ecosystem services. They remove the weak, sick, dying and overpopulated keeping trophic levels below them in balance, from exhausting their resources, and even play a role in modifying prey behavior. A healthy shark population is correlated with healthier fish stocks as well as coral reefs, a factor that will be increasingly relevant with the growing list of stressors impacting the marine environment such as climate change.

Thank you/Mahalo, One Ocean Team



TO: Honorable Chair Senator Gabbard & Members of the Committee on Agriculture and the Environment

February 3, 2020

FROM: Heather Carpenter, Western Regional Director, The Humane Society of the United States, hcarpenter@humanesociety.org, Phone number: 702.929.2999

RE: SUPPORT FOR SB 2717; 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, 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 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. 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.²
- Tens of millions of sharks are estimated to be killed annually for their fins. While antifinning laws are designed to halt further shark population declines, many species are still threatened and face possible extinction. Recent research from the University of Hawaii³

¹ IUCN Shark Specialist Group. Questions and Answers.

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

³ https://www.voanews.com/a/2641635.html

- 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 2717 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.⁴
- 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
 years⁵ have prompted public outcry and highlighted public desire for strong penalties for
 cruelty against sharks.⁶
- 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. 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".

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

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

⁴ http://www.pifsc.noaa.gov/fmb/reports/hlreports/areport_items.php?yr=2014&type=tbl&num=1

⁵ Video of tiger shark torture sparks outcry in Hawaii. https://www.huffingtonpost.com/2013/09/13/shark-torture-video-n-3922319.html

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

⁷ Ebert, D.A. 2001. Sharks, Rays, and Chimaeras of California. University of California Press.

⁸ 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).

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 falicformes, 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 Odontaspididae

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 pussilus, 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

Submitted on: 2/4/2020 11:03:14 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mike Nakachi	Testifying for Moana Ohana	Support	Yes

Comments:

Aloha Aina, Malama Aina, Malama Momona, all of these traditional and customary practices of Hawaiian Culture have been forgotten and abused. Mano and all shark pecies need this protection and is long over due. Mano are our Ohana! Please support this Bill SB2717 all the way this year! Mahalo. Malama Mano



TO: Honorable Chair Gabbard and Senate Agriculture, Energy and Environment 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, with suggested amendments

For the Fishes respectfully urges your support of SB2717 which would prohibit the intentional/knowing 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. 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 fishers (for their meat/fillets) and sharks 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 shark species.

Last session concerns were raised by a few shark researchers speaking independently of their affiliation with any academic institution. To address those concerns we are suggesting the below clarifications so that legitimate shark research may continue to occur:

- Amend preamble to clarify exemptions
- To avoid confusion with the term "take" in the federal Endangered Species Act (ESA), remove all references to "take"
- Clarify that the bill is NOT meant to inhibit legitimate shark related research, "if conducted under an Institutional Animal Care and Use Committee (IACUC)." and reviewed by an institution's native Hawaiian Cultural Practitioners (per UH HIMB)
- Removed confusing reference to research permits and DLNR determining biological removal levels

Thank you for your consideration of these amendments and the opportunity to testify on this important marine conservation issue

See: https://dlnr.hawaii.gov/sharks/hawaii-sharks/species-list/

HAWAII 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 falicformes, 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 Odontaspididae

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 pussilus, 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



Submitted on: 2/5/2020 11:01:45 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Lisa Bishop	Testifying for Friends of Hanauma Bay	Support	Yes	

Comments:

Aloha Chair Gabbard, Vice Chair Ruderman, and Committee members,

Friends of Hanauma Bay strongly supports SB2717 Relating to Shark Protection.

Please support and pass this bill!

Mahalo,

Lisa Bishop

President

Friends of Hanauma Bay

<u>SB-2717</u> Submitted on: 1/27/2020 8:16:46 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	_
Benton Kealii Pang, Ph.D.	Individual	Support	No	

Comments:

Submitted on: 1/28/2020 4:28:34 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
One Ocean Diving	Individual	Support	No

Comments:

We strongly support SB2717. Sharks are also not only ecologically important but also economically important. Here in Hawaii, millions of visitors and residents alike participate in ecotourism operations that bring millions into the state economy and employ local residents in a sustainable and educational activity that makes Hawaii a destination of choice for many. In a global context, sharks are worth far more alive according to a 2013 study by Cisneros-Montemayor et. al which estimates participants in the shark ecotourism industry expend > USD 314 million per year and is projected to grow based on current trends to an estimated > USD 780 million in tourist expenditures in the next 20 years (Cisneros-Montemayor et. al 2013). Similarly, a 2012 study by Vianna et. al provides support for the argument of non-extractive resource use based on data from shark ecotourism operations in Palau which generates USD\$18 million per year and states that the estimated value of the population of approximately 100 sharks used in the operation to be at most USD\$10,800 if they were harvested which is a fraction of worth of these animals as a non-consumptive resource (Vianna et. al 2012). The value of a live shark throughout its lifetime greatly outweighs the minimal profit that would otherwise be gained from 1 one time harvest of the animal.

Sharks are also top-level predators with significant value in terms of ecosystem services. They remove the weak, sick, dying and overpopulated keeping trophic levels below them in balance, from exhausting their resources, and even play a role in modifying prey behavior. A healthy shark population is correlated with healthier fish stocks as well as coral reefs, a factor that will be increasingly relevant with the growing list of stressors impacting the marine environment such as climate change.

