



# COASTAL HERITAGE

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## Hanging in the Balance

America's Fishing Industry

# CONTENTS

3

## HANGING IN THE BALANCE: AMERICA'S FISHING INDUSTRY

*It's getting tougher for American fishermen to compete against overseas producers who flood the U.S. market.*

11

## TWO ERAS, TWO COMMISSIONS

*A preliminary report by a new ocean commission calls for reform of fishing management.*

12

## SHRIMPERS FIGHT IMPORTED PRODUCT

*American shrimp fishermen hope to distinguish their product from inexpensive imports.*

13

## EBBS AND FLOWS

### ON THE COVER

*Don Moore lifts an amberjack from the Amy Marie onto Cherry Point Seafood Company's dock in Rockville. PHOTO/WADE SPEES*



**ON DISPLAY.** Stocks of vermilion snapper, like ones shown here at the South Carolina Aquarium, face overfishing in the U.S. South Atlantic region. PHOTO/WADE SPEES



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**CATCH LIMITS.** Many snapper-grouper populations are being restored through strict regulations in the U.S. South Atlantic region. PHOTO/WADE SPEES



*“There’s a heritage very much at risk—the heritage of fishing communities in the United States.”*

*Wally Stevens, president of the American Seafood Distributors Association.*

# Hangin' in the Balance

## America's Fishing Industry

*American fishermen are battered by tough regulations intended to recover overfished stocks and by floods of cheap imported seafood.*

**By John H. Tibbetts**

**C**raig Deihl, executive chef at Cypress Lowcountry Grille in Charleston, annually used to serve a ton or more of grouper, a popular item on his menu. But then grouper became harder to acquire. “I’d call on Friday or Saturday, and they’d have run out.”

The oceans’ bounty once seemed limitless, but in recent decades intense fishing pressure has decimated many populations of valuable commercial species such as swordfish, cod, haddock, tuna, snapper, and grouper. Roughly 25 to 30 percent of the world’s major fish stocks are overfished, according to the U.S. Commission on Ocean Policy, which released a preliminary report April 2004, to state governors and the public for comment. Appointed by President Bush, the commission is making recommendations on how to improve the capacity of the nation to manage oceans and coasts. The commission’s final report is due this fall.

About 25 percent of major U.S. fish stocks are also overfished (see sidebar p. 7). In the U.S. South Atlantic

region, some snapper and grouper stocks were driven down drastically from the mid-1970s to the early 1990s.

“Real damage was done to some stocks,” says Louis Daniel, assistant to the director of the North Carolina Division of Marine Fisheries, and vice-chairman of the South Atlantic Fishery Management Council (SAFMC), which manages fisheries in federal waters three miles to 200 miles offshore of the Carolinas, Georgia, and the eastern coast of Florida to the Keys.

The snapper-grouper fishery in the U.S. South Atlantic is a complex of 73 reef species, including snappers, grouper, jacks, porgies, tilefish, grunts, and sea basses. Some extremely overfished species include speckled hind, Warsaw grouper, misty grouper, yellowedge grouper, snowy grouper, golden tilefish, sand tilefish, and blueline tilefish.

Starting in the early 1990s, SAFMC instituted tough management measures for overfished species, including trip limits, species limits, size limits, gear regulations, seasonal closures, total-landings limits, a commercial





## Council studies marine-protected areas

In its April 2004 preliminary report, the U.S. Commission on Ocean Policy offered qualified support for marine-protected areas. "Although at times controversial," stated the commission, "appropriately designed and implemented marine-protected areas have proven useful."

Marine-protected areas, which can include no-take reserves, have helped restore fishery populations outside reserves in some locations, experts say. Adults and juveniles migrate outside of the reserve's borders, and currents relocate larvae. Within reserves, fish populations increase in size. Individuals also tend to live longer, grow larger, and reproduce more.

The South Atlantic Fishery Management Council (SAFMC) is considering whether to designate marine-protected areas to reduce fishing pressure on eight deepwater snapper and grouper species: speckled hind, Warsaw grouper, misty grouper, yellowedge grouper, snowy grouper, golden tile fish, sand tilefish, and blueline tilefish.

