

The NCMC

MARINE BULLETIN

No. 132

Spring 2011

AIM HIGH

Inside this issue:

- Ocean View - Many Happy Returns 2
- A Weak Hook and a Prayer?: Longline Closures, Alternative Gears Offer More Promise for Reducing Bluefin Bycatch 3
- ASMFC Acts to Reduce Striped Bass Mortality 6
- NGOs Respond To NOAA's Draft Aquaculture Policy 8

ASMFC TARGETS REBUILDING MENHADEN

"Nothing improves your aim like having a target." - Aristotle

The interstate panel responsible for conserving Atlantic menhaden, at once both the highest volume commercial fishery and arguably the most valuable prey fish on the east coast, is finally moving in the right direction. A year ago, the Atlantic States Marine Fisheries Commission acknowledged that menhaden abundance is too low, intensifying competition between the fisheries and numerous marine predators, a battle that striped bass, osprey and other dependent species are losing. This March, the 15-state commission took another step toward an ecosystems approach to managing menhaden for the future, while initiating action to increase abundance in the short term.

The ASMFC's Menhaden Management Board voted to initiate Addendum V to its Interstate Fishery Management Plan. The purpose of the addendum is to improve stock productivity and increase abundance from current levels, using a new overfishing threshold of 15% MSP (maximum spawning potential). The addendum will include a suite of management measures to achieve a new target reference point. The board failed to specify options for a new target, however,

a range of possible targets will be included in the addendum approved for public comment in August.

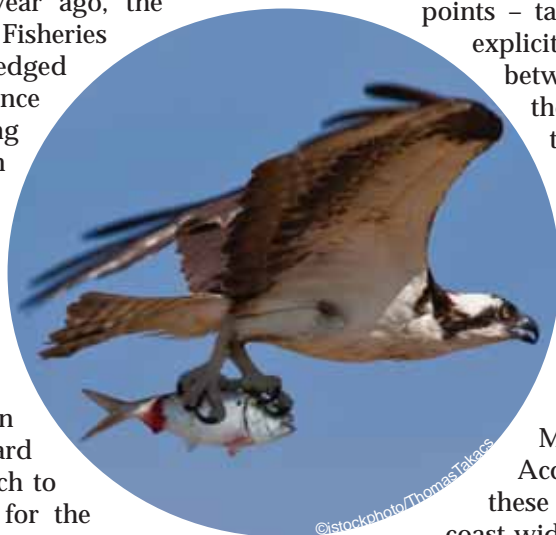
Recognizing this is an interim action, the ASMFC tasked scientists from the commission's menhaden and multispecies technical committees with continuing work on an ecosystems approach, using a multispecies model that better accounts for predation. The menhaden board also agreed on the need to establish ecosystem management goals to assist in developing ecological reference points - targets and limits set to explicitly allocate menhaden between the fisheries and the ecosystem - for long-term decision-making.

"This addendum has the potential to provide a number of conservation benefits for menhaden," says Ken Hinman, president of the National Coalition for Marine Conservation. According to Hinman, these are: the first Atlantic coast-wide catch limits; an end to overfishing; a substantial increase in abundance, which would increase available forage for menhaden predators and improve chances for good recruitment under favorable environmental conditions; and clear ecosystem goals to guide future management.

TARGETS AND THRESHOLDS

Current menhaden management rules call for rebuilding the population to the target level whenever the overfishing threshold level is exceeded. Since

continued on page 6



Plus:

- See page 5 for the latest on NCMC's recent travels.
- Take Marlin Off the Menu campaign updates, page 7



MANY HAPPY RETURNS

The Magnuson-Stevens Act, the national law governing ocean fishing enacted in 1976, turns 35 this year. We just turned 38. You could say we grew up together.

