

SB489 SD1 RELATING TO SHARK AND RAY PROTECTION Senate Committee on Judiciary

February 22, 2019	9:00 a.m.	Room 016
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The Office of Hawaiian Affairs (OHA) <u>SUPPORTS</u> SB489 SD1, which would prohibit the killing, capturing, or otherwise harming of any shark or ray species 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 and ray species may hold special cultural significance for Native Hawaiians. For example, sharks and rays are recognized as kinolau for Kū and Kanaloa, and certain individuals and species can be regarded as 'aumakua by some families. Sharks and rays 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 shark and ray species in state waters.

OHA notes that sharks and rays 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.

Finally, OHA appreciates the inclusion of Hawaiian names for sharks and rays, specifically the use of manō (shark) and hīhīmanu, hāhālua, and hailepo (various words for rays) in the respective section titles of the measure. Such terminology reinforces the cultural value of these species and is consistent with the measure's purpose to expand protection to all species of rays.

Accordingly, OHA urges the Committee to **PASS** SB489 SD1. Mahalo nui for the opportunity to testify on this measure.

DAVID Y. IGE GOVERNOR OF HAWAII





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

ROBERT K. MASUDA

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

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

Friday, February 22, 2019 9:00 AM State Capitol, Conference Room 016

In consideration of SENATE BILL 489, SENATE DRAFT 1 RELATING TO SHARK AND RAY PROTECTION

Senate Bill 489, Senate Draft 1 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; expands the existing prohibition on knowingly capturing or killing a manta ray in state marine waters to apply to all rays and to also include knowingly taking, possessing, abusing, or entangling a ray; and provides certain exemptions. **The Department of Land and Natural Resources (Department) supports this measure and offers the following comments.**

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

The Department supports regulating the take of sharks and rays, and will implement this measure by adopting regulations through the administrative rulemaking process to evaluate and apply scientific management principles, give due consideration to public interests, and carefully craft language to avoid conflict with existing state and federal laws.

Thank you for the opportunity to comment on this measure.

Center for Hawaiian Sovereignty Studies 46-255 Kahuhipa St. Suite 1205 Kane'ohe, HI 96744 (808) 247-7942 Kenneth R. Conklin, Ph.D. Executive Director e-mail <u>Ken_Conklin@yahoo.com</u> Unity, Equality, Aloha for all



To: SENATE COMMITTEE ON JUDICIARY

For hearing Friday, February 22, 2019

Re: SB 489, SD1

RELATING TO SHARK AND RAY PROTECTION.

Establishes an offense of knowingly capturing, taking, possessing, abusing, entangling, or killing a shark in state marine waters, along with penalties and fines. Expands the existing prohibition on knowingly capturing or killing a manta ray in state marine waters to apply to all rays and to also include knowingly taking, possessing, abusing, or entangling a ray. Provides certain exemptions. (SD1)

TESTIMONY IN OPPOSITION, UNLESS THE BILL IS AMENDED TO ENSURE RACIAL EQUALITY IN THE PERMISSIVE EXEMPTIONS This bill provides good reasons why sharks and rays should be protected. The bill provides severe penalties for anyone who captures, kills, or takes a shark or ray within state waters.

The problem with this bill is that it contains language strongly implying that exceptions should be made only for members of one particular racial group. But those exceptions should not be based on race. The exceptions should be for the exercise of traditional or customary cultural or religious practices which were done by some native Hawaiians prior to 1778 but which are now done by some Hawaii residents of many races and cultures. The exceptions should be defined by cultural or religious practices regardless of the race of today's Hawaii residents who engage in those practices.

There are four places in this bill where the language should be amended to make the exceptions culture-based or religion-based rather than race-based.

Page 1, lines 16-17 should be amended to say "... valued figures in certain cultures or religions and are economically important ..."

Page 2 lines 7-8 should be amended to say "their value to specific cultural or religious practices;"

Page 5, section 2(f) lines 11-14 should be reworded to say "Nothing in this section shall be construed to restrict the exercise of traditional and customary cultural or religious practices engaged in by some native Hawaiians prior to 1778 which now are engaged in by Hawaii residents of various races, as protected by article XII, section 7, of the Hawaii State Constitution."

Page 7, section 3(f) should be reworded to say "Nothing in this section shall be construed to restrict the exercise of traditional and customary cultural or religious practices engaged in by some native Hawaiians prior to 1778 which now are engaged in by Hawaii residents of various races, as protected by article XII, section 7, of the Hawaii State Constitution."

The point of these amendments is that the exceptions should include all people regardless of race who are exercising practices which were traditionally and customarily engaged in by the native Hawaiians who lived in that ahupua'a prior to 1778.