<u>SB-2717</u> Submitted on: 1/30/2020 7:50:15 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Te'sha Martines- Melim	Individual	Support	No

Comments:

Submitted on: 2/1/2020 10:42:06 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jeff Chasin	Individual	Support	No

Comments:

Sharks are apex predators, and it is extremely dangerous for any apex predator to be removed from its natural environment. The environmental impact can't even be guessed.

In addition, Sharks play such a vital role in the cultural practices of many people in Hawaii, and to lose them would be to lose a part of the state's culture.

Submitted on: 2/1/2020 2:53:37 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lauren Northrop	Individual	Support	No

Comments:

I am not a resident of Hawaii. I am an attorney, mother, and I have a background in marine biology. Hawaii is our family's dream destination. One of the main reasons we want to travel there is to see sharks in the wild. Sharks are dying out worldwide, and they need drastic measures to be taken via legislative protection. I hope you will pass this legislation so that we can travel to your beautiful state and see wild sharks living as they were meant to.

<u>SB-2717</u> Submitted on: 2/2/2020 1:57:05 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Rosemary Karlsson	Individual	Support	No

Comments:

It's very important to protect sharks to maintain the balance of nature in the oceans. No one needs to kill sharks for food or 'sport'.

<u>SB-2717</u> Submitted on: 2/2/2020 6:21:35 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Gregg Gruwell	Individual	Support	No

Comments:

I am a Hawaii resident and support this legislation. Our oceans are under seige and sharks are vital to the eco-system!

Submitted on: 2/3/2020 8:22:38 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Brittany Biggs	Individual	Support	No

Comments:

We must protect sharks from intentional killings. Sharks are not only vital to our ecosystem but they have significant cultural importance here in Hawaii. Though shark finning is illegal, it's still hapenning in our waters. In November 2018, almost a dozen men were charged with illegally trying to smuggle almost 1,000 shark fins out of Hawaii. We need to do more to protect sharks, and passing this bill is a huge step.

<u>SB-2717</u>

Submitted on: 2/3/2020 5:07:06 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Tim Dow	Individual	Support	Yes

Comments:

Aloha,

I strongly support sb2717 to prohibit the intentional killing of sharks. It is the right thing to do, and, in my opinion, should have not been removed from last year"s ray and shark protection bill. As global climate change wreaks havoc in our oceans, protrecting it's top predator is crucial, and manna are considered 'aumakua and should not be harmed in the first place. Please make this bill become law, you all have that ability, the senseless killing of sharks is just that, senseless.

Mahalo,

Tim Dow

Submitted on: 2/3/2020 5:46:39 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Andrea Quinn	Individual	Support	No	

Comments:

Dear Honorable Committee Members:

Please support SB2717. Sharks are a major keystone species. By protecting them you protect the marine ecosystem, which is responsible for generating so many of our tourism dollars.

Thank you for the opportunity to present my testimony.

Sincerely,

Andrea Quinn

Kihei

Submitted on: 2/3/2020 6:06:39 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Ocean Ramsey	Individual	Support	No

Comments:

It is in the state's best interests to preserve these animals for future generations. Manŕ (sharks) are widely respected as sacred 'aumakua, yet despite their cultural significance sharks have very little functional enforceable protection. The law should reflect the respect the native Hawaiian community has for these animals. There is a need for this bill as sharks are killed for wasteful reasons. While many incidents are not reported or common knowledge, those of us that work within the community are aware of several instances in which sharks were targeted or killed. Scalloped hammerheads (Sphyrna lewini) are a particular concern, as fishermen are known to use juvenile pups as bait for large fish species like Ulua (Caranx ignobilis). An individual was cited this year for illegal lay net use in Kaneohe Bay, a well known and important nursery ground for the species, after he killed several baby hammerheads but the penalty was only for illegal net use, not because he killed the sharks. Scalloped hammerheads were also recently reclassified globally as critically endangered as of December 2019, but even though they are known to be so vulnerable very little protection is in place. There are several other instances where sharks were killed or left for dead after they were caught, but this is a clear example of why this type of legislation needs to be implemented.

Sharks are also top-level predators with significant value in terms of ecosystem services. They remove the weak, sick, dying and overpopulated keeping trophic levels below them in balance, from exhausting their resources, and even play a role in modifying prey behavior. A healthy shark population is correlated with healthier fish stocks as well as coral reefs, a factor that will be increasingly relevant with the growing list of stressors impacting the marine environment such as climate change.

Sharks 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 the balance of the ecosystem by regulating the 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.

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 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 intended consequences when sharks are removed.

Further evidence for the ecological importance of sharks can be found when the density, size, and biomass of reef fishes in northwestern Hawaiian islands a large, remote, and lightly fished area, and the main Hawaiian Islands (MHI), an urbanized, heavily fished area. The study by Friedlander & DeMartini in 2002 revealed dramatic differences between the two ecosystems, as grand mean fish standing stock in the NWHI was more than 260% greater than in the MHI, more than 54% of the total fish biomass in the NWHI consisted of apex predators, (primarily sharks and jacks) whereas this trophic level accounted for less than 3% of the fish biomass in the MHI. The study concluded these differences represent both near-extirpation of apex predators and heavy exploitation of lower trophic levels in the MHI compared to the largely unfished NWHI (Friedlander & DeMartini 2002).