Nine proposed protected areas are being studied. With the exception of one proposed site off North Carolina, these areas would prohibit bottom fishing for snapper and grouper, but would allow trolling for pelagic species such as tuna, dolphin fish, wahoo, and billfishes. One protected area already exists in Florida. SAFMC plans to publish its list of areas for public comment in early 2005.

"Marine-protected areas have been a good thing based on how other countries have done them," says Mark Marhefka, a Charleston-based commercial fisherman.

But some U.S. fishing groups—both commercial and recreational—are opposed to implementation of significant marine reserves.

"We don't want any permanent no-fish zones," says Ed Kowysz, president of the Grand Strand Saltwater Anglers Association. "If species stay in that no-fish zone, then recreational sport fishermen can't go get them."

limited-entry program, and quotas. "We regulate fishermen very, very severely," says John Mark Dean, a professor emeritus of marine science at the University of South Carolina and an SAFMC member.

Recovery, though, is slow. After 10 years, many stocks "have turned the corner," says Daniel. Still, it could take another decade for some stocks to recover to sustainable levels.

Frustrated by regulations and low prices, some fishermen have given up chasing snapper-grouper, according to a study by the North Carolina Division of Marine Fisheries. In 1994, a total of 227 commercial fishermen harvested three million pounds of snapper-grouper in North Carolina, the state with the best multi-year fishing-trip records. Eight years later, of those original fishermen only 87 remained, catching one million pounds. Yet fishermen were catching roughly the same amount per vessel in 2002 as they did in 1994. Catching snapper-grouper is apparently still profitable, but for fewer people.

So how does the seafood industry make up the loss in domestic snapper-grouper? "They fill in with imports, especially Mexican grouper," says fisherman and seafood packer Charles Phillips of Phillips Seafood in Townsend, Ga., and vice-chair of a SAFMC advisory panel on the snapper-grouper fishery. "There are so many fish brought into Miami, it's ridiculous. And imports set the prices for all fish. If they're paying two bucks a pound for a Mexican grouper, you're not going to get three bucks for your grouper."

U.S. South Atlantic fishermen and shellfish harvesters face a perfect storm of financial and regulatory pressures: rising fuel and insurance and maintenance costs, closures of polluted harvesting grounds, public concern about trawling's effects on the sea bottom and turtles, increasingly tough regulations to sustain fishery popula-



YELLOWFIN GROUPE

tions and protect the marine environment, and huge volumes of imported fish (including shellfish) that drive down prices that local fishermen receive


for their catches.

Global trade is the biggest challenge facing U.S. fish producers. "Just 10 years ago, it was a different industry," says Wally Stevens, president of the American Seafood Distributors Association, one of the nation's largest seafood-industry groups. "Now we can get fresh fish out of Vietnam. Most of the salmon we eat comes on a plane every day from Chile. The technology of aquaculture, packaging, cold-chain distribution—planes, trucks, warehouses, coolers—and the handlers at the end—all this allows us to have the world at our doorstep. But as a result, there's a heritage very much at risk—the heritage of fishing communities in the United States."

It's become tougher for U.S. fishermen to compete against foreign producers. "Imports are coming in from countries that aren't meeting the same regulatory requirements that we have," says Dean. "You can buy imported grouper at less than you pay for domestic grouper. And the imported grouper would not be permitted to be landed by our fishermen because they are far smaller than our minimum size."

Meanwhile, resource managers have tightened harvesting rules on many stocks because of past overfishing. Some stocks are coming back, but not quickly enough to provide a living for many fishermen. "Management issues are making part-time fishermen out of everyone," says Robert Southerland, a North Carolina shrimper and an SAFMC member. "It's getting so restrictive that people don't have a full-time livelihood."

