tgi Kauai's newspaper since 1901
THE GARDEN ISLAND

Kapu

Aquarium permits pau

Court orders aquarium fishing permits illegal and invalid statewide

Contributed file photo by Robert Winter

These multi-band butterfly fish live on reefs and are a species collected by the aquarium trade.

Posted: Saturday, October 28, 2017 1:45 am
Jessica Else - The Garden Island | **4 comments**

HONOLULU — Aquarium fishing permits in Hawaii are now invalid and illegal, due to a Friday Oahu Circuit Court ruling by Judge Jeffrey Crabtree.

That applies to existing permits for use of fine mesh nets to catch aquatic life for aquarium purposes.

It's another step in a long legal battle that began in 2012 between the state Department of Land and Natural Resources and the environmental law firm Earthjustice.

"The department respects Judge Crabtree's ruling and will fully comply so long as it remains in effect," DLNR spokeswoman Deborah Ward said in a news release about the decision on Friday.

Earthjustice is representing several plaintiffs and sued DLNR for failing to comply with the Hawaii Environmental Policy Act and study environmental impacts before issuing aquarium collection permits.

The concern is too many fish are being taken from Hawaii's reefs.

Crabtree also ordered DLNR not to issue any new permits pending environmental review.

And while DLNR representatives are honoring the decision, they said the department doesn't fully agree with the ruling.

"The department continues to believe that existing aquarium fishing practices are sustainable and environmentally sound," Ward said in the release. "The department appreciates that dozens of local businesses and families depend on the industry for their livelihoods."

Currently there are 231 active commercial collection permits in Hawaii, according to DLNR. Earthjustice representatives say their plaintiffs are concerned that too many fish and other wildlife are being taken without regulation.

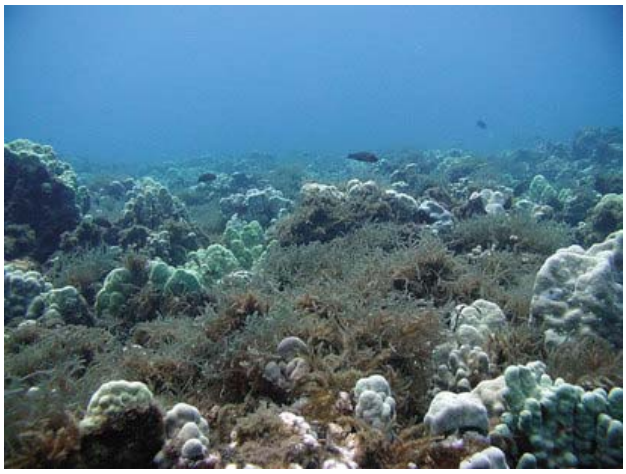
“We asked the court to order the halting of commercial collection under existing permits because, given DLNR’s historical refusal to acknowledge the aquarium trade’s impacts, plaintiffs have no faith DLNR will take any action to prevent the ongoing illegal collection on its own,” said Earthjustice attorney Summer Kupau-Odo, who represents the plaintiffs.

Hopeful signs of reef recovery emerging in North Kaanapali

October 12, 2017
BY RUSSELL SPARKS • Hawaii Department of Land and Natural Resources, Division of Aquatic Resources , Lahaina News

KAANAPALI - In 2009, a novel form of fisheries management officially went into effect along an approximately two-mile section of the north Kaanapali coastline in West Maui.

This area - the Kahekili Herbivore Fisheries Management Area (KHFMA) - is the first place in Hawaii where fish stocks are managed with the specific goal of improving the health and resiliency of the coral reef itself, not just the fish.



Leading up to the establishment of the KHFMA, state monitoring results showed that coral cover in the reefs along this section of coastline had declined dramatically and that reefs were periodically overgrown by blooms of seaweed. The condition of the reef was particularly concerning in 2005 and 2006, when dense summer blooms of the alien seaweed Acanthophora spicifera appeared to be accelerating the ongoing declines in coral cover.

Survey data from this time showed that the herbivore fish biomass - which takes into account the total number of fishes and their sizes - within the area was low compared to similar habitats around other parts of Maui, particularly compared to marine reserves where fishes are protected from harvest.

Since January of 2008, the state Division of Aquatic Resources has partnered with, first, the University of Hawaii, and then the National Oceanic & Atmospheric Administration's Pacific Islands Fisheries Science Center to conduct comprehensive monitoring of the coral reef areas within what is now the KHFMA. Those surveys involve detailed fish and habitat surveys conducted twice per year within the KHFMA and in some nearby areas just outside of the reserve boundaries.