Let me illustrate with an example. We know that in ancient times native Hawaiians, who were the entirety of the population in Hawaii, had the right to gather food and building materials from anywhere in the land controlled by their ali'i or konohiki, and also had the right to cross any land for the purpose of going to the ocean. Such rights were preserved after the Mahele, when royal patent deeds were awarded to create private ownership of land — but the gathering rights and shoreline access rights were preserved for the tenants (residents) of each ahupua'a. Those rights were race-neutral; i.e., every person (kanaka) who was a tenant (hoa'aina) had those rights regardless of race. Although such rights for hunting and fishing and gathering were probably not exercised very often by wealthy foreigners, there was no prohibition against them. The words "kanaka" and "hoa'aina" were race-neutral words not limited to people with native blood.

Today the laws of Hawaii recognize that all residents (hoa'aina), regardless of race, have the right to cross public lands as well as undeveloped or even partially developed private land to go to the beach. This right survives from ancient times right up to the present, for all residents regardless of race.

There are many residents of Hawaii whose heritage is from various Pacific island nations such as Samoa, Tonga, Marshall Islands who engage in Polynesian or Micronesian cultural practices, and should be allowed to continue doing so, even if they have no Hawaiian native ancestry. Likewise there are thousands of residents of Hawaii of Asian or Caucasian ancestry, with no Hawaiian native blood, who participate actively in hula halaus, for example, where their kumu hula might expect them to make their own sharkskin drums or sharktooth martial weapons.

So if this committee wishes to make an exception, then the exception should NOT be for people on account of their race, but rather should be for the traditional and customary activities formerly engaged in by native Hawaiians before 1778 but which are now engaged in by residents of all races. If you are unwilling to allow the exceptions for cultural activities regardless of race, then I believe the U.S. Constitution, 14th Amendment Equal Protection clause, requires you to entirely delete any exceptions based on culture or religion.

There is no good reason to make the exemption racial. The exemption should be based on preservation of historic skills or ongoing cultural or religious uses, regardless of race. Examples of acceptable circumstances for automatic exemption would include harvesting sharkskin for making a drum, or harvesting shark teeth to make an ornament for personal adornment or a replica of an ancient weapon for use in museum displays or school lessons.



The Nature Conservancy Hawai'i Program 923 Nu'uanu Avenue Honolulu, HI 96817

Testimony of The Nature Conservancy of Hawai'i Supporting SB 489 SD1 Relating to Shark and Ray Protection Senate Committee on Judiciary Friday, February 22, 2019, 9:00 AM, Room 016

The Nature Conservancy of Hawai'i is a non-profit conservation organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 preserves and work in over 30 coastal communities to help protect the near-shore reefs, waters and fisheries of the main Hawaiian Islands. We forge partnership with government, private parties and communities to protect forests and coral reefs for their ecological values and the many benefits they provide to people.

The Nature Conservancy supports SB 489 SD1 and the effective management of reef associated sharks by protecting them in the state waters of Hawai'i.

As drivers of highly productive nearshore marine ecosystems in Hawai'i, sharks represent keystone species, the removal of which has disproportionate impacts to coral reef ecosystems. Data demonstrating the vital role sharks fill as apex predators, derived in part from surveys conducted in the unfished waters of what is now the Papahānaumokuākea Marine National Monument (Friedlander and Demartini, 2002), confirms that intact apex predator populations increase the efficiency and productivity of coral reef ecosystems by removing unfit individuals from the population and exerting top-down pressure on prey species.

Rather than suppressing prey populations, shark predation selects for fast growing, healthy individuals. Further, research cruises in other coral reef archipelagos demonstrates that shark dominated apex predator biomass positively correlates to live coral cover (Sandin *et al.*, 2008), confirming the importance of sharks from an ecosystem perspective.

Reef associated species of sharks are slow growing and vulnerable to rapid over-exploitation based on their predatory behavior and territorial range from tens to hundreds of kilometers. Because they are disproportionately important members of healthy coral reef ecosystems, and more vulnerable to exploitation than many other marine species, sharks should be afforded special management considerations.

Wide-ranging species such as sharks are best managed by species-specific rather than place-based regulations. Laws that protect sharks from harvest are an important component of effective management for these keystone species. It is important not to dilute such regulations based on the public perception that sharks are dangerous or undesirable. There is no demonstrable evidence that intact shark populations correlate to increased danger for swimmers. Indeed, where sharks have been protected and reefs well managed, such as in Palau, these apex predators are important and iconic cultural, economic and ecological components of healthy coral reef communities

Friedlander AM, DeMartini EE (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. Mar Ecol Prog Ser 230:253–264. doi:10.3354/meps230253

Sandin SA, Smith JE, DeMartini EE, Dinsdale EA, Donner SD, et al (2008) Baselines and Degradation of Coral Reefs in the Northern Line Islands. PLoS ONE 3(2): e1548. doi:10.1371/journal.pone.0001548



OPPOSE SB489

The Hunting, Farming and Fishing Association opposes SB489 Relating TO SHARKS AND RAYS.