When the National Coalition for Marine Conservation was born, in 1973, what was to become the Magnuson Act was still a twinkle in Congress' eye. One of our first goals as an organization was to make sure it wasn't a wink. Too many fishermen wanted to draw a line in the water 200 miles from shore, kick the foreigners out, and make it an all-American party. As fishermen too, we wanted more.

"The entire *raison d'être* of a 200 mile bill," we wrote back in 1975, "is to provide sufficient 'responsibility and authority' to establish a management regime for those marine resources which would otherwise be irrationally exploited." By then, NCMC officers and directors had testified before congressional committees nine times. We advocated for regional management, balanced user-group representation, fishery management plans, and a new concept called optimum yield that would consider social, economic and, we insisted, ecological factors.

Our fisheries management system today is the product of a 35-year investment in the Act. We've made improvements over the years, responding to our changing needs and our growing knowledge. The NCMC has been a part of every important change.

Foreign and domestic fishing for "highly migratory" tunas was exempted from the original law, along with its bycatch of swordfish and billfish. We closed that loophole in 1990. In 1996, we put together a unique alliance of fishermen and environmentalists and together we strengthened the Act to require rebuilding plans for overfished stocks tied to ambitious timetables. Reducing bycatch in all fisheries became a new mandate. In 2006, the law was amended to make the setting of catch limits an unbiased, science-based conservation decision.

As a result, the nation's fisheries are on the upswing. Overfishing is the exception not the rule. Formerly depleted fisheries are recovering. Fishermen are getting quota increases from newly rebuilt stocks. On the other hand, there are inconsistencies in the way the law is applied; the rules and regulations it engenders are not always right, not always fair. And the Act's species-by-species approach can't repair ecosystems damaged by our past transgressions. It's still a work in progress.

Thirty-five, a humorist once said, is when you finally get your head together and your body starts falling apart. We can't let that happen to the Magnuson Act, which is now under attack from some unhappy segments of the fishing industry bent on weakening it - in the name of "flexibility;" with the idea that somehow we've gone too far and need to go back. Back to what? We've been there and done that. It didn't work.

All-in-all, we believe we're getting a good return on our investment in the Act - and we expect more in the years to come. Now is *not* the time to sell out our national interest in fish conservation.

-Ken Hinman, *President*

NATIONAL COALITION FOR MARINE CONSERVATION

Founded in 1973

The NCMC is a 501(c)(3) non-profit organization dedicated to the following goals:

- ◆ preventing overfishing and restoring depleted fish populations to healthy levels
- ◆ promoting sustainable use policies that balance commercial, recreational and ecological values
- ◆ modifying or eliminating wasteful fishing practices
- ◆ improving our understanding of fish and their role in the marine environment
- ◆ preserving coastal habitat and water quality.

OFFICERS AND STAFF

Tim Choate, Chairman
 Rick Weber, Vice Chairman
 Ken Hinman, President
 Pam Lyons Gromen, Executive Director
 Mary Barley, Treasurer
 Christine Snovell, Director of Communications and Development
 Lauren Megan, Office Manager

BOARD OF DIRECTORS

William Akin (*Montauk, NY*) ◆ Stanley Arkin (*New York, NY*) ◆ Mary Barley (*Islamorada, FL*) ◆ Bill Boyce (*Saugus, CA*)
 C. J. Bright, Jr. (*Kailua-Kona, HI*) ◆ Tim Choate (*Coral Gables, FL*) ◆ William Cox, Jr. (*Nantucket, MA*) ◆ John Heyer (*Sedona, AZ*)
 Sandra Kaupe (*Palm Beach, FL*) ◆ Sabrina Kleinknecht (*Monterey, CA*) ◆ Skip Walton (*Sarasota, FL*)
 Rick Weber (*Cape May, NJ*) ◆ Christopher Weld (*Essex, MA*)



For information or comment, contact:

The NCMC
Marine Bulletin

Pam Lyons Gromen, Editor
 4 Royal Street, SE
 Leesburg, VA 20175
 office: (703) 777-0037
 fax: (703) 777-1107

A WEAK HOOK AND A PRAYER?

