

HCR 347, RELATING TO ORNAMENTAL REEF FISHERY INDUSTRY
House Committee on Water, Land, Ocean Resources & Hawaiian
Affairs

March 24, 2008

10:30 a.m.

Room: 312

The Office of Hawaiian Affairs <u>SUPPORTS</u>, with amendments, H.C.R. 347, which urges the Department of Land and Natural Resources to proceed immediately with the adoption of rules to regulate the ornamental reef fishery industry in south Maui and Käneÿohe Bay.

One of the threats that is currently endangering the health of Hawaiÿi's marine ecosystems is the unregulated collection of reef fish for aquariums. OHA realizes that this problematic practice is not effectively regulated and enforced. As such, there is a dire need to address this problem, and OHA sees this bill as a step in the right direction.

A 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation by the U.S. Fish and Wildlife Service shows that wildlife watching is increasing in this State, and so too is the revenue we generate from it. In 2006, Hawaiÿi's wildlife was given an estimated value of \$402.3 million, and wildlife-watching spending has almost increased 50 percent since 2001. Our coral reefs play a large and valuable part in this. For example, Hanauma Bay saw 1 million visitors in 2006.

Therefore, OHA requests that this resolution be amended to increase the geographic limitations of south Maui and Käneÿohe Bay that are proposed. OHA suggests that if rules are to be promulgated, then it would be prudent to do them on a more statewide basis. This would also be more efficient in terms of time and money. The issue of collecting species for aquariums is an important one (as demonstrated by the barrage of requests for the Legislature to take action) for the entire State, and these reef species are not solely affected in the two areas that this bill addresses.

In addition, we ask that the resolution be amended to include language that states that the proposed rules will not conflict with the West Hawaiÿi Fisheries Council's rules, which were created, with much effort and good faith, by that community to protect the area's marine resources. These rules have been a shining example of effective resource management created through

### LATE TESTIMONY

healthy community collaboration and mutual respect of competing users of the nearshore resource. Moreover, we suggest that the proposed ornamental reef fishery industry rules actually reflect the West Hawaiÿi Fisheries Council's rules. We encourage the DLNR to reach out to the public and encourage community participation in the adoption of these rules.

As such, OHA urges the Committee to PASS H.C.R. 347, taking the above requests into account. Mahalo for the opportunity to testify.

**From:** Ron Tubbs [mailto:rtmb@hawaiiantel.net]

Sent: Tuesday, March 25, 2008 12:41 AM

To: WLHtestimony

**Subject:** Testimony HCR 347 and HR 312 10:30 am room 312 3-24-08

Respectfully submitted by:

Ron Tubbs, B.S., N.D. Eight years at University of Hawaii with education in Ecology, Demographics, Marine Biology, Nutrition and Biochemistry. Tropical fish diver and wholesaler.

Questions? Please call: 259-9997

IN SUPPORT OF HCR 347 AND HR 288

## **AQUARIUM FISH**

The aquarium fish industry has been a sustainable industry for over 50 years and fish counts and catch reports <u>confirm</u> proof of its sustainability. The \$3 million study of FRAs and non-FRAs off Kona provide more proof of Hawaii's sustainable aquarium fish industry. There is only one aquarium fish diver on Maui. Maui <u>experiences</u> no impact from aquarium fish collecting. Rich ecological preservationists from Maui are behind this bill not the DNLR, the Coral Reef Assessment and Monitor Program ("CRAMP"), National Oceanic and Atmospheric Administration ("NOAA"), most marine biologists or the fishermen.

Aquarium fish hobbyists spend a lot of money to keep the fish they buy healthy and happy. Enriched foods, controlled environments, medications and lack of predators greatly increase the lifespan of fish. Breeders are successfully breeding many species caught in Hawaii and may become future main suppliers for Hawaiian indigenous fish. Local fish have been kept alive for as long as twelve years in aquariums while this same fish normally could survive in the wild for only a couple years. Eels, sharks, etc. constantly prey on the fish day and night. Tropical fish divers get paid only when they deliver live healthy fish so prudent collection is the only way to make money in the business.