A 2008 publication by the DLNR-DAR of Hawaii found that Oahu's reefs have around 1/10th the biomass of apex predators (Willaims et. al 2008), indicating that anthropogenic pressures through the main Hawaiian islands has dramatically reduced populations of sharks that are particularly susceptible to over-exploitation due to life history characteristics including slow growth, late attainment of sexual maturity, long life spans, low fecundity (Stevens et. al 2000).

Based on the scientific studies cited above there is a very clear argument for protecting sharks in Hawaiian waters for their ecological importance. The long-term ecological implications of the removal of apex predators are difficult to document, but when it comes to conserving such a vital component of our marine ecosystems the

precautionary approach should be taken to ensure healthy populations of these animals persist for future generations.

Sharks are also not only ecologically important but also economically important. Here in Hawaii, millions of visitors and residents alike participate in ecotourism operations that bring millions into the state economy and employ local residents in a sustainable and educational activity that makes Hawaii a destination of choice specifically for its shark programs for hundreds of thousands of visitors. In a global context, sharks are worth far more alive according to a 2013 study by Cisneros-Montemayor et. al which estimates participants in the shark ecotourism industry expend > USD 314 million per year and is projected to grow based on current trends to an estimated > USD 780 million in tourist expenditures in the next 20 years (Cisneros-Montemayor et. al 2013). Similarly, a 2012 study by Vianna et. al provides support for the argument of non-extractive resource use based on data from shark ecotourism operations in Palau which generates USD\$18 million per year and states that the estimated value of the population of approximately 100 sharks used in the operation to be at most USD\$10,800 if they were harvested which is a fraction of worth of these animals as a non-consumptive resource (Vianna et. al 2012). The value of a live shark throughout its lifetime greatly outweighs the minimal profit that would otherwise be gained from 1 one time harvest of the animal.

Sharks are also top-level predators with significant value in terms of ecosystem services. They remove the weak, sick, dying and overpopulated keeping trophic levels below them in balance, from exhausting their resources, and even play a role in modifying prey behavior. A healthy shark population is correlated with healthier fish stocks as well as coral reefs, a factor that will be increasingly relevant with the growing list of stressors impacting the marine environment such as climate change.

Submitted on: 2/3/2020 6:16:17 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kaitlin Elisha	Individual	Support	No

Comments:

Sharks need our help. They need our voice. Why should we slaughter what we could befriend. Why slaughter a creature just for their fins then throw away the rest of the body. It's cruel. It's disgusting. It shouldn't be tolerated. Please help to make these inhumane actions towards sharks ILLEGAL.

<u>SB-2717</u> Submitted on: 2/3/2020 7:47:16 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Zhoomart Toktosunov	Individual	Support	No

Comments:

we have to save sharks, they are very important for our planet

<u>SB-2717</u> Submitted on: 2/3/2020 7:47:56 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Erwan Mairy	Individual	Support	Yes

Comments:

<u>SB-2717</u> Submitted on: 2/3/2020 8:00:12 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lisa Asagi	Individual	Support	No

Comments:

I believe this bill should be approved. Sharks as a species are vital to the health of our oceans.

<u>SB-2717</u> Submitted on: 2/3/2020 8:02:08 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dmitrii Akimov	Individual	Support	Yes

Comments:

Sharks must be live.

<u>SB-2717</u> Submitted on: 2/3/2020 8:05:08 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

Sharks are incredibly important for the health and balance of the ocean. They have been around for many centuries but their population has decreased majorly. Please prevent any unnecessary shark killings.

<u>SB-2717</u>

Submitted on: 2/3/2020 8:31:49 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Carlota Schmitz	Individual	Support	No

Comments:

We have been diving with sharks since we were young. They are amazing creatures and now that we understand them we know they are completly necesary for the environment. As Apex Predators they regulate the ecosystem from the top chain. They are misunderstood animals that have been fished for meat and fins. It has been proved that there are many suplements that immitate the flavor and taste of this animal. Please understand that without sharks the successful of marine species is going to be a science fiction movie.

Submitted on: 2/3/2020 9:30:57 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
taryn e quinterri	Individual	Support	No

Comments:

"My testimonial will include the facts I've swam with these sharks and found them to be misunderstood curious animals that are an extraordinary importance to the balance and longevity of our ecosystem. The existence of these animals long term is becoming a threat with the lack of knowledge and safety from humans that these sharks face, careless fishing and acts of netting etc are harming the chances of the long term protection of these animals. I'm in full support of this bill and will share and continue to promote this with all knowing even in the state of Arizona."

Submitted on: 2/3/2020 9:01:28 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Elle delallo	Individual	Support	No

Comments:

Sharks are an extreme importance to the balance of our eco system. This bill is of extreme importance and urgency in the health of our oceans and balance of our oceanic life. I fully support this bill and will continue to reach out to others for the understanding and importance of this bill. I've swam with the sharks in Oahu many times and they are misunderstood curious animals that deserve a healthy attention far from what blockbusters have attributed them to. This needs to be taken very seriously as our world/oceanic balance depends on it.

<u>SB-2717</u> Submitted on: 2/3/2020 9:37:23 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
katharina harer	Individual	Support	No

Comments:

Sharks are a vital part of the ocean environment and absolutely required for conservancy of a healthy marine flora and fauna. We too are dependent on a healthy sealife.