Longline Closures, Alternative Gears Offer More Promise for Reducing Bluefin Bycatch

The bycatch of bluefin by longliners has been a long-standing problem for the United States. The bluefin tuna is severely overfished, the fishery is tightly regulated and indiscriminate longline gear set for yellowfin tuna and swordfish hooks large numbers of breeding-age giants, most of which must be discarded, all of which are counted against the U.S. quota.

Instead of actively discouraging longline bycatch, the National Marine Fisheries Service is adjusting U.S. quota allocations to accommodate it. Other users, and the resource, are paying the price. In 2011, NMFS plans to set aside 28% of the U.S. bluefin quota for longliners. They get 94.5 metric tons of allowable landings, about 10% of the total. But first, 160 tons of dead discards (based on the number of dead bluefin thrown back in 2010) are taken off the top, before what's left of the U.S. quota is shared among U.S. fishermen, most of whom are using more selective and more manageable fishing gears, such as rod-and-reel and harpoon.

Needless to say, other tuna fishermen aren't happy about this. And neither are the tuna. Most of the dead discards occur in the Gulf of Mexico, the western Atlantic's only known spawning ground and an area put off limits to directed fishing for bluefin in 1983. About 300 breeding bluefin are reported killed in the gulf each year, but the true number is suspected to be much higher. As a relatively robust 2003 year-class enters the spawning population, interactions with longline vessels will increase and more precious breeders will die. Needlessly.

"At a time when we should be closing the door to indiscriminate longlining in the gulf bluefin fishery, NMFS is leaving out the welcome mat, offering them full accommodations and waiving the incidental costs," says NCMC president Ken Hinman. "The agency continues to give more priority to keeping the longline fishery alive than to saving one of the most threatened species in the Atlantic."

RIGHT QUESTION, WRONG ANSWER

Bluefin recovery has been stalled for decades because of a depleted spawning population and poor reproduction. The number of adult bluefin in the western Atlantic is about half the number in 1980, when the International Commission for the Conservation of Atlantic Tunas began "managing" the species. It's only a quarter the number that were around in 1970. The number of breeding-age tuna has actually declined further since 1998, when a new ICCAT "rebuilding program" was adopted.

Each spring, adult bluefin return to the northern Gulf

of Mexico to give birth to the future of the species. The fish spawned in the gulf in 2003 constitute the largest year class in 25 years of low productivity. These fish are now approaching sexual maturity and will begin this year and next to contribute to rebuilding. It's an unprecedented opportunity to jump-start recovery.

The need to protect bluefin spawning in the gulf has never been clearer or more urgent.

In typically understated fashion, NMFS earlier this year issued a rule declaring that measures to minimize the gulf bycatch of bluefin would have "both short- and long-term beneficial impacts on the stock status of Atlantic bluefin tuna." What did it do? Required the use of so-called "weak hooks."

Weak hooks are basically standard circle hooks made of a thinner gauge. Experiments begun in 2007, in cooperation with the longline industry, show some promise of lowering bycatch if the giant tunas (typically over 500 pounds) can straighten the hooks and escape. Based on "preliminary results", NMFS claims the use of weak hooks may cut the number of bluefin caught in the gulf longline fishery by more than half (56.5%).

NCMC commends NMFS, and the industry, for recognizing and acting on the need to reduce bluefin bycatch in the gulf and for seeking to remedy the problem through changes in fishing gear. It's a promising step. Unfortunately, requiring longline vessels to use weak hooks is not the answer. There is insufficient reason to believe it will provide adequate protection to the remnant breeding population. Quite simply, we don't even know at this point if weak hooks work as advertised.

"We know we don't always get what we want, so that's not the problem here," says NCMC's Hinman. "But we at the very least want to know what we're getting. And the problem is, we don't."