Eco groups say fish collectors <u>have no regulations</u> and can take as many fish as they want. That is simply not <u>a true statement</u>. Aquarium fish taking is highly regulated and the collectors must answer to Fish and Wildlife, DNLR enforcement, Department of Agriculture and the USDA.

## TROPICAL FISH

There is so much misinformation regarding tropical fish collecting that it would take many more pages to cover it all. For the above bill let us examine a number of issues. Eco groups claim nine million fish are taken from Hawaiian waters every year. This is not even close to the tropical fish association's estimates that approximately 250,000 fish

are taken per year for the whole <u>State and it</u> is less than the fry for one breeding pair at one spawning.

Tropical fish require veterinarian inspections when shipped to certain areas. Health and quality of fish are ultimately everything. Size limits, preserves, marine protected areas ("MPAs") and nearly 100 laws regulate tropical fish collecting – not to mention, in addition to those restrictions, environmental issues such as weather, surf and accessibility restrict diving greatly.

There are at most 60 divers in all of Hawaii who collect tropical fish. The 60 divers are split about evenly between Oahu and Kailua Kona. Around 200 are licensed but dive rarely if at all. There are far more ex-tropical fish divers with permits than current divers. Most of these divers have side jobs or cannot dive full time due to weather restrictions. Collectors rotate their spots and have been in business for as long as 40 years. Tropical fish collectors make money from long-term diving the same rotated areas. Due to decompression limits a diver can cover at most 50 square feet per dive with a limit of two to four dives a day. Tropical fish divers average 60 feet deep. Air supply limits them to 40 minutes a dive.

Fish are very smart and avoid the net – having just one run at the net-before they become net wise and avoid it. Divers go out just a few days a week. Fish run from the divers and hide in spaces like coral, artificial reefs, rocks, etc., preventing the capture of most fish in any area. Big breeders take up too much space in the catch bucket so abundant smaller fish are caught. Most small fish do not reach adulthood due to predators and food supply. In the long run, overall populations are not impacted. It would be impossible to catch all the fish from one area. Divers have a financial interest in leaving breeders to increase the populations and rotating spots insures future money from diving.

Eels are predators which eat a lot of fish. Tropical fish collectors do not take many eels because they are not very marketable and they are also very very abundant.

## FRA CLOSURES

FRA'S do not have any scientific foundation as research shows fish return right back to the reef they were spawned from. Old scientific research and ecology groups are missinformed on this subject! Oahu and Maui have much less divable area making them poor candidates for 30% FRA closures. The Big Island has vast areas and the 30% closure there left enough area for rotating fishing spots. Potters angels just had a large bloom in population on our west shores. More potters have been seen in the past two years than reportedly have been seen in twenty years. Potters are found on every island in the Hawaiian Islands and are less abundant in some places like Kona. See fish catch reports comparison of the DNLR. Cleaner wrasse due to their parasite cleaning and reef health benefits are a concern but like the potters they are very abundant. The taking of all coralvores (who eat live coral and consume a lot of coral every year) may be banned, but such a ban defies all logic when it is supposedly the year of the reef. We really need

clarification on what species <u>we are referring</u> to when <u>we discuss</u> "coralvores." Tropical fish collectors do not take many coralvores as they do poorly in noncoral aquariums.

### **ECONOMICS**

Many jobs will be lost and the economy of Hawaii will suffer as a result of this legislation. Nearly half the cost of getting a fish to market is for air freight. My business alone spends \$140,000 a year to Aloha and Hawaiian Airlines. The other airlines' revenue from my business is approximately \$208,000 annually, in addition to the effect this legislation will have on air freight revenue from nine other wholesalers like me. Add to the air freight revenue the revenue my business gives to box suppliers of amounting to close to \$60,000 a year. Loss of jobs could run as high as 60 divers, 120 workers in direct packing, and an unknown number of aquarium maintenance and support business workers. This is an astronomical number of lost jobs before attention is even drawn to those businesses the fish are sold to and their employees.

