



THE HUMANE SOCIETY
OF THE UNITED STATES



HUMANE SOCIETY
INTERNATIONAL

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To: Senate Ways & Means Committee
Senator Roz Baker, Chair
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From: The Humane Society of the United States / Humane Society International
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Washington, DC 20037 USA

SB 3225 SD1: In Support with amendments - Relating to Fishing - Ornamental Fish Collection

The Humane Society of the United States (HSUS/HSI), this nation's largest animal protection organization, with more than 10.8 million members and constituents, including 46,243 in Hawaii, and The HSUS/HSI's international arm, Humane Society International (HSI), support SB 3225 SD1 with amendments.

The global trade in live wild animals as pets—including live fish for display in home aquaria— involves hundreds of millions of animals every year. The trade threatens the survival of wild populations and causes unacceptable treatment of the animals. This thriving industry feeds on consumer demand for rare and beautiful animals. From monkeys, tigers, and small carnivores, to exotic birds such as parrots, to reptiles and amphibians, to fish, few species are safe from this demand.

The global trade in marine fish involves between 20 and 24 million individual animals, 99 percent of whom are wild-caught (Wabnitz et al. 2003). The U.S. Coral Reef Task Force has recognized that U.S. demand for aquarium species can threaten the sustainability of coral reef species and ecosystems (U.S. Coral Reef Task Force 2000). In this, the International Year of the Coral Reef, established by the International Coral Reef Initiative, it is fitting that Hawaii is re-examining its control over this destructive trade.

The HSUS/HSI opposes the keeping of wild animals as pets. By “wild” we mean any species that has not been domesticated by selective breeding for certain traits that make them appropriate companion animals, whether they are bred in captivity or taken directly from the wild.

Keeping wild animals as pets is inhumane. For wild-caught animals, one concern is that the means by which they are captured and transported to consumers cause unacceptable levels of injury and mortality. Those animals who survive the journey from the wild to the living room may fare no better. Wild animals are difficult to care for in a home environment. In many cases, the husbandry needs are unknown or impossible to meet. Many wild animals are sold as newborns or juveniles; as they grow to maturity they become difficult and dangerous to keep. As a result, wild animals suffer and die from malnourishment, neglect, and abuse in captivity.

High levels of mortality of marine fish in the aquaria trade, associated with inadequate handling and transport, have been widely recognized as a problem (Wabnitz et al 2003). One study demonstrated mortality rates of fish from Sri Lanka to the United Kingdom of 15 percent during and immediately after collection, 10 percent during transit, and 5 percent in holding facilities (Wood 1985). This means that 30 percent of the fish collected died before reaching the market. Once in a home aquarium, mortality rates continue to climb due to inadequate husbandry. The industry treats fish like cut flowers to be displayed until they die (often of starvation), then discarded and replaced.

The wild-caught fish trade is cruel, wasteful, and destructive to Hawaii’s biological diversity. The husbandry needs of some of the most popular fish exported from Hawaii—such as butterflyfish (*Chaetodon* spp.) who must eat coral or the cleaner wrasses (*Labroides* spp.) who must eat ectoparasites and other materials such as mucous from the bodies of other fish—simply cannot be met in captivity. Experts on captive husbandry of marine fish have created lists of commonly traded species categorized by their suitability for maintenance in aquaria, such as one that created five categories ranging from species that are “almost impossible to keep and should be left on the reef” to those that are “very hardy with almost all individuals readily acclimatizing to aquarium conditions” (Michael 1999 in Wabnitz et al. 2003). Among the species that are most commonly exported from Hawaii, the Hawaiian cleaner wrasse (*Labroides phthirophagus*) and the ornate butterflyfish (*Chaetodon ornatissimus*) are considered to be “almost impossible to keep and should be left on the reef” due to their restricted diets. The fourspot butterflyfish (*Chaetodon quadrimaculatus*) and the multiband butterflyfish (*Chaetodon multicinctus*) are also among the top ten species collected in Hawaii, and as coral feeding specialists are unlikely to be suitable for long-term maintenance in home aquaria. Indeed, another author’s list of species for “the beginner [hobbyist] to avoid” includes many taxa that are among the most commonly exported species from Hawaii: all butterflyfishes (Family Chaetodontidae), Achilles tang (*Acanthurus achilles*), and Moorish idol (*Zanclus cornutus*) (Paletta 2001). Collection and export of specimens that have virtually no chance of survival in the home aquaria should cease.