MASKING THE NEED FOR ADDITIONAL MEASURES

There are a number of serious questions about the research that make the results uncertain and any conclusions at this time premature.

- The results are preliminary, based on too small a sample size, raise more questions than they answer and are therefore unreliable. NMFS asserts that a 56.5% reduction is statistically significant, but the small sample size – 33 bluefin caught during the experiment – challenges the significance of the results as to the fleet-wide effectiveness of the experimental hook, as do the results – catch

continued on page 4

A WEAK HOOK AND A PRAYER? *continued from page 3*

reductions *and* increases – obtained for other species. The catch of white marlin, for instance, actually increased dramatically, by 53%, with the use of weak hooks.

- The effectiveness of the hooks is influenced by how the vessel deploys its gear, which can vary greatly throughout the fleet. NMFS admits that variability in hauling practices may affect variability in retention and release rates for both target and non-target species. Even among the small number of vessels that participated in the experiment, hauling practices varied, as did retention rates.

While weight of the fish is assumed to be a major factor in bluefin straightening the weak hook, other factors, as NMFS notes, also contribute to the exertion of force on the hook, which could straighten it. Among these are vessel hauling practices. It may be that dead bluefin are getting off the hook during haul-back, in which case there is no effective reduction in mortality, only uncounted mortality. NMFS “suspects” that the fish that escaped the weak hooks did so soon after hook-up, but that can’t be known without testing with hook-timers. (That research is underway this year, but the results won’t be available for a year or two.)

Knowing the answer to this question is crucial not only to predicting the effectiveness of weak hooks, but also to monitoring their effectiveness as a conservation measure after implementation. If fish are dying and dropping off rather than escaping, these fish will be credited toward a perceived reduction in bycatch, thereby giving a false sense of success in reducing bycatch mortality. Requiring the use of weak hooks before this question is answered could result in concealing the true level of bluefin bycatch mortality in the gulf, which would be a bad thing on many levels; for one thing, it would mask the need for additional measures in the future.

CAP AND CLOSE

Given the questions surrounding the effectiveness of weak hooks in reducing bluefin bycatch mortality and their impact on the catch of other species, weak hooks alone should not be considered a means to minimizing bluefin bycatch in the Gulf of Mexico at this time.

The NCMC is urging NMFS to strengthen what is a commendable but ultimately weak and inadequate rule by instituting a cap on the allowable bycatch in the gulf and a closure of the longline fishery during spawning season, both of which could be implemented in tandem with continued experimental use of weak hooks. The situation demands more than measures that “may” work, but may not. It demands actions that will guarantee as few spawning bluefin as possible are killed. How few? A 75% reduction from recent levels is a reasonable goal.

A closure of the region designated as the bluefin Habitat Area of Particular Concern during peak spawning months – April through June – would significantly reduce bluefin

bycatch while allowing for fishing in other months.

A fleet-wide bycatch cap, accompanied by 100% observer coverage, could be used to create a disincentive to catch bluefin tuna in the gulf throughout the year. If the gulf cap were set at, for example, 75 fish per year (25% of the 2006-9 annual average), then the gulf would close to longlining for the rest of the year once that cap is reached.

A combination of a hard cap on longline bycatch of bluefin and a 3-month closure during the height of bluefin spawning activity in the gulf – call it “cap-and-close” – would maximize protection for breeding bluefin, while allowing longliners to fish most of the year and providing an incentive to modify their gear (e.g., fish shorter lines/sets to allow more bycatch to be released alive) or switch to more selective alternatives (e.g., green sticks for yellowfin tuna, buoy gear for swordfish).

It is extremely important that, as the 2003 year class begins spawning in the gulf and the number of breeding-age fish vulnerable to longline bycatch there increases substantially over the coming years, we have in place measures we are fully confident will protect these fish so they can contribute to a long-awaited bluefin recovery for years to come. □



“Too Many Hooks”
Illustration by Stephen Schildbach



A log of where we have traveled to fight for the fish in the last quarter...