Submitted on: 2/3/2020 9:37:48 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Stefani Specker-Cook	Individual	Support	No

Comments:

Aloha,

Please support this bill. The ocean is my home and all of our backyards. Our lives depend on the beautiful ocean and all of the marine animals within it. Sharks are vital to our ecosystems, without them, our marine ecosystems will collapse. We must fight for our environment and continue to be an example to the rest of the world. Remember, without a blue world, there is no green one (Dr. Sylvia Earle).

Sharks have been roaming the Earth's oceans for 400 million years, surviving five mass extinctions. In only the past 30 years, shark populations have dropped 90% due to humans, threatening the balance of the entire marine ecosystem. At the top of the oceanic food chain, the shark plays a vital role in its environment by keeping fish and marine animal populations in check. Mike Heithaus, an executive director at Florida International University's School of Environment, explains how shark extinction can affect the way we live, "This is a big concern because the loss of sharks can affect the wider ecosystem... if we don't have enough of these predators around, it causes cascading changes in the ecosystem, that trickle all the way down to marine plants." Marine animals, seafood businesses, and humans would see the first-hand effects of a world without sharks. Coral reefs would collapse and so would entire ecosystems across the most critical habitats. The ocean is our primary defense against greenhouse gasses and it also contributes to one-third of our total food supply. Environments throughout the Pacific are becoming more vulnerable to climate change, and overexploitation which will affect the livelihoods of people. Many Pacific communities, like Hawai'i, rely on marine-related tourism to support their economy and supply jobs for the people. A loss in marine ecosystems will have detrimental effects on tourist arrivals, ultimately effecting employment and quality of life. It is imperative to keep our ocean sustainable because it produces more oxygen than all of our forests combined. Without these essential creatures, a domino effect would come crashing down on our planet.

From a student, citizen, and ocean lover.

Mahalo nui loa,

Stefani Specker-Cook

<u>SB-2717</u> Submitted on: 2/3/2020 9:40:59 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Martin Jungersen	Individual	Support	No

Submitted on: 2/3/2020 9:41:03 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Damon Ogden	Individual	Support	No	

Comments:

To all that concerns and for all that is concerned.....

I submit this testimony on behalf of all Ocean mammals and fishes, I wish to show that I do NOT agree with killing sharks or shark finning, Sharks are apart of the most important part of the earths ecological system, to kill sharks or you are a person that kills sharks then you are destroying the ecosystem of the entire earth, it is fact that shark fin soup is tasteless and has no nutritional value for humans therefore, killing sharks is MEANINGLESS!!! All that kill sharks should be prosecuted by law!. We must protect sharks, to save our oceans, to save our earth.

Submitted on: 2/3/2020 9:41:13 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jaclyn Maher	Individual	Support	No

Comments:

The role of government is to protect the commons from tragedy. This bill is a strong step in the right direction. The balance of the ocean's ecosystem is in peril and we need strong government leadership to pass laws that will preserve our natural resources far into the future. It's proven that sharks play an integral role in the health of the oceans. With all the destruction we do to this planet, there must be a counter balance so everything can strive back towards how nature intended. Please make the hard but right decision and pass this bill.

<u>SB-2717</u> Submitted on: 2/3/2020 9:48:09 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jason Stark	Individual	Support	No

Comments:

I support SB2717.

Submitted on: 2/3/2020 10:08:51 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jodi Secrist	Individual	Support	No

Comments:

Sharks are extremely important to the oceans enviornment and ecosystem. Without them, the whole entire balance will be thrown off. I think fines should be in place when capturing or killing sharks because without them the ocean would be ruined.

<u>SB-2717</u> Submitted on: 2/3/2020 11:04:48 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
jessica jaehns	Individual	Support	No

Comments:

Sharks are so important for the marine ecosystem so please stop killing them for unnecessary reasons.
With lots of love for sharks

Jessica Jähns

<u>SB-2717</u> Submitted on: 2/3/2020 11:27:38 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Miguel Gutierrez	Individual	Support	No

Comments:

Request for support to this legislation

<u>SB-2717</u> Submitted on: 2/3/2020 11:51:32 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Azuma Chrupalyk	Individual	Support	No

<u>SB-2717</u> Submitted on: 2/3/2020 11:51:35 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Steven Blasco	Individual	Support	No

Comments:

Save our sharks! Hundreds of millions are killed each year and they need protection so our oceans can thrive!

Submitted on: 2/4/2020 12:06:22 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
David Kritzman	Individual	Support	No

Comments:

Sharks are incredibly important to the ecosystem, please help to protect them. At the current rate, if we do not protect these beautiful and valuable animals, they will become extinct. Imagine our young children or grandchildren not knowing about sharks because they no longer exist. The oceans cannot survive without sharks helping to keep the oceans clean.

<u>SB-2717</u> Submitted on: 2/4/2020 12:17:11 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Alexandra Molina	Individual	Support	No

Comments:

I fully support everything in this. I especially support shark protection and feel that that is extremely important.

<u>SB-2717</u> Submitted on: 2/4/2020 1:33:00 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
winfried rudel	Individual	Support	No

<u>SB-2717</u> Submitted on: 2/4/2020 3:33:26 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Hector Villaescusa	Individual	Support	No

Comments:

Sharks are very important for the health and balance of our oceans. We as a country should be leading by example to protect them.

Submitted on: 2/4/2020 3:37:07 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

Up until 20 or so years ago there was little to no management for sharks, skates and rays. Public awareness and appreciation for sharks was at an all-time low. For a long time these amazing animals were misunderstood and vilified. Even today sensationalist media stories play on the 'Jaws' stereotype to sell stories. Despite this we've seen a huge positive shift in public attitudes over the past 20 years.