The South Carolina Aquarium, to support local seafood producers, is



A CUT ABOVE. Craig Deihl, executive chef at Cypress Lowcountry Grille in Charleston, trims and cuts a yellowfin tuna's quarter bottom loin, making about 25 servings. Yellowfin tuna is one of the species celebrated by the Sustainable Seafood Education Project, which encourages consumers to buy seafood harvested from well-managed fisheries. For more information about restaurant partners and recipes, visit [www.scaquarium.org](http://www.scaquarium.org)  
PHOTO/WADE SPEES

leading an effort to create the Sustainable Seafood Education Project, which brings together scientists, fish farmers (or aquaculturists), chefs, conservationists, regulators, educators, and fishermen. Thirty-two lowcountry restaurants have joined up.

The project discourages chefs from serving three species: orange roughy, Chilean sea bass, and shark. Many of the fish most at risk to overfishing are slow to mature, have limited geographical range, or reproduce at an older age or sporadically.

The project, though, encourages the public “to celebrate some kinds of seafood, especially local species,” says Christopher Andrews, executive director of the South Carolina Aquarium. The project encourages consumption of many species in the reef-fish complex, including yellow-tail snapper, vermilion snapper, South Atlantic red snapper, and most groupers, all of which are managed rigorously.

“You can feel good about eating this product, which is regulated and sustainable,” says Mark Marhefka, a Charleston-based commercial fishermen and chair of the SAFMC snapper-grouper advisory panel. “Plus, you’re keeping a livelihood going for local fishermen.”

Fresh seafood is part of the lowcountry’s attraction, yet residents and visitors will continue eating imported seafood. The state’s fishing industry can’t supply South Carolina restaurants year-round.

Even so, many lowcountry restaurants don’t serve locally caught fish when it’s available. More than 70 percent of Marhefka’s catch volume is vermilion snapper, but he hasn’t found buyers for it among local restaurants. Instead, he sells it to northern premium markets from Baltimore to Canada.

Most fish caught locally are traded through New York markets. Later, some return here, processed



VERMILION SNAPPER

and ready to be cooked. Many local restaurants and grocery stores demand steady supplies offered by distributors in New York, where South Carolina-caught grouper gets mixed with Mexican-caught grouper. “Unless you go out and catch the fish yourself, you can’t be a hundred percent sure of where it came from,” says Deihl.

But this September, for the first time, seafood in U.S. supermarkets will begin carrying labels stating in which country’s waters the fish originated, where it was processed, and whether it is wild or farmed. The new labeling requirement will cover everything from farmed shrimp to wild salmon to fish sticks.

An omnibus-spending bill, passed in January 2004 by Congress, provided money for the “country-of-origin” seafood-labeling program. Fish must be categorized according to the nationality of the boat that catches them. Regulations governing beef and pork labeling have been delayed until September 2006.

But restaurants—the most influential market for seafood—are exempt from the new labeling rule, and that might defeat some of the law’s purpose. The “white table-cloth sector,” in particular, strongly influences what seafood Americans eat and how they cook it. “We tend to eat (at home) what we see in restaurants,” says Mike Sutton, program officer in the conservation and science program of the David and Lucile Packard Foundation in Los Altos, Calif. “Celebrity chefs are especially important. They are the gatekeepers in the industry.”

Because of the restaurant exemption and potential loopholes, the new law alone won’t significantly improve prospects for domestic fishermen, says Bubba Green, executive director of the South Carolina Seafood Alliance, which does not take a position for or against the new rule. The alliance membership includes harvesters, processors, and distributors. Says Green: “The law’s going to be a whole lot less effective than proponents think it’s going to be.”

## OUT FAR AND DEEP

The ocean bottom is mostly sandy and flat for about 30 to 60 miles offshore along the Carolinas

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and Georgia. Then, along the mid-continental shelf, the seafloor elevation changes abruptly, and rocky outcrops attract vermilion snapper and other valuable fish.

For centuries, this region was too far out and snapper-grouper species lived too deep for most fishermen to catch. So fishermen concentrated on species they could harvest more easily within 10 to 20 miles from shore.

Fishing vessels worldwide hugged coastlines for most of human history. Fishermen rowed and sailed through estuaries and the coastal ocean, armed with rough hooks and handmade nets. The open sea was distant and dangerous. De facto marine refuges existed in places that fishing gear could not reach. These refuges provided nurseries so that fish populations could rebound after heavy fishing pressure.