- ✦ President Ken Hinman was invited to address the Board of Trustees of the Norcross Wildlife Foundation in **Baltimore, MD** on January 30th. He talked about NCMC's work to conserve tunas, billfish and Atlantic menhaden.
- ✦ Executive director Pam Lyons Gromen attended the February 8 -10 Mid-Atlantic Fishery Management Council (MAFMC) meeting in **New Bern, NC** to advocate for explicit allocations of forage fish to predators and for comprehensive shad and river herring bycatch mitigation in the Council's developing amendment to its Atlantic mackerel, squid and butterfish plan.
- ✦ Ken participated in the Chesapeake Bay Foundation's Annual Education Conference in **Virginia Beach, VA** on February 24th. His presentation was entitled "An Ecosystem-Based Approach to Conserving Atlantic Menhaden".
- ✦ From February 29 - March 2, Pam attended the Atlantic States Marine Fisheries Commission (ASMFC) River Herring Stock Assessment Subcommittee meeting in **Providence, RI** where plans to incorporate ocean bycatch data in the assessment were discussed.
- ✦ From March 4-8, Ken attended the Pacific Fishery Management Council (PFMC) meeting in **Portland, OR**. In furthering NCMC's goal of protecting the west coast forage base, he participated in meetings of the council's science committee and testified before the council on its Ecosystem Fishery Management Plan.
- ✦ On March 8th, Pam traveled to **Baltimore, MD** to encourage the MAFMC to feature ecological information in a report used to inform catch levels for mackerel, squid, and butterfish.
- ✦ At the ASMFC Winter/Spring meeting in **Alexandria, VA**, the Shad and River Herring Management Board responded to recommendations made by NCMC and other stakeholder groups by elevating the importance of ocean bycatch analyses in the ongoing coastwide river herring stock assessment. Pam was present at the meeting which took place on March 22nd.
- ✦ Ken also attended the ASMFC March 22nd meeting in **Alexandria, VA**, where the Menhaden Management Board voted to reduce catch in order to rebuild the overfished population. (see *Aim High*, page 1)
- ✦ Ken represented NCMC at the annual meeting of the Marine Fish Conservation Network's Board of Advisors March 29th in **Washington, D.C.**, where the board discussed network priorities for the coming year.
- ✦ Ken, Pam and Director of Communications & Development Christine Snovell attended the Annual Meeting of NCMC's Board of Directors June 8-10 in **Islamorada, FL** to review accomplishments and set goals for the year ahead.
- ✦ On April 13th, Pam attended the MAFMC Squid, Mackerel, and Butterfish Committee meeting held in **Annapolis, MD** where the Committee provided direction for further development of alternatives to monitor and reduce shad and river herring bycatch.
- ✦ On April 14th, Ken addressed the MAFMC Executive Committee in **Annapolis, MD** on how the council can include ecological considerations in setting catch limits for squid, mackerel and butterfish.
- ✦ From April 19-21, Pam traveled to **Portland, OR** to participate in meetings of the PFMC's ecosystem science and advisory teams as they formed recommendations for the development and scope of the Council's West Coast fishery ecosystem plan.
- ✦ The Harte Research Institute hosted a Gulf of Mexico Alternative Gear Workshop in **Corpus Christi, TX** on April 28th. Ken went as an invited participant in the workshop, which was devoted to exploring more selective and sustainable alternatives to fishing with indiscriminate pelagic longlines, which have a significant bycatch of bluefin tuna and marlin in the gulf.

AIM HIGH *continued from page 1*

the stock is currently well below the proposed limit of 15%MSP – it's estimated at only two-thirds that level, according to the 2010 stock assessment - rebuilding to the target population level will be required. It's assumed that a new target must be adopted to go along with a new threshold, but what should it be?