We oppose SB489 because the current regulations are more than adequate in the protection of Sharks in Hawaiian waters. The current regulations make it unlawful to possess, sell, offer for sale, trade, or distribute shark fins. Shark fin is defined as the raw or dried fin or tail or tail of a shark. It also states that it is unlawful to knowingly capture or kill a manta ray within state waters. Sharks were gathered by Hawaiians to eat and to make instruments of war, drums and other items needed. Upon the introduction of past regulations, there is no commercial fisheries nor an active catch that would reduce the number of sharks to justify these regulations. The current proposed regulations states that the value of tourism outweighs everything to include Hawaiian culture. This bill uses Hawaiian culture as a base for justification and criminalize all who harm sharks whether dead or alive.

We strongly oppose this bill because the justification in using Hawaiian culture as a base is not factual and the current regulations are adequate. We would support regulations allowing the people of Hawaii to capture sharks for food.

Mahalo,

Mala Alto

Makani Christensen

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 8:42:46 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ocean Ramsey	Testifying for One Ocean Conservation	Support	No

Comments:

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 9:04:02 PM Testimony for JDC on 2/22/2019 9:00:00 AM

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

Comments:

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 9:07:07 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Water Inspired	Testifying for One Ocean Diving	Support	No

Comments:

Please pass this to help save sharks and the ocean. We study sharks and see that their populations are in heavy decline and that many have hooks, fishing line, broken jaws, cut fins, and even bullet wounds. Sharks need more protection. Please pass this bill. Aloha

<u>SB-489-SD-1</u> Submitted on: 2/21/2019 7:48:01 AM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	Testifying for O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

<u>SB-489-SD-1</u>

Submitted on: 2/21/2019 8:25:27 AM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
One Ocean Conservation	Testifying for One Ocean Conservation	Support	No	

Comments:

Aloha Legislative Committees,

One Ocean Conservation strongly supports SB 489. Sharks are rays are a vital component of healthy marine ecosystems that have experienced rapid declines throughout the last decades. As apex predators sharks are at the top of the food chain, therefore maintaining 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 rays may alter size, structure and population parameters in response to changes in species abundance (Stevens et. al 2000).

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

The benefits of maintaining viable populations greatly outweigh any value that would be gained by killing these species. Sharks have very little functional protection here in Hawaii, and with shark populations dropping rapidly around the world the time for action is now.

5B-489-SD-1 Submitted on: 2/21/2019 Festimony for JDC on 2/2			LA	ЧЕ	
Submitted By	Organization	Testi Posit	-	Present a Hearing	
Jose Palazzo	Testifying for Divers for Sharks	Supp	oort	No	

Comments:

Honorable Legislators of Hawai'i,

Greetings from Brazil. I have the privilege to address you on behalf of Divers for Sharks, a global coalition of more than 150,000 people including dive businesss owners, professional and recreational divers, and ocean enthusiasts from 85 countries, with many supporters of course on the United States and particularly in Hawai'i.

We would like to offer our unconditional support to this landmark bill. As is well known, sharks are extremely important for the dive industry in Hawai'i and elsewhere in the world, not only because they are of particular interest for divers to watch, but also and manily becxause of their invaluable role in the health of our shared oceans. The decline of these top predators due to rampant overfishing, as has been widely documented in scientific literature, has a profound impact on marine ecosystems, threatening the delicate balance which not only maintains our industry but also ensures healthy fisheries and the provision of other ecosystem services associated with the sea.

We kindly ask you to consider the interests of the dive industry as you make progress on this matter, and in so doing we commend this bill for approval by this parliament.

Thank you.

José Truda Palazzo, Jr. for

Divers for Sharks

www.diversforsharks.com.br - www,facebook.com/diversforsharks - contato@diversforsharks.com.br



TO: The Honorable Chair, Karl Rhoades and Member of the Judiciary Committee

February 21, 2019

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 489 SD1; Relating to Shark and Ray Protection

On behalf of The Humane Society of the United States, Humane Society International and our members and supporters across Hawaii, we urge your support of SB 489 SD1 which would impose penalties for anyone who knowingly captures, takes or kills sharks or rays 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 and rays 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, 13 states have adopted similar measures following Hawaii's footstep. SB 489 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.
- With the growing interest and number of commercial tour operators involved in ray diving tours, this measure would ensure that protections are afforded to ray species. If enacted, with SB 489 Hawaii would establish another "first in the world" record by prohibiting the take, capture and killing of ray species in state waters.
- The number of shark and ray landings globally increased by 227% from 1950 to 2003.¹ 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. Five out of the seven most threatened Chondrichthyan species are rays.²

¹ IUCN Shark Specialist Group. Questions and Answers.