During the seventeenth century, though, fishermen of northern Europe and North America began traveling great distances for cod and other species that could be sold on international markets.

By the early nineteenth century, English fishermen began operating steam trawlers with power winches to haul up nets, which made fishing far more efficient. Still, many small vessels were relatively primitive through the 1940s. Small-scale commercial fishing boats in South Carolina still used small one- or two-cylinder gasoline engines, and fishermen hauled in nets by hand.

During the 1960s, fishing vessels and practices throughout the Northern Hemisphere were becoming far more sophisticated. To take advantage of the oceans' riches, nations including the United States, Russia, most European countries, and Japan subsidized their fishing industries through low- or no-interest loans and payments.

Fishermen invested in higher-powered engines, improved navigational equipment, and trawling and

netting gear. Between 1970 and 1990, the size of the world's decked fishing fleet doubled from 585,000 to 1.2 million vessels (not including millions of smaller craft), according to the United Nations Food and Agriculture Organization (FAO). With sonar, mariners began detecting fish schooling in the deep ocean. Trawling vessels began using depth recorders and global positioning systems to find bottom fish and shellfish. Ships became much larger and safer to handle on the open sea.

It was during this period of rapid expansion and technological prowess that snapper-grouper species in the U.S. South Atlantic also faced tremendous fishing pressure. Wild harvests peaked in the late 1980s.

The swift growth of catches resulted in overfishing in many ocean areas globally. "We fish everywhere now," says Daniel Pauly, a fisheries biologist at the University of British Columbia. "A hundred years ago, (some) fisheries were protected by the depth and distance from the coast. Today, technology makes it possible to fish anywhere. The areas that once were refuges are gone."

Recreational fishermen also have greatly improved tools. The U.S. South Atlantic has the largest recreational marine fishery in the nation—an estimated 2.3 million resident anglers in 2002. Recreational angling is expected to grow rapidly with explosive population increases along the coast.

Many American fish stocks, some scientists say, face the same problem plaguing those around the world: too many well-equipped vessels are hunting too few fish. Nearly one hundred major U.S. fish stocks are overfished, according to the NOAA National Marine Fisheries Service (NMFS).

Many commercial fishermen who once relied on snapper-grouper now catch other species. "We have

## Distinction

The terms "overfishing" and "overfished" mean different things.


An "overfished" fishery is like an overweight person, says Michael Sissenwine, NOAA National Marine Fisheries Service director of scientific programs.

"Overfishing," meanwhile, is like someone who is overeating.

An overweight individual might not be overeating—he could be dieting and losing weight.

Similarly, an overfished fishery might not be currently stressed by overfishing. Fishermen might be on a strict diet regarding a specific species, their catches limited by a fishery rebuilding plan.

Yet many overfished fisheries do indeed suffer from overfishing, says Sissenwine. "The two problems are often correlated. But you can have one problem and not the other."

In the U.S. South Atlantic region, for example, overfishing is occurring in the vermilion snapper fishery, but it is not overfished. Black sea bass is both overfished and experiencing overfishing. Overfishing is not occurring in the red porgy stock, but it is overfished. 

great species diversity in this region," says USC's Dean, "and we have very opportunistic fishermen who shift among species."

Fishing pressures have severely reduced worldwide populations of top marine predators such as grouper, snapper, and tuna. In a study published in the journal *Nature*, Ransom Myers, a biologist at Dalhousie University in Halifax, Canada, writes that the global ocean has lost more than 90% of the populations of large predatory fishes.

The fish first targeted by fishermen tend to be the largest—both the largest species and the largest animals within particular species. Once large predatory fish begin to disappear,



#### LOOKING BACK.

Until 1940, when a hurricane swamped most of the “mosquito fleet” (shown above and near right), African American fishermen sailed out of Charleston harbor to catch blackfish, porgy, bastard snapper, whiting, summer trout, and croaker.