Collection of animals from the wild for the pet trade is harmful to wild populations. There are many examples of wild populations that have been decimated by over-collection to supply the exotic pet trade including the slow lorises of Southeast Asia (*Nycticebus* spp.), the hyacinth macaw of South America (*Anodorhynchus hyacinthinus*) of Central and South America, and the radiated tortoise of Madagascar (*Geochelone radiata*). Among marine fish species that are threatened by collection for the aquaria trade are the Banggai cardinalfish of Indonesia (*Pterapogon kauderni*), the scribbled angelfish of Australia and Papua New Guinea (*Chaetodontoplus duboulayi*), and the mandarin fish of The Phillipines (*Synchiropus splendidus*). In Hawaii, researchers have raised concerns about the collection of uncommon or rare species for the trade including Tinker’s butterflyfish (*Chaetodon tinkeri*), the Hawaiian turkeyfish (*Pterois sphex*) and the flame angelfish (*Centropyge loricula*).

There are many problems with the current management of collection of fish for export from Hawaii. The number of fish exported from Hawaii annually is unknown. In 1995 the official export figure was 422,823 according to the Department of Land and Natural Resources (DLNR). However, this figure was based on reports filed by only 40 percent of people permitted or licensed to export fish, and therefore is believed to significantly underestimate the actual number of fish exported (Boggiatto et al. 2004). The fact that 60 percent of permit and license holders

disregard the requirement to provide monthly catch reports to DLNR apparently without consequence is of concern. The lack of such basic information as the number of fish exported on a species-specific basis does not allow effective management.

Although allowed by law, Hawaii's DLNR has not adopted regulations that limit the number of fish collected by each permit holder (a bag limit), size limits, open and closed seasons, or other common management tools adopted by other jurisdictions that export marine fish for the aquaria trade, such as Florida. The DLNR requires collectors to have permits, and commercial collectors to have licenses, but the nearly 200 permit holders can collect any number of fish of any species. They can also collect fish anywhere with the exception of Marine Life Conservation Districts, and Fish Replenishment Areas established in 2000 on the west coast of Hawaii island. As a result, although the industry is regulated in the sense that permits are issued, except as noted in the previous sentence, there is no management system being applied that would ensure that wild populations are not harmed by levels of collection. This is troubling given the apparent high level of trade.

There is ample scientific and anecdotal evidence that the level of collection of marine fish for the home aquaria trade has had significant detrimental impacts on wild fish populations in Hawaii. Research has established that collection of fish for the aquarium trade is a major source of overfishing on the island of Hawaii (Tissot 1999; Tissot and Hallacher 2003); in one study, seven of ten fish species targeted by collectors were found to be significantly reduced in abundance (*ibid*). Anecdotally, independent divers and dive tour operators have been reporting declines in fish abundance for at least the past decade; and many testified in favor of SB 3225. Although every area where collection occurs has not been studied in order to scientifically determine the impact of collection on the abundance of species, this should not be used as an excuse for inaction. When it comes to extractive wildlife use, precaution should be applied in cases of scientific uncertainty in order to protect species from over-exploitation.

In addition to concerns about the sustainability of collection and the survival of collected species, current aquarium collection practices in Hawaii raise significant concerns about the effects of aquarium collection on Hawaii's valuable coral reef ecosystems. Among the top Hawaiian exports are the yellow tang (*Zebrasoma flavescens*), kole (*Ctenochaetus strigosus*), chevron tang (*Ctenochaetus hawaiiensis*), Achilles tang (*Acanthurus achilles*), and clown tang (*Naso lituratus*), all of which are important herbivorous species that have experienced significant population declines in areas where fish are collected for export. Herbivorous fish play a crucial role in reef ecosystems by preventing algae to outcompete living corals. On other reefs around the world, overfishing of herbivores has resulted in ecosystem shifts in which corals and other important reef-dwelling benthic invertebrates become smothered by overabundant fleshy algae.

Destructive collection techniques are also of concern. Collectors in Hawaii have been observed breaking coral to capture fish and even using bleach, both of which are illegal (Tissot and Hallacher 2003).