Results of these assessments are very promising. At the end of 2016, seven years following the management area designation, there were clear signs that important grazing fishes are increasing in size and numbers.

Parrotfishes have shown a nearly 170 percent increase in biomass (total weight of parrotfish per square meter of habitat), and surgeonfishes have experienced a more moderate 24 percent increase in biomass.

More importantly, however, the substrate, or surface of the reef base, appears to be changing in some critical ways.

The mats of seaweed and the covering of algal turf (fuzzy covering of small filamentous seaweeds) that once dominated the area have been replaced by large areas of crustose coralline algae (the purple and pink crusts of calcified seaweed). Corals tend to thrive in areas of high crustose algae.

Juvenile corals prefer to settle on reefs with high crustose algal cover, and corals also tend to grow faster when they are not competing for space with thick algal turfs and seaweeds. Living coral cover has been slower to respond.

The good news, however, is that the earlier declines in coral cover have stopped, and there are signs of recovery. Corals grow relatively slowly, so recovery takes time, but the positive impacts of herbivore protection at the KHFMA have greatly improved conditions for local corals to thrive.

Maui residents and visitors will have the opportunity to learn more about the KHFMA at the annual Ridge to Reef Rendezvous, a free, family-friendly community event featuring food, fun, music and prizes. The event will include a Keiki Fishing Tournament, a scavenger hunt for all ages and a Haunted Reef to explore.

Come learn more about this important management area and other actions being taken both in the water and on land to help protect the coral reefs of West Maui and throughout the state - and how you can get involved!

The theme of this year's event is "Ocean Optimism." Join scientists, managers and local conservation groups on Oct. 28 at Kahekili Beach Park (Old Airport Beach) in North Kaanapali from 9 a.m. to noon (note that the Keiki Fishing Tournament's start time is 8 a.m.).

Join us for additional events leading up to the Ridge to Reef Rendezvous, including a Science Night focused on water quality at Kohola Brewery on Wednesday, Oct. 25, at 6:30 p.m. (ages 21 and up), and a special screening of the award-winning film "Chasing Coral," followed by a Q&A panel of reef researchers, starting at 6 p.m. at Whalers Village on Friday, Oct. 27.

For more information, visit www.facebook.com/WestMauiKumuwai or call (808) 283-1631.

The New York Times | https://nyti.ms/2iMp2Wo

Loss of Federal Protections May Imperil Pacific Reefs, Scientists Warn

Fisheries officials call the marine national monuments unnecessary, and their boundaries are said to be under review by the Trump administration.

By CHRISTOPHER PALA OCT. 30, 2017

HONOLULU — Terry Kerby has been piloting deep-sea submarines for four decades, but nothing prepared him for the devastation he observed recently on several underwater mountains called seamounts in the middle of the Pacific Ocean.

"It was a biological desert," he said. Where normally fish and crabs dart about forests of coral and sponges, "all we could can see was a parking lot full of nets and lines, with no life at all."

Mr. Kerby and Brendan Roark, a geographer at Texas A&M University, are comparing seamounts that have been fished to those in pristine, protected areas. This month, they surveyed the upper reaches of four seamounts, one of which, Hancock, lies inside Papahānaumokuākea Marine National Monument, which includes the Northwestern Hawaiian Islands.

They knew that the seamounts had been fished by trawlers and coral harvesters at some point. "But the extent of the devastation and the huge amount of gear that was abandoned on the bottom were shocking for both of us," he said.

Among the casualties littering the seabed were 10-foot-tall black corals that can live over 4,000 years, among the oldest forms of life on earth.

“Allowing fishing in the few protected seamounts left would be a huge mistake,” said Dr. Roark.

It’s a sentiment widely shared among marine ecologists.

The Trump administration is considering rolling back federal protections for 10 national monuments, including two in the central Pacific. The Pacific Remote Islands National Marine Monument and the Rose Atoll National Marine Monument protect the waters around a handful of islands, most uninhabited, to the south of the Hawaiian Islands.

The shore reefs of the islands have long been protected from commercial fishing; the monument designations extended that protection to 50 miles from shore in some cases and 200 miles in others.

According to a memo obtained by The Washington Post in September, Interior Secretary Ryan Zinke has recommended that the designations of the Pacific Remote Islands and the Rose Atoll be amended “to allow commercial fishing.” (A similar recommendation was made for another marine monument, the Northeast Canyons and Seamounts, off the coast of New England.)

The memo did not mention the largest marine reserve: Papahānaumokuākea, a string of mostly uninhabited atolls and reefs that have been largely undisturbed since World War II. At about 583,000 square miles, it is the largest protected area on the planet. (Industry officials in Hawaii are pressing for commercial fishing to be allowed there, too.)