PHOTOS/COURTESY OF THE CHARLESTON MUSEUM, CHARLESTON, SOUTH CAROLINA



**WHOPPER.** Captain Vivian Bessent (in cap) with a gigantic grouper caught on the Rascal in 1953. Scientists say that the vast majority of large fish have disappeared from the world’s oceans because of overfishing. PHOTO/COURTESY OF VICTOR BURRELL

fishermen then pursue prey species on the next lower level of the food chain.

With snapper-grouper catches down as a result of overfishing and regulations, many North Carolina commercial fishermen are catching huge numbers of croaker, an unregulated, small groundfish. Caught by gill nets and trawls, croaker are low-priced fish often

sold to China as a food staple. As one observer pointed out, croaker is probably less valuable than the cardboard box it’s carried in. In size, croaker is similar to menhaden, reaching maturity at about one pound.

Massive croaker catches, regulators worry, could affect the health of fish populations in some areas. “The biomass of the croaker fishery is

huge,” says Daniel. “But we don’t have a good handle on the overall ecosystem effect” of North Carolina fishermen transferring their efforts from snapper and grouper to croaker.

“Many management measures are intended to take fishing gear out of the water,” adds Daniel. “But we’re not taking the gear out of the water, we’re just shifting gears” onto other species.





schools, are a crucial food source for predatory species. Bass, mackerel, cod, bonito, swordfish, bluefish, and tuna are intensive consumers of menhaden.

Menhaden and juvenile croaker also vacuum up plankton in many Atlantic Coast estuaries, clarifying the water column and controlling the spread of algal blooms. Menhaden and croaker thus are essential links in the food chain connecting tiny plankton to marine predators that grace our supper tables. The nineteenth-century fishery zoologist G. Brown Goode once said that people who eat Atlantic Ocean fish are eating “nothing but menhaden.”

South Carolina regulations prohibit purse seines used to catch huge numbers of menhaden in estuarine waters. The croaker fishery is generally limited to colder waters north of South Carolina, though

croakers swim here as well.

Will predators get skinnier and scarcer in estuaries where they have fewer smaller fish to consume? Will predators, facing food scarcity, breed earlier? “As fishing boats turn to smaller, less valuable, and once discarded species, they are . . . causing changes in the size, age structure, genetic makeup, and reproductive status of fish popula-



YELLOWTAIL SNAPPER

tions,” states the U.S. Commission on Ocean Policy preliminary report. “This seriously compromises the

integrity of marine ecosystems, the ecological services they provide, and the resources upon which Americans rely.”

#### NEXT WAVE OF COMPETITION

In the future, U.S. commercial fishermen will likely face even more intense competition from fish producers in developing countries.

Numerous Asian nations have dramatically ramped up seafood production to feed their people but also to sell fish to Japan, United States, and Europe, the world’s largest seafood markets.

During the late 1970s, international agencies such as the World Bank began encouraging fish farming—or aquaculture—as a way to provide food for the poor and promote commerce in developing countries. Aquaculture fulfilled much of this promise.

Total fish consumption worldwide jumped from 45 million metric tons in 1973 to more than 91 million metric tons in 1997, including wild harvests and farm-raised fish.

Fish farming provided most of this growth over the past 20 years. Indeed, aquaculture is the fastest growing food-production industry worldwide. By 2030, aquatic farming will probably provide more than half of the fish for human consumption, according to the Food and Agriculture Organization (FAO) of the United Nations.

There are two reasons for this remarkable rise in fish consumption since the early 1970s, says Nikolas Wada, coauthor of a major report on fish trade by the International Food Policy Research Institute (IFPRI).

The seafood industry processes catches of many smaller fishes into products such as fish sticks and food for chicken, cattle, pigs, pets, and carnivorous farmed fish. In some regions of the world, smaller fishes provide cheap protein for the poor.

But stripping the ocean of forage species can disrupt the marine food chain. Menhaden and croaker, which swim in dense

First, human populations have skyrocketed in many developing countries where people have historically eaten a lot of fish. Second, people in these countries have been eating, on average, more fish than ever before.

Developing countries sell far more seafood on the international market than they did 20 years ago. Shrimp, salmon, and tuna are big-ticket items in global fish markets.