Today we're lucky to have a large (and ever growing) group of passionate shark supporters from around the world. We also have more engaged Government and industry. Together we continue to champion sharks and further their conservation.

Sharks are fascinating and diverse animals, but there's much more to them than that. A world without sharks would have serious consequences for marine and freshwater ecosystems. As well as, the many human communities and economies that depend on them. Diverse shark populations are important for:

- HEALTHY OCEANS sharks play an integral role in keeping our oceans healthy.
 They do this by keeping other populations in check and preying on the sick and old. This prevents the spread of disease and improves the gene pool.
- OUR WELL BEING many divers relay magical experiences with sharks indeed this is often the highlight of any diving trip. Research shows that
 experiencing nature improves our well-being.
- THE ECONOMY shark and ray fisheries provide jobs and income for communities across the world. The rise in ecotourism is also placing a financial value on the presence of sharks. Only by managing fisheries sustainably can we ensure these livelihoods in the future.
- **GLOBAL DIVERSITY** sharks are an integral part of our natural world and support biodiversity. We've inherited these amazing animals and we want to pass them on to future generations.

And yet many species are in danger of disappearing from our waters. The biggest threat faced by sharks across the world is overfishing. This is why we need to continue

focusing so much	of our efforts	on fisheries	management.	It gets	right to the	e heart	of the
problem.							

Thank you.

Submitted on: 2/4/2020 4:28:46 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sunshine Eckstrom	Individual	Support	No

Comments:

Please support SB2717 to help protect sharks and as a consequence, the health of our oceans. Sharks are being killed at high rates worldwide, including in Hawaii. Our ocean ecosystems won't survive without them. The sharks and the ocean desperately need our protection. Thank you.

<u>SB-2717</u> Submitted on: 2/4/2020 4:28:48 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Victoria Corum	Individual	Support	No	

Comments:

Dear Sir/Madame:

Sharks are vital to the health and natural balance of the ocean world. Please consider the testimony of experts who continue to share how important sharks are to the marine ecosystem.

Thank you for your time,

Victoria

<u>SB-2717</u> Submitted on: 2/4/2020 4:50:12 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Kim Rapp	Individual	Support	No

Comments:

Sharks need protection, they should not be hunted. They are beautiful creatures that need our help! Please ban the hunting and finning of sharks, the ocean needs them!

Submitted on: 2/4/2020 5:30:43 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

I am not a marine biologist so I will not try to speak to you on the exact facts as I don't have the authority to do so. There is plenty of evidence online that will show just how important sharks are to our ecosystem, and I implore you to consult scientific specialists about this to help make your decision. We must do our best to protect our oceans in any way we can and that includes protecting these majestic creatures. The population of many whale species fell and is still struggling to recover due to whaling, do we really want the same thing to happen to our ocean's sharks? We humans overfish and are damaging our oceans and we need to try to fix our mistakes and help our oceans before it is too late. Please pass this bill to help protect our oceans and wildlife. Every little bit can make an impact and I truly hope you find it in your hearts to protect these wonderful creatures. Thank you for your time.

<u>SB-2717</u> Submitted on: 2/4/2020 4:51:11 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Chloe Elias	Individual	Support	No

Comments:

I fully support prohibiting the intentional wasteful killings of sharks in Hawaii. Sharks are essential to the ocean's ecosystem and the economy of coastal communities and therefore need to be protected.

Submitted on: 2/4/2020 6:04:59 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Madilyn Scott	Individual	Support	No

Comments:

These ancient animals carry a certain stigma with them, one that labels them as ruthless, man-eating monsters.

While it's true that you definitely don't want to get too close to a shark while he's busy hunting seals for food, sharks are far less dangerous than they are made out to be. The movie *Jaws*, which was the highest grossing film upon its time of release, surely helped perpetuate a vicious, vengeful image of sharks, great whites in particular.

The truth is that sharks are essential to our ecosystem, and help us in far more ways than they harm us. When we treat these prehistoric marvels with the respect that they deserve, everyone comes out on top.

If you aren't already familiar with shark finning, let me enlighten you on the atrocities that are being committed. To put it nicely, sharks are being caught with huge metal hooks and yanked out of the water. Then their fins are slashed off and the live bodies are tossed back in the water to sink to the bottom where they will slowly suffocate. Their fins are then dried and sold for shark fin soup. There are so many things wrong with this I don't even know where to start.

Firstly, it's totally inhumane to do this. Imagine if there were a million traps placed throughout the forests of the world and deer were being caught, had their legs cut off and left to die. The world would be up in arms. But when it's sharks, it's okay because they kill people.

Sharks kill roughly 5 people a year. We kill 10,000 sharks every hour. Every hour! 100,000,000 a year.

THERE IS NO JUSTIFICATION FOR KILLING THEM AT ALL!!

<u>SB-2717</u> Submitted on: 2/4/2020 6:28:52 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mackenna Cady	Individual	Support	No

<u>SB-2717</u> Submitted on: 2/4/2020 6:32:15 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing	
Ryan Scott	Individual	Support	No	Ī

Comments:

Sharks are often misunderstood creatures and are important to the health and cyclical balance of the ocean. Measures should be taken to protect these awesome creatures and facilitate the species' growth in Hawaii and beyond.