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

- 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 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 489 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 shark and rays, this measure would prevent consideration of ineffective mass culling efforts and those individuals who may target sharks due to misinformation. Cases involving cruelty against sharks in recent 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.
- Current law prohibits the take of *only giant oceanic* Manta Ray species. SB 489 would extend this protection to all species of rays in state waters (listed below), including Torpedo, Stingray, Devilray and Eagleray, Manta alfredi (reef manta ray) and Mobula tarapacana (sicklefin devilray).
- Rays are killed in massive numbers for their meat, gill rakers, gill plates, and fins (called "wings" and also used in shark fin soup) and traded worldwide. The significant increase in global demand for these parts poses a major threat to multiple species of vulnerable elasmobranchs.⁷ SB 489 would prevent any future trade in harvesting rays in the Hawaii state waters as we saw recently with the mass commercial harvesting of our sea cucumbers by international companies. DLNR has since prohibited commercial harvest of sea cucumbers.
- Sharks and rays share life history traits that make them particularly vulnerable to overexploitation and population collapse.⁸ 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".⁹

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

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. <u>https://www.huffingtonpost.com/2013/09/13/shark-torture-video-n_3922319.html</u>

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

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

⁸ Ebert, D.A. 2001. Sharks, Rays, and Chimaeras of California. University of California Press.

⁹ 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).

Thank you for the opportunity to testify on this important marine conservation issue. We urge swift passage of SB 489 SD1.

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

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

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

Sharks **Order Orectolobiformes Family Rhincodontidae** Whale shark, Rhincodon typus, VU **Order Carcharhiniformes Family Scyliorhinidae** Sponge-headed cat shark, Apristurus spongiceps, DD **Family Pseudotriakidae** False cat shark, Pseudotriakis microdon, DD **Family Carcharhinidae** Bignose shark, Carcharhinus altimus, DD Gray reef shark, Carcharhinus amblyrhynchos, NT Silky shark, Carcharhinus 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 **Ravs Order Torpediniformes Family Torpedinidae** Torpedo ray, Torpedo sp., DD or LC, depending on species **Order Myliobatiformes Family Plesiobatidae** Giant stingaree, Plesiobatis daviesi, LC Family Hexatrygonidae Sixgill stingray, Hexatrygon bickelli, LC Longnosed deepwater ray, Hexatrygon longirostra, IUCN uncertain whether separate species **Family Dasyatidae** Diamond stingray, Dasyatis dipterura, DD Brown stingray, Dasyatis lata, LC Pelagic stingray, Pteroplatytrygon violacea, LC Family Myliobatidae Spotted eagle ray, Aetobatus narinari, NT **Family Mobulidae**

Manta ray, *Manta birostris*, VU Spinetail devil ray, *Mobula japanica*, NT



February 20, 2019

Senator Karl Rhoads, Chair Senator Glenn Wakai, Vice Chair



COMMITTEE ON JUDICIARY

Hearing Date: February 22, 2019Hearing Time: 9:00AMRegarding: SB489 SD1 RELATING TO SHARK AND RAY PROTECTION

TESTIMONY IN OPPOSITION WITH AMENDMENTS of SB489 SD1

Aloha Honorable Chair Rhoads, Vice Chair Wakai and Members of the Committee on Judiciary,

HFACT is a not-for-profit, IRS 501c (5) organization, that advocates for small boat commercial, non-commercial, and recreational fishermen throughout Hawaii. HFACT board members sit on a number of international, regional, and federal fisheries management and endangered species advisory committees as well as state marine, coastal zone, and fisheries advisory committees and working groups; and, HFACT is thoroughly familiar with and participates in ocean and marine resource management in Hawaii and the western and central Pacific.

HFACT strongly suggests AMENDMENTS SB489.

This bill attempts to address protection of sharks and rays under one bill, however, the ecology, habitat, and human interaction are quite different. This bill should be split into two separate bills, one for sharks and one for rays. HFACT makes no comment regarding this bill regarding rays.