“As we told the ASMFC at the March meeting, targets are levels that we aim for and thresholds are levels we aim to avoid,” says Hinman. “The target needs to be set safely above the threshold, allowing for factors that may affect our accuracy, like scientific and management uncertainties.”

The federal Magnuson-Stevens Fishery Conservation and Management Act's National Standard 1 Guidelines state that the size of the buffer between the target and threshold should reflect uncertainties to reduce the probability that overfishing might occur. The Lenfest Working Group on Annual Catch Limits (September 2007) recommends that the buffer should be even greater when “the consequences of overfishing as expressed by vulnerability of the resource is higher.” In this regard, menhaden's role as forage for so many species higher up the food chain highlights the risk of allowing abundance to approach the overfished level.

AIMING HIGH

According to preliminary projections done by the commission's science advisors, growing the stock to the 15%MSP level would mean about a 78% increase in the menhaden spawning population. A target of 20%MSP, we are told, could result in a more than 100% increase in abundance and a 25%MSP could produce a 200% increase. Clearly, these would be significant gains for menhaden and the ecosystem. But according to the scientific literature and emerging practices, they would amount to very modest targets for a forage fish as important as menhaden.

The NCMC has compiled many of these in its paper, “Ecological Reference Points for Atlantic Menhaden,” submitted to the ASMFC in 2009. Targets employed for key forage fish typically range somewhere between 40% and 75% of an unfished population. Menhaden is currently at around 10% of that level. Again, the new overfished threshold would be 15%.

The Marine Stewardship Council, which develops international standards for sustainable fishing, recently weighed in. It's Low Trophic Level Task Force, convened to develop guidelines for assessing the sustainability of forage fisheries in order to award the MSC label, released draft guidance in April. It identifies menhaden as a key low trophic level species, along with sardine, anchovy, krill and other small pelagic species that form dense schools, feed mostly on plankton, and transmit a large volume of energy to higher trophic levels by serving as prey.

The MSC suggests that the target reference point must be at least 40% of an unfished population to get a *minimum* passing score. The default *recommended* target for key forage species is 75%.

As the ASMFC moves into an ecosystems approach for conserving Atlantic menhaden and sets a new rebuilding target, even an interim one, the weight of opinion says it should be aiming high. □

ASMFC ACTS TO REDUCE STRIPED BASS MORTALITY

Can the menhaden population support more stripers?

At its March meeting, the ASMFC Striped Bass Management Board decided to initiate Draft Addendum III to the Interstate Fishery Management Plan for Striped Bass to reduce fishing mortality by as much as 40% and to implement stronger protections for the spawning stock. The Board's decision was in response to a number of troubling findings, including a 25% decline in striped bass abundance from 2004 to 2008, a 66% decline in recreational catch from 2006 to 2009, and continued low recruitment.

The addendum is expected to include options for new recreational and commercial minimum size limits, reduced commercial allocation, reduced recreational bag limits, and at least a 50% reduction in striped bass fishing in known spawning areas during the spawning season.

Actions taken through Addendum III should ultimately result in more striped bass in the water, ***but will there be enough prey to sustain an increased striped bass population?***

The stripers' main food source, Atlantic menhaden, is being overfished and is at historically low abundance, according to a 2010 stock assessment. Measures to increase menhaden abundance, through more conservative fishing targets and thresholds, are under development. (see *Aim High*, page 1)

On their current time lines, both Draft Addendum III to the Striped Bass Plan and Draft Addendum V to the Atlantic Menhaden Plan will be released for public comment in August and should be implemented for the 2012 fishing year. The goals of these addenda, like the ecology of striped bass and menhaden, are inextricably linked. To be successful at halting the decline of striped bass, the ASMFC must rebuild the menhaden population to a level designed to sustain predators as well as fishing.