# Hawaii has 28 million square feet of divable ocean.

Marine fish are the <u>very effective</u> little ambassadors from Hawaii who help promote tourism. Many collectors spend substantial sums of money to come see Hawaii's fish. Hawaii's marine fish have a worldwide reputation for beauty and quality. Dive charters and tropical fish groups <u>coexist</u> for the most part and fish collecting divers avoid tourist spots. Introducers of this bill take tour groups to preserves like Molokini, Haunama Bay and Sharks Cove – all preserves never visited by tropical fish divers.

Demographic studies have shown that in the future many of our global, nonrenewable resources such as oil and minerals will be depleted as the world population increases, leaving states to rely more on their own resources. In years to come, it will be crucial for Hawaii to rely more on its own renewable marine resources. Restricting access to marine resources without complete <u>deliberation</u> of the impact this bill would have on the future of Hawaii's fishermen and the economy of the <u>State</u> would be a huge mistake. To maintain our economy we must utilize our renewable resources with wisdom.

At face value these bills seem to be a good idea to protect the marine resources of Hawaii, but upon closer evaluation the bills pose a serious risk to our marine resources. Our <u>State</u> has the strictest laws in the United States which protect our marine resources. Many reserves have already been established. Gill net regulations are now in effect. The need to rush into a law hastily drafted and not thought out is unnecessary and could result in serious problems.

#### **SUSTAINABILITY**

Marine fish are the most renewable natural resource because they are the most efficient breeders on the planet. Many species can spread or lay several hundred thousand to half a million eggs at one breeding ("Marine Biology" a text, 5th edition by Peter Castro and

Michael Hubner). Most of Hawaii's fish species are broadcast breeders repopulating wide areas and are found throughout the South Pacific. Most fish can reach breeding size in one year and breed once to twice a year. Large overpopulation fish blooms occur all the time – in 2003 a very large population occurred in the Aweoweo: yellow tang, Moorish idols and potters angels. Reports of this bloom were reported in the news and media. Yellow tang populations are out of control in MPAs of Kailua Kona and counts are up 48% (DNLR testimony at the last hearing stated the yellow tang population was up 90% in FRAs and 70% in non FRAs) causing the decline of other species due to food supply (http://cramp.wcc.hawaii.edu/) and the DNLR website.

Species of significant interest are fish which for population or breeding purposes should be protected. The fish species listed by West Hawaii Councel and DNLR as no catch make no sense at all. Puffers and boxfish are not only extremely abundant but they are poisonous and cannot be mixed with other fish. Puffers and boxfish are rarely used for aquarium purposes. Researchers from the University of Hawaii Hilo and the DNLR catch reports show potters angels populations in great shape. (This was a species to be banned by the original bill). Potters angels just had a large bloom in population on our west shores. More potters angels have been seen in the past two years than anyone has seen in ten years. Potters angels are found on every island in the Hawaiian Islands and are less abundant in some places like Kona. Now even Kona counts are up. See fish catch reports comparison of the DNLR. Cleaner wrasse due to their parasite cleaning and reef health benefits are a concern but like the potters angels, they are very abundant. It is the year of the reef but stop the taking of all coralvores? Coralvores eat live coral and consume a lot of coral every year. Coralvores (what species are we talking about anyway-we need clarification on this). Tropical fish collectors do not take many coralvores as they do poorly in noncoral aquariums.

The vast majority of the Hawaiian Island shores are untouched by fishing and diving. High surf in the winter closes northern shores of all islands for many months. Summer surf affects southern shores. High winds from the east for most of the year shut down eastern shores for diving. Poor accessibility to many areas due to distance, and lack of harbors and roads, ensure these areas will remain untouched. More than 90% of Hawaii is not impacted by fishing! Almost all of Hawaiian waters receive periods of "no catch" due to weather and inaccessibility. Mother Nature has already made sure that untouched areas are in place and will remain that way.