The worldwide fish trade, worth \$55 billion a year, has become more important in value than global trade in coffee, tea, cocoa, sugar, and bananas combined, according to IFPRI research.

China is easily the biggest aquaculture producer by volume. According to its own reporting, China produces an astonishing 68 percent of global aquaculture production by weight—primarily low-value freshwater carp for domestic consumption.



WRECKFISH

In the future, China could grow more premium seafood to sell to wealthy countries. “Will China continue to produce freshwater carp at low intensity?” asked Wada. “Or is China going to start investing in higher-value commodities for the export market?”

China and several Southeast Asian countries are already culturing high-value marine species such as grouper and flounder largely for domestic markets, says Albert Tacon, an aquaculture nutritionist at the Hawaii Institute of Marine Biology.

“If China diversifies into high-value species for export in a big way,” says Wada, “they will have a major impact on world seafood markets.”

“The trends are clear,” says Christopher Delgado, lead author of the IFPRI report. “In 2020, people in developing countries will produce, consume, and trade a greater share of the world’s fish.”

By value, though, industrialized coun-

tries will probably remain the big spenders on premium seafood such as shrimp and salmon.

Japan is the largest seafood market by value; the United States is the second largest. From 1996 to 2001, U.S. seafood imports increased in value by 40 percent. Japan’s imports declined nine percent by value over the same period. So the United States will probably become the dominant seafood market for imports by value within the next decade.

More of the seafood that Americans eat will be foreign-produced in the future. In wealthy countries like the United States, notes the FAO, “an increasing share of the fish consumed will be imported and, as these countries will want to obtain fish as cheaply as possible, it is likely that most trade barriers will be removed in advanced economies.”

Foreign producers hold certain advantages over many U.S. fishermen and fish farmers. In some cases, overseas producers—who may not face seasonal closures, strict environmental regulations, and other constraints—can guarantee consistency year-round. This is especially true of seafood production dominated by foreign aquaculture. Foreign fishing fleets are also less capital-intensive and have cheaper labor forces.

The near future, therefore, will be difficult for fishermen in the U.S. South Atlantic. But eventually U.S. producers could benefit from stringent fisheries management.

“Because of the way these other countries manage their fisheries—which is not at all—many overseas fishermen are going to be in worse shape ultimately than we are,” says Daniel. “Our fishermen who have stuck it out are going to be in the catbird seat. The question is whether they’re going to be able to stay in the fishery long enough to reap the benefits.”



**GAS GUZZLER.** Mark Marhefka, a commercial snapper-grouper fisherman based in Rockville, pumps gas into the Amy Marie’s tank. Over the past year, diesel fuel has risen from \$1 a gallon to \$1.40. Filling his tank costs as much as \$500 a trip now, cutting deeply into his profits.

PHOTO/WADE SPEES

## TWO ERAS, TWO COMMISSIONS

In 1969, the Stratton Commission released a landmark report describing the U.S. fishing industry as technically deficient and uncompetitive. The Stratton Commission called for the U.S. fishing industry to take back its fisheries from foreign boats and for the federal government to set up management regimes on fishery stocks.

In response, Congress passed a law now known as the Magnuson-Stevens Fishery Conservation and Management Act, which expanded the federal fisheries conservation zone to 200 miles offshore and established eight regional councils to manage fisheries. Most individual coastal states within the United States have jurisdiction up to three miles offshore, though a few have wider jurisdiction.

Subsequently, the U.S. “fishing industry rushed to enlarge its capacity to catch fish,” notes the April 2004 preliminary report by the U.S. Commission on Ocean Policy. “New technologies were developed while programs . . . provided incentives for U.S. fishermen to upgrade or buy new vessels. This led to an unprecedented and unforeseen expansion of U.S. fishing power.”

The preliminary report calls for reforms of the regional fishery councils, which recommend catch limits on fish and allocate catches among recreational and commercial fishermen. Councils offer these recommendations to the NOAA National Marine Fisheries Service (NMFS) and the Secretary of Commerce, who make the final determinations on fishery management plans.