<u>SB-2717</u> Submitted on: 2/4/2020 7:26:13 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Julia-Claire Kaddatz	Individual	Support	No

<u>SB-2717</u> Submitted on: 2/4/2020 7:52:48 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Submitted on: 2/4/2020 7:56:37 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jacqueline Walker	Individual	Support	No

Comments:

Sharks are extremely important for the health and balance of the entire ocean. Sharks are being killed at a rapid rate worldwide. In Hawaii, sharks are being kills either through bycatch or for wasteful purposes. Sharks have a significant value in Hawaiian culture. Sharks are worth MUCH more alive than they are dead, both ecologically and economically. Without sharks, ocean life is doomed.

<u>SB-2717</u> Submitted on: 2/4/2020 8:03:31 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

Sharks have a huge influence on the environment. And if we keep killing them we will eventually be killing ourselves. They are a beautiful creature and we need to respect the sea and everything in it.

<u>SB-2717</u> Submitted on: 2/4/2020 9:19:47 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

I support this bill in its entirety

<u>SB-2717</u> Submitted on: 2/4/2020 9:52:23 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Testimony Regarding SB 2717

My Name is Dr. Kim Holland. I am the founder and senior member of the Shark Research Group at the Hawaii Institute of Marine Biology, University of Hawaii at Manoa. Over the past decades, our research group has contributed significantly to the conservation of Hawaii's sharks. I am presenting this testimony a private individual.

I am opposed to SB2717. Hawaii's coastal sharks are not being impacted by people 'knowingly fishing or harassing' them. Therefore, this bill will have no impact on the health of shark populations in Hawaii state waters. Additionally, the regulations outlined in the bill are unenforceable because fishing methods used to catch sharks are identical to ways of catching other species of fish. Further, SB 2717 could have several negative impacts. These include 1) Frivolous and/or malicious complaints concerning legitimate activities such as shark tourism, sport fishing and small scale commercial fishing, 2) Adding additional workload to enforcement agencies who are already overstretched 3) Diminishing the impact of other more meaningful conservation regulations 4) Curtailing scientific research and educational activities by imposing unnecessary administrative hurdles that can change unpredictably. Regarding this last point – whereas SB2717 does include language that appears to exempt research activities, closer inspection shows that approval from state agencies would still be required and these approvals can be notoriously burdensome, subjective and slow to be issued. This can have a dampening effect on shark-related research and education - both of which are important for maintaining the health of our marine environment and which also bring significant amounts of money into the state.

Broader, more substantive aspects of shark conservation (e.g., shark finning) are already covered by existing legislation.

In summary, although well intentioned the proposed regulations will have no meaningful impact and could have many unintended negative ramifications.

<u>SB-2717</u> Submitted on: 2/4/2020 10:53:39 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Rachel Doody	Individual	Support	No

Comments:

We need the sharks for the health of our oceans, they deserve protection.

Submitted on: 2/4/2020 11:14:27 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Tiffanie Martin	Individual	Support	No

Comments:

Please pass SB2717 because we are the mano's voice. Without them we all suffer the consequences. They deserve official protection laws, just as humans do.

Thank you for your kind attention to this critical matter.

Mahalo,

Tiffanie Martin

4920 SW Landing Dr #101 Portland, Oregon

<u>SB-2717</u> Submitted on: 2/4/2020 11:48:59 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Thais Parreira do Amaral	Individual	Support	No

Comments:

LET'S PROHIBIT INTENTIONAL WASTEFUL KILLING OF SHARKS IN HAWAII!!!!!

<u>SB-2717</u> Submitted on: 2/4/2020 11:50:55 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Shawna Brown	Individual	Support	No

Comments:

I support this bill and feel it is our duty to protect marine life.

Submitted on: 2/4/2020 11:55:33 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sarah Scott	Individual	Support	No

Comments:

I hope at today's meeting common sense will be used. Killing Sharks in such a gruesome and inhuman way is WRONG. There are many generations to come here in Hawaii let today stop this senseless and unacceptable practice. Please do the right thing.

Submitted on: 2/4/2020 12:10:24 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

Sharks are incredibly important for the health and balance of the ocean. Sharks are being killed rapidly and unsustainably worldwide and in Hawaii they're being killed either through by catch or for wasteful purposes. Sharks are worth far more alive than dead, both ecologically and economically. Therefore it is crucial that we protect them by putting in place measures to stop the decline in shark populations.

To the Attention of the Hawaii State Legislature:

Aloha, my name is Kimberly Matucci and I am a current resident of the Kona district of the Big Island of Hawaii. I am a marine biologist specializing in sharks and have worked in the dive industry as well for the past 12 years. I am writing you today in SUPPORT of SB2717 that would prohibit intentional wasteful killing of sharks in Hawaii. I urge you to please SUPPORT this profoundly impactful bill today.

I am deeply concerned with the worldwide status of sharks in our time. Shark populations around the world have plummeted to a miniscule fraction of what they used to be, causing other species to also exhibit a severe decline or even disappear entirely. The decimation of these apex predators is not only catastrophic for sharks but for the entire ocean ecosystem. The vital role that sharks hold in the ocean is arguably of the greatest importance of all ocean species in regard to health and equilibrium. Sharks maintain the balance of the ocean by keeping the food chain in check (ensuring that no one particular trophic level booms uncontrollably), eliminating the sick and weak from the gene pool and forcing grazing fishes to span out and not over-graze one particular area. Without sharks, the oceans will inevitably collapse. Sharks also play a monumental role in ecotourism being worth far more alive than dead (both ecologically and economically). People travel from all over the world in hopes of diving with sharks here in Hawaiian waters. Sharks also hold a significant value in Hawaiian culture that dates back centuries.