Given these serious concerns, The HSUS/HSI urges the state of Hawaii to adopt a moratorium on the commercial collection and export of marine fish, or at least the establishment of bag limits as was proposed in the original version of this bill. We note that there was tremendous support for

the original version of this bill from many individuals, community groups, and businesses and community leaders in Hawaii.

The HSUS/HSI nonetheless supports the amended bill, SB 3225 SD1, because, if enacted, it would lead to the establishment of extensive areas where collecting will be prohibited. The program in West Hawaii on which this approach builds has shown high levels of community support and success in increasing the abundance of collected species within the fish replenishment areas (Tissot et al. 2004). In the first five years, seven out of the ten most heavily collected species (representing 94 percent of all collected fish) had increased in density in the fish replenishment areas (Walsh et al. 2004).

We respectfully make the following recommendations to amend SB 3225 SD1:

- An interim Fish Replenishment Area (FRA) should be established for South Maui from Kahekeli Park south to Ahihi Keanou. This would span an open area between two existing management areas, and would encompass less than the 30 percent of Maui's shoreline. Olowalu south past Ukumehame is all finger coral and could be a prime recovery area if protected.
- An interim FRA should be established for Oahu covering all of Kane'ohe Bay, where there has been massive coral destruction and local citizen concern.
- A limited entry program should be established for all islands as drafted by the West Hawaii Fisheries Council and DLNR's Division of Aquatic Resources, with the following changes: a) there will be no exceptions to the limited entry program for those licensed and permitted collectors outside West Hawaii; b) permits will be non-transferable; c) permits will be non-renewable outside West Hawaii.
- An interim no-take list should be established, effective immediately, to include all species known to die in transit or soon after that are difficult to keep alive once in captivity. This interim no-take list shall be replaced by a permanent no-take list once studies are undertaken to develop that list.
- Permits should be valid only on the island for which they are issued.
- Fines for collecting marine species in violation of any of the terms of this Act should be at least: \$50/fish for the 1st offense, \$100/fish for the 2nd offense, \$200/fish for the 3rd offense, permit revoked on the 4th offense.
- Catch reports should be verified with unannounced on-site inspections and permits revoked if reports are not filed in the previous month.
- Funds for the implementation of these provisions should be derived from taxes or fees on the industry (the "users pay principle"). Users should pass these costs on to consumers.

Thank you for this opportunity to provide testimony on SB 3225 SD1.

References Cited:

- Boggiatto, K, Rieser, A., Moffie, K. and L. Paul. 2004. *The Marine Aquarium Trade in the Western Hemisphere and the Indo-Pacific Region: Impacts on Coral Reef Ecosystems and a Summary of Governing Legal Instruments and Policy Options*. Hawaii Audubon Society, Honolulu, Hawaii.
- Michael, C. 1999. *Marine Fishes. 500+ Essential-to-Know Aquarium Species*. Microcosm Ltd.
- Paletta, M.S. 2001. *The New Marine Aquarium: Step-by-Step Setup and Stocking Guide*. T.F.H. Publications, Inc., Neptune City, New Jersey.
- Tissot, B., 1999. Adaptive management of aquarium fish collection in Hawaii. *SPC Live Reef Fish Information Bulletin* 6: 16-19.
- Tissot, B.N. and L.E. Hallacher. 2003 Effects of aquarium collectors on coral reef fishes in Kona, Hawaii. *Conservation Biology* 17:1759-1768
- Tissot, B.N., Walsh, W. and L. E. Hallacher. 2004. Evaluating the effectiveness of a marine reserve network in Hawaii to increase the productivity of an aquarium fishery. *Pacific Science* 58(2): 175-188.
- U.S. Coral Reef Task Force 2000. *The National Action Plan to Conserve Coral Reefs*.
- Wabnitz, C., Taylor, M., Green, E. and T. Razak. 2003. *From Ocean to Aquarium: The Global Trade in Marine Ornamental Species*. UNEP World Conservation Monitoring Center.
- Walsh, W. J., B. N. Tissot and L. E. Hallacher. 2004. *A report on the findings and recommendations of effectiveness of the West Hawai`i regional fishery management area*. Report to the 23rd Hawaii Legislature. 38 pp.
- Wood, E. 1985. *Exploitation of Coral Reef Fishes for the Aquarium Trade*. Marine Conservation Society, Ross-on-Wye, UK. (cited in Wabnitz 2003)