Councils include state and federal resource managers, but these regulatory bodies were designed in the 1970s so that representatives of commercial and recreational fishing industries would hold the majority of votes. Experts believed that having

fishing interests hold a majority would help fishery managers sustain stocks over time.

But it hasn't turned out that way, says Andrew Rosenberg, dean of life sciences and agriculture at the University of New Hampshire and a commissioner on the U.S. Commission on Ocean Policy. When important fish stocks have declined rapidly, many councils have not reduced fishermen's access to the resource, says Rosenberg. Instead many councils have continued arguing that there are plenty of fish to catch.

Fishermen on councils tend to look at a regional fishery resource from the point of view of their financial interests, says Rosenberg. They put off setting new regulations to recover the resource. Then, once a fishery has collapsed and regulations finally have been put in place, fish populations begin to revive over time. But too often fishing interests on councils are unwilling to sustain effective regulations long enough to recover fully. If councils fail to act, NMFS has the authority to sustain effective regulations, but in some cases NMFS has not weathered the political heat, experts say.

Such problems did not occur on the South Atlantic Fishery Management Council (SAFMC), which regulates fisheries in federal waters from North Carolina to the Florida Keys, says John Mark Dean, a professor emeritus of marine science at the University of South Carolina who has served twice as SAFMC member. In 1989-1991, for example, the council established tough limits on catches of Spanish mackerel and king mackerel, both of which fisheries had declined, says Dean. Now these stocks are thriving.

“Some of our most conservative recommendations have come from fishermen on our council,” who advocate more stringent

fishery-management efforts, says Gregg Waugh, SAFMC deputy executive director.

Now the commission calls for reforms to address overfishing. First, regional fishery councils should clearly separate fishery assessment (the sustainable harvests of fish stocks) and allocation (who catches the fish). This reform, according to the commission, would allow scientists—instead of fishermen—more authority over how many fish in specific stocks can be caught to sustain those populations.

Second, the commission argues, there should be “fine-tuning” of the eight regional fishery management councils. The number of fishing industry representatives on the councils should be reduced, in part to eliminate potential conflicts of interest.

Third, fishery managers should further explore the use of “dedicated-access privileges.” In a traditional open-access, derby-style fishery, anyone who can afford to buy a fishing boat can get a license and race out at the season's opening to catch as many fish as possible. By contrast, in a dedicated-access fishery, an individual fisherman, community, or other entity is granted the privilege of catching a specific portion of a stock's total allowable catch. The benefit is that fishermen do not have to overfish the resource because each is allowed to catch only a certain share. “The incentive,” states the commission, is that fishermen would “catch the full share at a low cost and sell the best quality fish at the highest obtainable price.”

SAFMC has already established a dedicated-access fishery for wreckfish and snapper-grouper caught off the South Carolina coast. “It's a tool that works in some instances,” says Waugh, “so we'd like to have it available.”





## Shrimpers fight imported product

American shrimp fishermen realize they must find ways to distinguish U.S. product from imports, says Mount Pleasant resident Eddie Gordon, president of the Southern Shrimp Alliance (SSA), an eight-state group formed in 2002.

“We are rapidly moving forward to having a certified product, a special brand called ‘Wild American Shrimp,’ just like those for black Angus beef and Vidalia onions,” says Gordon. “You have to have this differentiation and enforce it.”

Americans eat relatively little U.S. caught or farmed shrimp, though they eat all that’s produced. Up to 85 percent of shrimp that Americans eat is imported.

Huge volumes of shrimp grown overseas have been “dumped” on U.S. markets at extremely low prices, creating havoc for fishermen and shrimp farmers in coastal southern states from North Carolina to Texas, according to SSA. Prices for South Carolina shrimp have fallen to 1970s levels. Now, U.S. producers want tariffs placed on imported shrimp, and they have taken an “anti-dumping” case to the U.S. Department of Commerce.

Many lowcountry restaurants and retail outlets sell primarily foreign shrimp because it’s available year-round, often at the lowest cost. Shrimp is the most popular seafood in the United States, and American producers cannot meet exploding market demand.