Sharks are being killed at such a rapid rate worldwide that tragically if we do not intervene immediately and drastically, there will be no coming back for shark species -- and no coming back for the ocean as well. Here in Hawaii, sharks are being killed either through bycatch or for wasteful purposes. You have the chance to end this, here and now, and to help save sharks from their demise. Lets let Hawaii act as a role model for the rest of the world to look up to.

I urge you to please SUPPORT SB2717, prohibiting the intentional wasteful killing of sharks in Hawaii. I thank you for your time and consideration.

Mahalo & kind regards, Kimberly Matucci

Contact details are as follows: 808-640-7409 73-3712 Kaimalolo Place, Kailua Kona, 96740 Hawaii

<u>SB-2717</u> Submitted on: 2/4/2020 4:43:52 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Klayton Kubo	Individual	Oppose	No

Aloha.

Thank you for taking the time to read my testimony. My name is Ileana, and I have been living on Oahu for almost four consecutive years. I am originally from Miami FL, where I grew up fascinated by the ocean. I always thought sharks were amazing and misunderstood creatures. They are overfished in parts of Asia and also suffer from bycatch of large fish hauls. Fishermen also accidentally reel sharks in or kill them if they are nearby fishing. Sharks are very beautiful creatures however do not support any nutritional value to humans. Shark fin soup, a popular soup that results from the defining of sharks and the torturous death of keeping them alive. Although we hope this may not happen in the US, it still happens around the world so we must set an example for our country to follow through.

Our community as a whole values sharks immensely. Sharks are a part of Hawaiian culture. They are our neighbors in our seas and are not hard to find. Enforcing a law like this will show how much value these animals have and the amount of respect they deserve. They live in the sea and they are a predator that should not be killed due to fishing. Also enforcing bycatch since that occurs as well and this would help enforce it. I volunteer for an organization that warns fishermen to call us when an animal is entangled or hooked. Most do not know how to deal with an animal that may be suffering from a hook or netting accident, therefore we try to enforce practices.

I really believe that this will help protect sharks and I hope to see these changes occur.

Mahalo for your time, lleana

<u>SB-2717</u> Submitted on: 2/4/2020 6:02:37 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

<u>SB-2717</u> Submitted on: 2/4/2020 9:49:17 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Simone Matucci	Individual	Support	No

Submitted on: 2/4/2020 9:49:32 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

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 Hawaii (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 manŕ, 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 manŕ 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

Barley, S. C., M. G. Meekan, and J. J. Meeuwig. 2017. Species diversity, abundance, biomass, size and trophic structure of fish on coral reefs in relation to shark abundance. Marine Ecology Progress Series **565**:163-179.

Beckwith, M. W. 1917. Hawaiian shark aumakua. American Anthropologist 19:503-517.

Couch, C. S., J. H. Burns, G. Liu, K. Steward, T. N. Gutlay, J. Kenyon, C. M. Eakin, and R. K. Kosaki. 2017. Mass coral bleaching due to unprecedented marine heatwave

in Papahĕ naumokuÄ• kea Marine National Monument (Northwestern Hawaiian Islands). PLoS One **12:**e0185121.

Emerson, J. S. 1892. The lesser Hawaiian Gods. Hawaiian Historical Society Papers 2:1–24.

Friedlander, A. M., and E. E. DeMartini. 2002. Contrasts in density, size, and biomass of reef fishes between the northwestern and the main Hawaiian Islands: the effects of fishing down apex predators. Marine Ecology Progress Series **230**:253-264.

Sandin, S. A., J. E. Smith, E. E. DeMartini, E. A. Dinsdale, S. D. Donner, A. M. Friedlander, T. Konotchick, M. Malay, J. E. Maragos, and D. Obura. 2008. Baselines and degradation of coral reefs in the Northern Line Islands. PloS one **3:**e1548.

Submitted on: 2/4/2020 9:51:28 PM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

Sharks are a critical species in the coral reef ecosystem and need to be protected to ensure the stability of the near shore ecosystems that are utilized daily in Hawaii. Furthermore, manŕ have a huge cultural importance and that alone should be reason enough to protect them in entirety. With the resurgence of Hawaii culture, it would be beneficial for the state to take a leading role in protecting ancient aumakua. MÄ• lama ManÅ• . MÄ• lama Kai. MÄ• lama 'Aina.

<u>SB-2717</u> Submitted on: 2/5/2020 12:39:55 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sonya Raica	Individual	Support	No

Comments:

Please protect our sharks.

<u>SB-2717</u> Submitted on: 2/5/2020 1:53:00 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Friese	Individual	Support	Yes

To the Attention of the Hawaii State Legislature:

Aloha, my name is Kimberly Matucci and I am a current resident of the Kona district of the Big Island of Hawaii. I am a marine biologist specializing in sharks and have worked in the dive industry as well for the past 12 years. I am writing you today in SUPPORT of SB2717 that would prohibit intentional wasteful killing of sharks in Hawaii. I urge you to please SUPPORT this profoundly impactful bill today.