Eventually, ASMFC's efforts to develop multi-species models will connect the dots between the management of striped bass and menhaden. Until then, the fact that the striped bass population is dropping while menhaden are being overfished should be proof enough that the connection between a predator and its prey cannot be ignored without detrimental consequences to the ecosystem and the fishing public. □

ECO FISHING TEAM SPREADS THE WORD AT FLORIDA TOURNAMENTS

The Eco Fishing Team of New Smyrna Beach, led by Danny Perna, is helping the *Take Marlin Off the Menu* campaign by spreading the word at Florida fishing tournaments in 2011. The team is asking anglers to report any marlin being served in restaurants and supermarkets, and raising awareness about the campaign's plans for legislation to protect billfish in 2011. We will need anglers' support when legislation is re-introduced, probably this summer, and the Eco Fishing Team will assist in building support among anglers throughout the year.

To reach tournament participants, the team is setting up a *Take Marlin Off the Menu* booth at each event they fish in. The first booth was at the Yamaha Contender Miami Billfish Tournament in early April, where team members handed out billfish fact sheets as well as material from NCMC and IGFA. Danny had a big banner made for us. He reports that many tournament anglers stopped by the booth and asked what they could do to help.

A list of upcoming tournaments where you may see a *Take Marlin Off the Menu* booth is on Eco Fishing Team's web site: www.ecofishingteam.com/page/tournament-participation.html

MARLIN CAMPAIGN DOWN UNDER

Our efforts to take marlin off the market here in the U.S. have inspired a similar effort in Australia. *Fishing World*, Australia's premier fishing magazine, announced in March that it has initiated its own version of *Take Marlin Off the Menu* "down under". According to the magazine, it was inspired by the success of the U.S. campaign, launched in 2008 by NCMC and IGFA, in highlighting to the non-fishing public the importance of protecting these iconic fish.

The Australian publication is urging its readers to contact restaurants that serve marlin in order to educate chefs and restaurants against using marlin on their menus. "It is highly likely that striped marlin are currently overexploited and could potentially be driven to extinction by industrial fishing operations," says *Fishing World*. "(A restaurant's) decision not to use marlin on (its) menu will hopefully reduce commercial pressure on these iconic pelagic predators."

"We are excited that *Take Marlin Off the Menu's* message is spreading, prompting similar consumer campaigns abroad," says NCMC president Ken Hinman. "The efforts of our friends in Australia to raise public awareness of the plight of billfish will help promote billfish conservation at international fishery management bodies in the Pacific, where currently no catch limits exist."

For more information, visit www.fishingworld.com.au/news/help-take-marlin-off-the-menu.

NEW SEAFOOD GUIDEBOOK SAYS "AVOID MARLIN"

In May, the Marine Conservation Society of Great Britain launched its most comprehensive advice to point chefs and consumers to sustainable seafood. The MCS pocket Good Fish Guide (www.goodfishguide.org.uk) and online consumer guide (www.fishonline.org) uses a "traffic light" labeling system, rating fish from 1 – 5, with scores of 4 or 5 getting a red light, i.e., do not purchase or consume.

Marlin (all species) receive the MCS' lowest score, a 5. "The health of marlin populations is either poor or unknown," warns the updated guide. "Management, if present, is neither effective in the recovery of the stocks nor long term productivity. Capture methods have a potentially high incidence of bycatch of non-target species in general, including from protected, endangered or threatened populations. *Avoid marlin.*" (emphasis added)

MERCURY IN MARLIN: IS IT SAFE? NO.

Most people are unaware that marlin accumulate harmful levels of mercury. The U.S. Environmental Protection Agency health guidelines for fish consumption indicate that any fish with a mercury level greater than 1.5 parts per million (ppm) should not be consumed in any amount. Marlin, especially large specimens, have been found to contain mercury levels as high as 15 ppm, or 10 times the EPA limit.