HFACT, however, have strong comments regarding sharks as there are already regulations on sharks. Hawaii Statutes already prohibits the possession of shark fins, thus killing of sharks for this purpose is already prohibited. Protections also already exist for the scalloped hammerhead shark and the oceanic white tip shark and a prohibition on killing these sharks exist. Fishermen in Hawaii have harvested the thresher shark, mako shark, and spiny dogfish for food for many generations. These sharks are not primary targeted species but are by-catch which may occur when fishing for other food fin fish. Fishermen do not waste sharks that are caught. These sharks enter the food stream in the local economy or are consumed by fishermen and their families. HFACT strongly urges that the committee amend the bill for food and bait use of sharks.

HFACT also wishes to provide comment that sharks, in general, including the most populous shark, the tiger shark, are very numerous in Hawaiian waters, and borders on being a problem for swimmers and ocean users. Any prohibition of killing of sharks will exasperate this problem. An over-population of tiger sharks need to be avoided. Rather than legislating a prohibition on sharks, the Department of Land and Natural Resources should be allowed to create rules, via the Chapter 91 process, to manage sharks utilizing the best available science.

Hawai'i Fishermen's Alliance for Conservation and Tradition, Inc. 75-796 Hiona Street, Holualoa HI 96725

It should also be noted that sharks are the primary predator of the endangered Hawaiian Monk Seal, and an increase in shark will be detrimental to Monk Seal recovery. Furthermore, sharks are the primary predator for newly born humpback whales. Increase in shark population from overprotection could cause a serious imbalance in the marine ecosystem.

HFACT wishes to emphasize that overfishing of sharks is not occurring. Harvest of sharks is very minor. HFACT is against any wanton waste of any marine resource. And, sharks are well managed under current existing law.

HFACT thanks the chair, vice-chair, and members of this committee for the opportunity to submit testimony.

Sincerely,

remande

Phil Fernandez President

The proposed vessel based Commercial Marine *Vessel* License (CMVL) is a practical solution and reduces the financial burden upon the vessel owner or captain as he would otherwise be required to pay the \$100 each for a CML for each crewmember instead of a single CMVL at a fee higher than an individual CML that will account for all crewmembers aboard also eliminating the universe of unnecessary CML holders and resultant paperwork.

However, HFACT offers the following amendments for your consideration.

 Delete the proposed language related to "<u>fishery and gear specific commercial licenses</u>" <u>S189-2 (a)</u>.

Reason: Commercial fishermen generally are required fish different fisheries with the changing fishery seasons and this proposed requirement becomes extremely burdensome for CML holders by having to obtain additional licenses for different fisheries and or gear types. Commercial fishermen fish for different species that requires different gear types throughout the year as Hawai`i's are seasonal by species and/or by rues. A CML or CMVL is sufficient as it requires any person who sells their catch, regardless of the fishery or gear type used, even if only one fish is sold.

2) Delete the proposed language relating to "<u>full-time and part-time commercial licenses</u>" in <u>S189-2 (a)</u>.

Example: A CML fisherman who supplements his social security income by fishing, experiences years when his fish sales are greater than his social security income while at other times less. He would not know whether or not he is a fulltime or part time fisherman until the end of a year. Similarly, a construction worker holding a CML, who is laid off and on during the course of a year, may decide to fish while being laid off and could also make more or less from fishing but he too would not know until the end of the year. HFACT understands that if a person decides to sell his catch he is required to hold a CML and/or a CMVL.

3) Delete the proposed language "<u>or guide</u>" in S189-2 (c).

Reason: The term "guide" is unnecessary as any individual who sells any portion of his catch, he is required to hold a CML or CMVL.

Thank you Chairs Gabbard and Kahele, Vice-chairs Ruderman and Keith-Agaran, and committee members for this opportunity to provide testimony on this critically important matter that can affect the future of our fisheries, fishing and boating communities, traditional fishing rights and marine resource conservation and management.

Sincerely,

Jemande

Phil Fernandez President

Hawai'i Fishermen's Alliance for Conservation and Tradition, Inc. 75-796 Hiona Street, Holualoa HI 96725



<u>SB-489-SD-1</u> Submitted on: 2/21/2019 2:32:11 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Victoria LEBRUN	Testifying for Titi Conservation Alliance	Support	No

Comments:

On behalf of Titi Conservation Alliance, NGO from Costa Rica, we support this bill for the well being of Oceans ecosystems and our planet.

Thank you for taking it in consideration,

Victoria Lebrun and Titi Conservation Alliance Team



<u>SB-489-SD-1</u> Submitted on: 2/21/2019 11:05:07 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ann S Freed	Testifying for Hawaii Women's Coalition	Support	No

Comments:



Aloha Chair Rhoads, Vice Chair Wakai and members,

We are support our transgendered sisters and brothers on this issue. Please pass.