The ocean covers most of this planet with fish outnumbering any other species on earth. Hawaii has over 4,508 square miles of divable ocean. Hawaii's corals grow three to five inches per year—growth that is dependent on sunlight and depth. Only very near shore reefs in run off areas with little current are in decline; see (http://cramp.wcc.hawaii.edu/) study of Kaneohe and Maui. Hawaii's reef fish do not eat seaweeds which grow as a result of Eutrophication-runoff. There is over 6 feet deep of new coral in many of Kaneohe Bays reefs that were dredged in the 1940's. One hundred million tons of coral have been dredged from Kaneohe after Pearl Harbor attack in preparation for world war two. Most Harbors in Hawaii are being dredged on a regular basis because coral growth is so quick. CRAMP website has one study of removing coral from a channel in Maui

due to too much coral. Waikiki aquarium sells its growing coral (seven inch per year) to others all the time. Special permits are needed for Waikiki aquarium to sell coral. Most of the Hawaiian Islands are untouched by tropical fish collecting. Collecting is limited to patches on the Kailua Kona coast (30% of which is protected by MPAs and West and South shores of Oahu. Some patches of other areas are fished occasionally. To shut down tropical fish diving areas by 30% would have a big impact on the industry which is already sustainable! Eighty five percent of the Big Island, almost all Maui, all Molokai, all Kahoolawe, all lanai, all Molokai, 50% Oahu, all Kauai, all Niihau and the northwest Hawaiian Islands are not fished by tropical fish divers. 2001 and 2002 Great annual fish counts conducted on several islands (www.reef.org) showed an increase of fish in areas counted by 2% to 23% for most species showing an overall increase in State's fish populations. The DNLR \$3 million MPAs study showed an increase there as well (some species declined in counts there due to overpopulation-species crowding-ecosystems can only support a certain population). University of Hawaii fish counts in Kaneohe Bay show fish increases and fish counts at all artificial reefs like the YO57 ship off Waikiki show increased fish counts. DNLR has done a great job placing artificial reefs around Oahu and needs to continue this practice. Habitat increases fish counts! There is no scientific data showing population scarcity from tropical fish collecting. No fish in Hawaii has become extinct!

Fishermen, divers, net layers and others working in the fishing industries have long used the common practice of rotating their fishing spots which research has proved reduces the impact of fishing in one area. Rotating has been used by the <u>State</u> in the Diamond Head reserve where only every other year fishing is allowed. Fish are a renewable resource. Fish can live for 15 years or longer and may breed many times a year. Fry and adult breeding stages are important for the perpetuation of the species. Fish may reach adult size within a few months. Ecosystems can support <u>only</u> a specific population of fish, and fishing, like hunting, can help perpetuate the health of the species. If you reduce the area for fishing, you increase the impact on the unrestricted areas. Fisherman from NW Hawaiian Islands closure will now be impacting unprotected areas more! No environmental impact study was done for this closure!!

More populated and accessible areas will be targeted by this bill. This will put a great strain on the higher impact areas that are unrestricted. The damage could be great. Certain species live in a narrow ecosystem, and it is conceivable that if the wrong zones are chosen extinction of certain species will occur. For instance, the Chevron Tang is restricted to certain areas on the Kona coast. Mauiensis shell is only found in West Maui. Population increases and increased demands on our <u>States</u> resources will occur. This bill is not the answer to managing our marine resources.

The Big Island had a similar bill pass that closed large portions of the Kona Coast. The areas closed were near large resorts. This was beneficial to tourism, but detrimental to the fishing business. Many fishing businesses there have gone out of business! Those remaining have seen a reduction in income. Many native Hawaiians can not fish in areas used by their ancestors. Tourism is very important to our Hawaiian economy, but so are our marine resources. We must use our renewable marine resources in a sustainable way,

not chop off the hand that feeds us. Many jobs are at stake. Loss of jobs will create a heavier burden on the State's financial resources. Competition from Indonesia, Mediterranean and other third world countries have decreased Hawaii fish sales dramatically.