But recent research suggests that the toxicity of mercury may be cancelled out in some species of fish by the presence of sufficient quantities of selenium, a trace mineral that is important to the health of cells, in humans and other animals. The relationship, and precisely how it works, is still under study; it appears the selenium binds with the mercury, blocking it from binding to brain tissue, for instance. Because many fish contain selenium, mercury concerns are being downplayed, especially by the seafood industry. They shouldn't be.

It's agreed among researchers that the key factor is the ratio of selenium (Se) to mercury (Hg). A high Se:Hg ratio would mean the selenium makes the mercury benign, with enough left over for its own benefits to cellular function. If the ratio is low, for example, more mercury than selenium, then the mercury is harmful and there are no nutritional benefits from the selenium. Those fish with high Se:Hg ratios include salmon, tuna and red snapper. Those fish with the lowest ratios include swordfish, shark and marlin. According to a 2007 study using fish purchased in the U.S., marlin steaks contained twice as much mercury as selenium (Se:Hg ration of 1.45:2.89 ppm), making it the most potentially toxic fish examined. (Sivakumar et al, Trace Elements in Fish and Fish Oil Supplements, Atomic Spectroscopy, March 2007)





NGOs RESPOND TO NOAA'S DRAFT AQUACULTURE POLICY

Policy Lacks Teeth; NOAA Lacks Authority

Amid much criticism for its piecemeal approach to developing offshore aquaculture, NOAA Fisheries passively allowed the Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico (Gulf Aquaculture Plan) to take effect¹ in Fall 2009. Dr. James Balsiger, Acting Assistant Administrator for NOAA Fisheries at the time, justified the agency's actions before Congress, testifying that NOAA was in the process of crafting a national policy that would provide a coordinated regulatory process for aquaculture in federal waters. He explained that once adopted, the policy would be used to evaluate the Gulf Aquaculture Plan, to determine if it should be amended or withdrawn all together.

The long-awaited draft of NOAA's aquaculture policy was released in February 2011 for public comment. The policy starts out strong, stating that aquaculture should be "in harmony with healthy, productive, and resilient marine ecosystems." However, the supporting principles on which NOAA intends to base regulatory actions (found in the appendix of the document) are weak and could not uphold the statements in the policy, much less be used as a tool for evaluating the efficacy of the Gulf Aquaculture Plan.


NCMC joined with other fishing, environmental and consumer groups in urging Commerce Secretary Gary Locke and NOAA Administrator Dr. Jane Lubchenco to

¹Under the Magnuson-Stevens Act, if the Secretary of Commerce does not notify a fishery management council within a certain time period that he has approved, partially approved, or disapproved a fishery management plan, the plan takes effect as if approved.

articulate, within the principles, mandatory conditions for offshore aquaculture permitting that would prevent harm to marine ecosystems. Conditions must include, among others, prohibiting non-native or genetically-engineered fish aquaculture as well as requiring that wild fish-based feeds be derived from fisheries managed to maintain adequate forage for the ecosystem. The groups also reiterated their concern about NOAA's continued attempts to advance aquaculture by defining aquaculture as "fishing" and thereby assuming regulatory authority under the Magnuson-Stevens Fishery Conservation and Management Act, which Congress did not intend to apply to aquaculture.

While it is important for NOAA to strengthen its policy to provide a clear vision for sustainable aquaculture, policy does not carry the force of law nor can it provide NOAA with adequate authority. On the same day NOAA released its draft aquaculture policy, Congressman Don Young (R-AK) introduced H.R. 574, a bill that would prohibit aquaculture operations in federal waters unless and until Congress passes a law authorizing such action. NCMC supports Congressman Young's bill. In the absence of a national regulatory framework with strong environmental standards, offshore aquaculture poses serious risks to marine resources and the people that depend on them. NOAA moving forward at this juncture, without the proper authority to implement offshore aquaculture sustainably, runs counter to its mission of ocean stewardship. □

Your mailing label now includes your membership renewal date.



www.savethefish.org
Leesburg, VA 20175
4 Royal Street, S.E.