Mahalo

Ann S. Freed, Co-Chair, Hawaii Women's Coalition

<u>SB-489-SD-1</u>

Submitted on: 2/19/2019 3:16:14 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Douglas Perrine	Individual	Support	No

Comments:

Over the years, continuing to the present day I have seen a number of incidents of sharks and rays killed or tormented and injured for no apparent purpose, and without any intent to consume any of the animal victimized. Sharks and rays are generally not considered food in Hawaii, and are revered by many. They grow slowly, mature late, and reproduce in limited numbers and therefore cannot sustain significant amounts of artificial mortality. Sadly, most sharks I see swimming wild in Hawaiian waters are carrying fishing gear, which impacts their health and survival. The Hawaiian stingray is an endemic species, found only in Hawaii, yet is rarely seen in our waters. Protection for our own native ray, and all other species of rays and sharks in Hawaiian waters is long overdue. Some species (e.g. oceanic whitetip shark) have already suffered greater than 90% declines in abundance. Sharks are apex predators that influence the entire food web beneath them. To maintain a healthy marine ecosystem, it is important that we act now.

<u>SB-489-SD-1</u> Submitted on: 2/19/2019 3:37:43 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Don McLeish	Individual	Support	No

Comments:

The rays and sharks are not part of our food stock and need to be protected so they can fill their roles in the ocean environment. They are also a great lure for snorkelers and divers who come to the islands to see such fish.

<u>SB-489-SD-1</u> Submitted on: 2/19/2019 3:45:15 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Russell Worman	Individual	Support	No

Comments:

Sharks and rays are a very important part of the health of the ecosystem for Hawaii's reefs. They are also very important draw for diving tourists like me. Coming face to face with a Hammerhead of the Kona coast in 2008 was life changing experience for my family. Please support this bill for the sharks, rays, indigenous peoples and visitors to the Aloha state as well. Thank you,

Russell Worman

SB-489-SD-1

Submitted on: 2/19/2019 5:50:25 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Marc Hughes	Individual	Support	No

Comments:

I teach marine conservation at local schools using underwater

videos and photos to inform students of the importance of protecting rays and sharks.

I have seen populations of these animals dwindle in the 25 years I have been diving in Hawaii.

Longlining and other detrimental types of fishing of these animals has taken a toll on the survivability of these species in Hawaiian waters. Wether as bycatch or intentional fishing/killing of these animals there are pressures put on their populations that threaten their existence in Hawaii.

i personally have taken many photographs of fishhooks in the mouths of Tiger, Oceanic Whitetip and Reef sharks. I have also photographed rays with various body parts ripped off from fishing lines. We as humans are killing or mutilating more of these animals than is sustainable for a healthy population. Their value as participants in a healthy marine ecosystem and ecotourism is far greater than monetary compensation for a few individuals that threaten their survival. I am a UH graduate with degrees in Marine science and Conservation biology and have been a witness to the pressures put on sharks and rays in Hawaii for many years. Please understand they are a symbol of Hawaiian Culture and are as important as the Sea turtles and Nene which tourists and locals alike have come to know as being synonymous with the beauty and spirit of Hawaii and its inhabitants! Pass this bill to protect these animals so the keiki of tomorrow may be able to witness the mana of these creatures first hand and not just read about them as a historical animal we had a chance to save but didn't prioritize!

<u>SB-489-SD-1</u> Submitted on: 2/19/2019 6:28:31 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Pecoraro	Individual	Support	No

Comments:

These measures are necessary to help protect the environment by preserving the natural order. With 90% of some populations already depleted, steps must be taken to protect the remaining populations.

<u>SB-489-SD-1</u> Submitted on: 2/19/2019 7:38:40 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Carissa	Individual	Comments	No

Comments:

These animals are an important part of our ecosystem and are critical to ocean cleanliness. Killing, harassing, or mistreating them should be forbidden. Their survival is pertinent to our survival too, in many ways. Economy, food, clean oceans all can be determined by whether they live or die. A quick buck now could mean massive devastation later.

<u>SB-489-SD-1</u> Submitted on: 2/19/2019 10:51:46 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Cynthia Urry	Individual	Support	No

Comments:

I support this bill so our sharks and rays will be protected .