I am deeply concerned with the worldwide status of sharks in our time. Shark populations around the world have plummeted to a miniscule fraction of what they used to be, causing other species to also exhibit a severe decline or even disappear entirely. The decimation of these apex predators is not only catastrophic for sharks but for the entire ocean ecosystem. The vital role that sharks hold in the ocean is arguably of the greatest importance of all ocean species in regard to health and equilibrium. Sharks maintain the balance of the ocean by keeping the food chain in check (ensuring that no one particular trophic level booms uncontrollably), eliminating the sick and weak from the gene pool and forcing grazing fishes to span out and not over-graze one particular area. Sharks also play a monumental role in ecotourism being worth far more alive than dead (both ecologically and economically). People travel from all over the world in hopes of diving with sharks here in Hawaiian waters. Sharks also hold a significant value in Hawaiian culture that dates back centuries.

Sharks are being killed at such a rapid rate worldwide that tragically if we do not intervene immediately and drastically, there will be no coming back for shark species -- and no coming back for the ocean as well. Here in Hawaii, sharks are being killed either through bycatch or for wasteful purposes. You have the chance to end this, here and now, and to help save sharks from their demise. Lets let Hawaii act as a role model for the rest of the world to look up to.

I urge you to please SUPPORT SB2717, prohibiting the intentional wasteful killing of sharks in Hawaii. I thank you for your time and consideration.

Mahalo & kind regards, Kimberly Matucci

Contact details are as follows: 808-640-7409 73-3712 Kaimalolo Place, Kailua Kona, 96740 Hawaii
 From:
 Zoe Williams

 To:
 AEN Testimony

 Subject:
 HB27-17 Testimony

Date: Tuesday, February 4, 2020 2:27:06 PM

Dear Hawaiian Government,

My name is Zoë Williams and I am a shark and ocean conservationist. It is so important to me that bill HB 27-17 is passed to protect the sharks. It is my dream to be a marine biologist and study sharks, the ocean and everything in the ocean.

I am only 10 years old and I have visited Hawaii just to swim with sharks. I want to learn more about sharks and someday go to college there. If the population of sharks goes down, more people like me will not come visit, people will not go to school there for marine biology, like I plan to.

I wish I could be there in person to tell you all this, but I live in Oregon. Please protect these important animals from finning & fishing.

Thank you, Zoë Williams "Sharks are our Friends" From: Kristan Kelly Williams
To: AEN Testimony
Subject: HB 27-17 Testimony

Date: Tuesday, February 4, 2020 2:29:18 PM

To whom it may concern,

I am writing to express my support in HB 2717, to protect sharks from fishing and finning.

Thank you for your consideration.

Mahalo nui, Kristan

Kristan Kelly Williams SOPTV Student Showcase Producer 541-326-9755

Kristan Kelly Images www.kkellyimages.com
 From:
 Kayleigh Grant

 To:
 AEN Testimony

 Subject:
 support SB2717

Date: Tuesday, February 4, 2020 4:55:58 PM

Aloha to whom it may concern,

I am writing in today as an independent Marine biologist urging you to pass HB808 for shark and ray protection. 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). Hawaii is often looked at as a leader in environmental and conservation issues and I believe we should show our aumakua the same regard. 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) so it's very hard for them to repopulate when they are decimated. Hawaii is still recovering from the large scale culling or killing of tiger sharks between 1959-1976. 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.

--

Mahalo and Aloha,

Kayleigh Grant (215)2085432 KayleighNGrant@gmail.com Farawayseas.com OneOceanDiving.com

Submitted on: 2/5/2020 9:32:39 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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

Comments:

I support SB2717. We are stewards of Hawaii Nei. It is our responsibility to care for all the gifts in its lands and seas. Those who desecrate the animals and plants in Hawaii need to be held responsible for their atrocities. Sharks are one of the greatest creatures in Hawaii, and were considered sacred by the original people of Hawaii. Please pass into law senate bill 2717. Thank you.

Buffy Nakachi

<u>SB-2717</u> Submitted on: 2/5/2020 9:51:06 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Crystal Dombrow	Individual	Support	No



<u>SB-2717</u> Submitted on: 2/5/2020 10:29:52 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

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



Submitted on: 2/5/2020 11:00:58 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Daniel Moret	Individual	Support	No

Comments:

Sharks are an important part of this world, and any life/consciousness should be protected. How would you feel if someone hunted you, your family, and your friends down for your skin, organs, and meat?



<u>SB-2717</u> Submitted on: 2/5/2020 11:09:00 AM

Testimony for AEN on 2/5/2020 1:30:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Natalie Parra	Testifying for Keiko Conservation	Support	No

<u>SB-2717</u> Submitted on: 2/5/2020 12:36:53 PM

Testimony for AEN on 2/5/2020 1:30:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing	
patty hermann	Individual	Support	No	

<u>SB-2717</u> Submitted on: 2/5/2020 3:39:21 PM

Testimony for AEN on 2/5/2020 1:30:00 PM



Submitted By	Organization	Position	Hearing
Jeffery	Individual	Support	No

<u>SB-2717</u> Submitted on: 2/5/2020 3:41:06 PM

Testimony for AEN on 2/5/2020 1:30:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing
Bailey Amato	Individual	Support	No

<u>SB-2717</u> Submitted on: 2/5/2020 3:48:16 PM

Testimony for AEN on 2/5/2020 1:30:00 PM



Submitted By	Organization	Position	Present at Hearing
Ann Petersen	Individual	Support	No