The <u>DNLR</u> has made many a mistakes in the past, let's not contribute to another one. DNLR and the State introduced Blueline Snappers into Hawaiian waters for the fishermen. These fish are predators, have spread throughout the islands, causing imbalances in certain fish populations. Blue spotted groupers are another introduced predator species. The University of Hawaii brought in Korean bubble algae and gorilla ogo to Coconut Island where they were released into the bay and smothered huge areas of coral growth. The <u>State</u> dredged 100 million cubic tons of coral from Kaneohe Bay in 1942, in preparation for World War II. Much of the ten-foot dredged areas has six feet of coral growth since then. Hundreds of dredging channels for harbors have been done by the <u>State</u>. Sewage, garbage and old ships have been dumped by the <u>State</u>. The State of Hawaii is the biggest offender of our marine resources. Although the intentions of the DNLR and the <u>State</u> were good, in all of these cases damage was done. It would be another mistake in passing these bills.

Marine preserves need to be rotated with open periods to decrease impact on nonpreserve areas.

Changing laws to protect breeder sizes and not to target them as the laws do now could be a great help. Though only a few breeding pairs are needed to repopulate a reef. With one million to 5 million fry at one spawning and the return of nearly 60% to the place of spawning we do not need to limit all larger breeding pairs from fishing. Some adult breeders are what we need to protect. All tropical fish divers know if you leave some breeders areas will repopulate quickly. Removing laws which protect very abundant species like convict tangs (six inch min. take limit) and blue line snapper (invasive species) which are over populated and squeeze out other species food supplies. Use fishermen to aid in population growth with incentives to remove invasive species. Promote blueline snapper as a good eating fish for local markets. Survival of the fittest ensures healthy abundant reefs for our future.

Hawaii's ocean resources need to be managed and developed for a sustainable future. Sustainable means harvesting our vast marine resources in a renewable way. This does not mean closing one third of all oceans which is a near sided protection point of view.

Please feel free to respond to this email with any questions or comments. Fish counts and documentation can be supplied to support up the above facts upon request. The synopsis is we can have a sustainable tropical fish industry with no significant impact and this potential law would kill the future of this business.

## Testimony in Support of HCR 347 and HR 288

Hawaii Tropical Fish Association R. T. Distributors Inc. Adam Snodgrass Kona, Hawaii 96795 Ph./FX (808) 259-9997 Email rtmb@hawaiiantel.net 3-24-08 10:30 am room 312 whise committee

Resolutions HCR 347 and HR 288 are greatly needed to correct a process which allowed legislators to be lied to. (SB3225) was based on highly biased, unscientific information and lies. In the name of ecology, the tourist snorkeling industry led a campaign to shut down Hawaii's tropical aquarium fish industry with several forms of a hastily drawn bill.

HCR 347 and HR 288 will rectify the lies associated with the user conflicts:

- It was reported that 9 million Aquarium fish are taken from Hawaii's waters annually. The truth is approximately 250,000 fish are taken annually. Hawaii Tropical Fish Association-(HTFA) numbers and DNLR estimates are higher due to statistically adjusted for non reporting but are close to HTFA numbers. No where near 9 million!
- Ecology groups have run daily TV commercials claiming 75% of all fish are gone from Hawaii's waters. The true scientific statement was that 75% of the world's oceans have been impacted by man's activities.
- Maui groups say most of the fish are gone and tropical fish divers
  took them. The truth: The great American Fish Count-sponsored by
  and done with some of the same groups who oppose tropical fish
  showed an <u>increase</u> in numbers of identified species on all Islands.
  Even though the counts were done by amateurs and thus not
  scientific they are still useful. DNLR Bill Walsh's fish count analysis
  study, revealed inexperienced people cannot count the fish
  correctly, that their counts are too low because they cannot identify
  fish correctly. Thus the counts should actually be higher.

Their were so many lies from groups and individuals trying to protect fish at all cost, even to the point of perpetuating lies in numerous media adds, We must slow down, assess the issues and logically and scientifically address the future of our oceans.

HCR 347 and HR 288 will provide for a rational decision-making process coordinated by DLNR that will address the user conflicts between the tourist snorkeling industry and the aquarium fish industry within an ecologically sound, least-biased, factual context aimed at perpetuating not lies, but the sustainability of Hawaii's ocean resources upon which all parties depend.