<u>SB-489-SD-1</u>

Submitted on: 2/20/2019 10:10:16 AM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kalamakahi Crabbe	Individual	Support	Yes

Comments:

Aloha my name is Kalamakahi Crabbe and I am a 7th grader at SEEQS public charter school. I am in STROUNG SUPPORT of SB 489 because this provides more awareness and care for marine life. We look at these animals as a scary predator, but in reality they help protect our marine ecosystem to balance out over population of fish. If we hunt them and hurt them we will do no good as people. Also I am a hawaiian and even though they are not my amakua they are some other ohana's amakua so if we kill there family that doesn't bring happiness or safety it brings moarn and saddness. We as people just need to be cautious because we are entering there home and if we disturb them they will lash out they are wild. So if we can just bring awareness to sharks and rays that would be so amazing and helpful. Thank you and Mahalo for your time!

Sincerley,

Kalamakahi Crabbe

SB-489-SD-1

Submitted on: 2/20/2019 11:56:59 AM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kimi Makaiau	Individual	Oppose	No

Comments:

I oppose HB808 and SB489 that prohibits, establishes criminal penalties, and establishes administrative fines for any person who knowingly captures, takes, possesses, abuses, entangles, or kills any shark within state marine waters. I recognize the important role sharks and rays play in maintaining healthy marine ecosystems and appreciate the intent of the bill, but cannot support it in its current form.

As a fisherwoman my family and I rely upon the ocean for sustenance, recreation, and livelihood. We do not support the take of sharks unnecessarily or for pleasure. There are certain species of shark that we do capture as bycatch and occasionally keep for personal consumption. This bill does not provide any scientific support for its need. I feel there can be other ways to achieve the desired goals than to criminalize responsible fishers. These management measures can be better attained through the administrative rulemaking process and not thru legislative action.

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 6:15:36 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Darrell Tanaka	Individual	Oppose	No

Comments:

in opposition with recomendation for amendment....fishermen catch and eat certain species of shark, please consider the dlnr's amended testimony, its a good compromise. thank you.

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 6:35:37 PM Testimony for JDC on 2/22/2019 9:00:00 AM

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

Comments:

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 7:52:11 PM Testimony for JDC on 2/22/2019 9:00:00 AM

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

Comments:

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 7:56:52 PM Testimony for JDC on 2/22/2019 9:00:00 AM

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

Comments:

Aloha Senators,

If SB489 SD1 passes in its form it will criminalize me. I was taught to use sharks for bait and also for food. Where do I fit in when it comes down to "Cultural Practices"? Please take this into consideration.

Mahalo,

Klayton Kubo

Waimea, Kaua'i

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 8:53:46 PM Testimony for JDC on 2/22/2019 9:00:00 AM

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

Comments:

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 9:04:45 PM Testimony for JDC on 2/22/2019 9:00:00 AM

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

Comments:

I support SB489 SD1 and I hope you will, too. Let's make Hawaii a leader in shark and conservation worldwide by giving them better protection in our waters! Mahalo for your consideration.

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 9:08:12 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nadine Lane	Individual	Support	No

Comments:

Please help keep this part of the Hawaiian culture alive and protect sharks and rays.

<u>SB-489-SD-1</u> Submitted on: 2/20/2019 10:13:11 PM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Michelle Bennett	Individual	Support	No

Comments:

Hawaii has taken many difference strides in being a leader for improving our environment from the shark fin ban to banning harmful chemicals in sunscreens. Florida has just made stricter laws regarding shark fishing and if a place known for shark fishing like Florida can make it safer for humans and sharks, then here in Hawaii, where there is a natural and cultural respect for sharks, it only makes sense we protect these critically important animals as well!

Thank you so much for reading and considering this testimony as well as the bill!

SB-489-SD-1

Submitted on: 2/21/2019 8:51:46 AM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Blake Thompson	Individual	Support	No

Comments:

Aloha Legislative Committees,

I strongly support SB 489. Sharks and rays are extremely important to ocean ecosystems. As ocean predators near the top of the food chain, sharks keep the ecosystem balanced, regulate populations of other marine life, and ensure healthy fish stock and reefs. Sharks and rays are more vulnerable than most other fish species. They are long-lived and slow-growing, start reproducing at an advanced age, and produce relatively few offspring per year. If the food chain is disrupted by a decline in the shark population, it affects the entire ocean ecosystem, known as a trophic cascade. Protection for sharks and rays ultimately means healthier, more resilient oceans and reefs that are better able to withstand other pressures on the ocean ecosystem from climate change and pollution.

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 and rays 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 and rays in Hawaiian waters for their ecological, economic, and intrinsic value. 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.

SB-489-SD-1
Submitted on: 2/21/2019 9:56:00 AM
Testimony for JDC on 2/22/2019 9:00:00 AMLATE
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Submitted By	Organization	Position	Hearing
Bitsa Burger	Individual	Support	No

Comments:

Shark "finning," the brutal technique of cutting the fin off of a shark and throwing the animal back in the water to bleed to death, was banned in Hawaii in 2010. Sadly, the barbaric practice continues on the black market. "Big game" nighttime excursions target sharks off the coast of Oahu and other islands. These hunting practices target sharks ruthlessly and indiscriminately.