Many scientists see these marine reserves as among the last rich, untouched ecosystems where they can study the effects of climate change in isolation from the impacts of overfishing or pollution.

The fishing industry here in Hawaii sees it differently. A driving force behind the administration’s reconsideration is an obscure but powerful quasi-governmental organization called the Western Pacific Fishery Management Council, or Wespac,

based in Honolulu. The council has jurisdiction over the waters where 140 long-line vessels based in Hawaii — as well as a handful in American Samoa — fish mostly for tuna and billfish.

Wespac has argued that limits on catch, gear and fishing seasons are the best tools to regulate fishing and to ensure that the Pacific yields the maximum sustainable harvests. Over the years, the council has strongly opposed the creation and expansions of each of the marine monuments.

This year, the council has embraced a new slogan: “Make America Great Again: Return U.S. fishermen to U.S. waters.” In a presentation to members of the other fisheries councils in February, Wespac officials claimed the marine monuments “curtailed economic growth” and “compromised national food security.”

Ray Hilborn, a fisheries expert at the University of Washington and a scientific adviser to Wespac, argues that tuna and billfish are highly migratory and travel in and out of the reserves. “The monuments just force the fishermen to go farther and spend more fuel to catch the same fish,” he said in an interview. “It’s a fake protection.”

Asked whether Wespac sought to reintroduce fishing only in monument waters or also in near-shore reefs, Kitty Simonds, the longtime executive director, said in an email that the council also would review “the management measures that were in place before the monument designation and may recommend changes.”

The fishing industry in Hawaii is hardly in trouble, several experts noted. Indeed, the Hawaii fleet’s bigeye tuna catch has doubled since 2006, even though half of America’s Pacific waters are now off-limits to fishing.

Robert Richmond, a marine ecologist at the University of Hawaii, pointed out that the Hawaii fleet filled its yearly quota of bigeye in August this year, “so they obviously don’t need more space to fish. They’re just against all protected areas on principle.”

Over 500 million people depend on reefs for protein, Dr. Richmond said, and they already yield far less than they could if they were sustainably fished. Reef

ecosystems may become even less productive as the ocean gets warmer and more acidic.

Dr. Richmond and other scientists also took issue with Dr. Hilborn's criticism of marine monuments. They say the reserves serve as havens for species depleted elsewhere and for populations migrating away from the Equator, where warming waters are lowering plankton density.

"The fisheries benefits of marine reserves are now beyond doubt," Callum Roberts, a marine conservation biologist at the University of York, said in an email. "They allow fish populations to grow back and spill fish into surrounding waters, they pour fountains of offspring into ocean currents that seed fisheries, and they provide resilience to environmental shocks."

The tools favored by fisheries officials target a few species to the neglect of others, he added, while "reserve benefits reach entire ecosystems."

One of the islands on Mr. Zinke's list is Palmyra, an atoll that lies 1,000 miles south of Hawaii and is part of the Pacific Remote Islands National Marine Monument. The Nature Conservancy has been running a marine lab there since 2005, the only site with housing and a runway for small aircraft located in one of the most untouched tropical marine ecosystems in the world.

With 170 inches of rain a year — compared with 37 in Seattle — Palmyra also has a dense rain forest where 11 species of seabirds nest. Discoveries made there include a surprising link between fish and seabirds: a study found that nesting birds' droppings carried onto the reef by the rain stimulated plankton growth that attracted manta rays and other plankton feeders.

Other research has shown that the classic picture of a coral reef, with lots of pretty little fish and a few big ones, is entirely artificial. Palmyra's reefs, like those in the other monuments, are dominated by sharks, snappers, jacks and other top predators, while smaller prey cower in fear in holes in the coral, a study found.

So interconnected are the elements of intact reef communities that allowing fishing just beyond 12 miles would disrupt the ecosystem, said Alan Friedlander, a

marine ecologist at the University of Hawaii and chief scientist of the National Geographic Society's Pristine Seas project.

"You need to keep the fishing as far away as possible, ideally at 200 miles," said Dr. Friedlander.

Moreover, the remote locations are difficult to police. Many of the denizens of intact tropical reefs, like humphead parrotfish and wrasses, are worth thousands of dollars in Asia, said Dr. Richmond.

"Fishing them sustainably, as Wespac proposes, would mean traveling very long distances from Hawaii and taking very few fish," he said. "It wouldn't be economical." Dr. Richmond predicted that fishing vessels "would poach the heck out of those islands."