Protection of sharks and rays is important to folks all around the world. Aside from the horror of such brutality, just in itself -- which fact alone should be enough!! -- a main draw to the islands is ocean recreation and tourism surrounding awe-inspiring sharks and rays. What words & images do Hawaiins really want to be the first that come to anyone's mind when they think of visiting the islands? An abundance of awe-inspiring ocean life... or the brutal slaughtering of endangered sea creatures?!

Honolulu decision makers have already received hundreds of support letters and phone calls from around the country, mobilizing activists and inspiring the bill to gain steam. SB489 would be the first of its kind in the USA and set precedent for similar, comprehensive legislation in other states. Please, for the sake of all of us, be Leaders in the fight to protect the wonders of our oceans!

SB-489-SD-1
Submitted on: 2/21/2019 9:56:27 AM
Testimony for JDC on 2/22/2019 9:00:00 AMImage: Constraint of the second sec

Comments:

Sharks and rays are a pillar of oceanic ecosystems that have a legacy of hundreds of millions of years. In just a few decades many shark and ray populations have plummeted to mere fractions of their former value. When I think of the Hawaiian islands situated within the vast Pacific ocean, I can only imagine the pristine reef and a pelagic habitats that surround it. Marine life is a huge draw for tourists looking for an experience of a lifetime, and what iconic species can deliver an experience better than sharks and rays? A bill like this is incredibly important because it shows people the government is aware of the problems sharks and rays are facing and is finally doing something about it. If we let there be a free for all in the oceans it is likely we'll see mass extinctions in the coming decades. We need the firm protection of law to maintain Hawaii's waters as beautiful thriving marine ecosystems.

Please support and put into law SB489. Saving the major animal and marine life predators are crucial to saving all animal and marine life. I've never been to Hawaii but it has been a lifelong dream of mine to one day go the islands and surf and scuba dive and take in the all the beauty of the Hawaiian islands. They are one the one world's most special places and I feel I can say that with confidence even though I've never been there. Please keep it special and the waters around the islands clean, health and abundant with marine life.

Thank you,

Christopher Dill Los Angeles, California



<u>SB-489-SD-1</u> Submitted on: 2/21/2019 11:20:18 AM Testimony for JDC on 2/22/2019 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Ruhee Baltz	Individual	Support	No

Comments:

Please enforce the strongest protections as possible for sharks and rays. People around the world care about these species and we all have a duty to protect and save them. They already face many threats - millions are killed every year and many species are in danger of extinction. Protection for sharks and rays ultimately means healthier, more resilient oceans and reefs that are better able to withstand other pressures on the ocean ecosystem from climate change and pollution. They are a vital part of the ecosytem and should be allowed to live in peace and protected from harm.

<u>SB-489-SD-1</u> Submitted on: 2/21/2019 5:13:02 PM Testimony for JDC on 2/22/2019 9:00:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Mark M Giese	Individual	Support	No

Comments:

Please support SB489 and Help Pass Legislation to Protect Sharks and Rays in Hawaiian Waters.

Thank you.



Submitted By	Organization	Testifier Position	Present at Hearing
Paula Zerzan	Individual	Support	No

Comments:

The protection of sharks and rays is important to folks all around the world. I've vacationed in HI multiple times, and a main draw to the islands is ocean recreation, healthy oceans, and sea-dwelling creatures such as awe-inspiring sharks and rays.

SB489 would be the first legislation of its kind in the USA and set precedent for similar, comprehensive legislation in other states.

Shark "finning," the brutal technique of cutting the fin off of a shark and throwing the animal back in the water to bleed to death, was banned in Hawaii in 2010. Sadly, the barbaric practice continues on the black market. "Big game" nighttime excursions target sharks off the coast of Oahu and other islands. These hunting practices target sharks ruthlessly and indiscriminately. Please pass this vital legislation to end these barbaric practices.



<u>SB-489-SD-1</u> Submitted on: 2/22/2019 6:24:42 AM Testimony for JDC on 2/22/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Balazs	Individual	Support	No

Comments:



<u>SB-489-SD-1</u> Submitted on: 2/22/2019 7:00:55 AM Testimony for JDC on 2/22/2019 9:00:00 AM

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

Comments:

Dear Honorable Committee Members:

Please support SB489. Sharks and rays are keystone species and by protecting them you protect the marine ecosystem.

Thank you for the opportunity to present my testimony.

Sincerely,

Andrea Quinn

Kihei