Daniel Pauly, a prominent fisheries scientist at the University of British Columbia, says that given a chance, the value of the bigger reserves like those around Wake and Johnston atolls and Jarvis Island, which extend to 200 miles offshore, will increase over time.

Why? Evolution.

Research by Jonathan A. Mee, a fish geneticist at Mount Royal University in Calgary, Alberta, suggests that in any large marine reserve, some "lazy" fish will spend their whole lives inside the boundaries and therefore will not be caught — and the bigger the reserve, the more fish inside it will live longer.

This will raise the number of what scientists call B.O.F.F.s (Big Old Fecund Females), which produce more eggs and eggs of better quality, further increasing the density of fish inside the reserve. Dr. Mee believes that evolutionary selection of a putative "lazy" gene would accelerate the population growth inside a reserve.

"The bigger the mortality outside the reserve, the faster the population inside will grow," Dr. Mee said in an interview.

This would be particularly helpful for bigeye tuna, which is the mainstay of the sushi market and the principal target of the Hawaii long-line fleet. The population of

bigeye in the central and western Pacific is now estimated to be 16 percent of its original size.

“Technology and subsidies have allowed industrial fleets to go farther and farther, and deeper and deeper, and to deplete stock after stock,” said Dr. Pauly, who has shown that the global catch is steadily falling.

“The only thing standing between these fleets and global depletion are these big no-take reserves, so this is the time to create more, not to open up the existing ones to fishing.”

Alex David Rogers, a conservation biologist and seamount expert at Oxford University, estimated that worldwide there were about 16,000 seamounts with summits above 5,000 feet, shallow enough to harbor a rich diversity of fish and corals. Unfortunately, he said, most have already been fished.

Still, those seamounts in the Papahānaumokuākea and Pacific Remote Islands marine monuments remain mostly pristine, said Chris Yesson, an expert on ocean floors at the Zoological Society of London.

“Saving the ones in the American marine monuments is extremely important, because the NW Pacific is particularly rich in endemic corals and other marine life,” Dr. Rogers wrote in an email.

Paul Achitoff, managing attorney for Earthjustice’s mid-Pacific office in Honolulu, said many legal scholars had concluded that the Antiquities Act, which allows presidents to designate and protect monuments without congressional approval, is a one-way street.

“It does not allow presidents to remove restrictions or protections from a previously designated monument,” he said in an interview. “Only Congress can do that.”

He acknowledged that several presidents had changed monument boundaries and tweaked restrictions without court challenges.

That may change soon. “If any of the protections to the Pacific marine monuments are lifted, we will be filing lawsuits, and we expect to win,” Mr. Achitoff said.

A version of this article appears in print on October 31, 2017, on Page D1 of the New York edition with the headline: Unsettled Waters.

Waves eat away part of Kamehameha Hwy., forming potentially hazardous hole

Published: Monday, September 4th 2017, 9:13 pm HST
Updated: Monday, September 4th 2017, 10:04 pm HST

By Allyson Blair, Reporter CONNECT

HAUULA, OAHU (HawaiiNewsNow) - Not far from the Kim Taylor Reece Gallery in Hauula is a newly formed hole several feet deep in the makai lane of Kamehameha Highway.

From below, you can see where waves have gnawed into underside of the asphalt.

"On high tide the water comes up from the ocean here and splashes and come through the road and out to the yellow line," area resident Derrick Pressley said.

Pressley lives across the street. He says until recently, all of the erosion was happening on the shoulder. Now he's worried about how fast the lane is starting to disappear.

"I've emailed DOT three times and I've heard nothing back. No response. I'm really concerned about the liability. The hole is getting larger. Motorist can't see it. It's dangerous. It's going to hurt somebody," said Pressley.

Traffic engineering expert Panos Prevedouros agrees.

"It's a major risk. The pavement is undermined so it can collapse in a small or large degree, to which I don't know, at any time," said Prevedouros.

Prevedouros says the road needs immediate repair. In the meantime drivers shouldn't be allowed anywhere near the undermined asphalt.

"Everything in that area seems to be completely eroded. Therefore even the crash guard that looks to be okay. Although it has some rust on the backside. It may be structurally compromised," said Prevedouros.

We asked the Department of Transportation what it's doing to fix the problems in the area. A spokesperson sent us this statement:

> *HDOT is aware of the erosion issues on Kamehameha Highway in Hauula. Crews monitor the area regularly. We are researching options to protect the highway, while also being sensitive to environmental concerns. We will continue working with DLNR regarding how it is addressing sea level rise statewide. All long term solutions are expensive and must consider the potential relocation of the roadway, which has multiple impacts.*

It is unclear if or when state crews will do anything to address the hole.