American shrimpers face many of the same problems as snapper-grouper fishermen: rising prices for fuel and labor, increasing competition from imports, and falling prices for domestic product. One important difference, however, is that the domestic shrimp fishery is not overfished, and it is not experiencing overfishing, according to Amber Von Harten, S.C. Sea Grant fisheries extension specialist.

“One of the big problems in South Carolina is the lack of freezer capacity and processing facilities here,” says Von Harten. “Infrastructure is key to a sustainable industry in the state and region.”

But the most pressing challenge is imported shrimp. After a shrimper carries his catch to dock, a packer usually sells it to a national distributor who handles both American and foreign product. The distributor, in turn, sells the shrimp

frozen to grocery stores and restaurants that rarely label the seafood’s origin. Consumers, therefore, often don’t know whether shrimp is foreign or domestic, farmed or wild-caught. Shrimpers hope that a new rule coming into effect this fall will solve this problem. In September, seafood in U.S. supermarkets must have labels stating the product’s nation of origin, location of processing, and whether it is wild or farmed.

In February 2004, the U.S. International Trade Commission stated there is “reasonable indication” that six nations illegally flooded the American markets with cheap shrimp.

The U.S. producers’ case has gone to the U.S. Department of Commerce, which on July 6 is expected to decide whether to place duties on shrimp from China and Vietnam, and on July 29 whether to place duties on shrimp from Brazil, Thailand, Ecuador, and India.

“We see both sides of the (shrimp-imports) issue,” says Linda Candler, a vice-president of the National Fisheries Institute, a seafood-industry organization based in Arlington, Virginia. “Domestic shrimp production has remained flat for 20 years. The surge in imports is to meet domestic demand. You can’t meet demand without imports.”



**LOCAL FLAVOR.** “We need to educate people about the positive attributes of wild-caught American shrimp,” says Eddie Gordon of the Southern Shrimp Alliance, an eight-state group formed in 2002. Shown here at Shem Creek in Mount Pleasant, Gordon says, “Taste is the biggest attribute.” PHOTO/WADE SPEES

Overseas shrimp farmers determine the domestic prices because their volume is so huge. Still, domestic fishermen and aquaculturists can establish “niche markets” in which a high-quality product is coupled with “buy U.S.” marketing strategies. ♡

# EBBS & FLOWS

## 16<sup>th</sup> Annual Beach Sweep/River Sweep Statewide, South Carolina Sept. 18, 2004

Each year thousands of people participate in Beach Sweep/River Sweep, South Carolina's largest one-day litter cleanup of beaches and waterways. The S.C. Sea Grant Consortium and S.C. Department of Natural Resources organize the event, and anyone can participate—individuals, families, schools, civic and conservation clubs, or businesses.

Last year volunteers collected over 47.5 tons of debris, but there is still more to be done. To find out how you can help, call Susan Ferris, coastal coordinator, at (843) 727-2078 or Lynn Quattro, inland coordinator, at (803) 734-9094. For more information, including a list of coastal site captains and areas covered, visit <http://www.scseagrant.org> and click on Education.

## South Carolina Environmental Symposium Charleston, South Carolina Sept. 29–Oct. 1, 2004

This year's theme is Shaping South Carolina's Future: Planning for Prosperity. The concepts of quality of life and economic development seem at odds. Can good environmental policymaking help reconcile these issues? Conference topics include building healthy communities, understanding environmental health and air quality, and exploring regional transportation issues. For more information, see <http://www.scsymposium.com> or contact Mary Rudloff at [msrudlof@santecooper.com](mailto:msrudlof@santecooper.com)

## 7th International Conference on Shellfish Restoration Charleston, South Carolina, USA Nov. 17-20, 2004

The 7th International Conference on Shellfish Restoration (ICSR '04) will provide an opportunity for government officials, resource managers, and users to discuss approaches to restore coastal ecosystems through habitat quality assessment and restoration; stock enhancement, management, restoration; and habitat remediation through watershed management.

To request more information and to submit an abstract, visit <http://www.scseagrant.org/icsr.htm> or contact Rick DeVoe at [Rick.DeVoe@scseagrant.org](mailto:Rick.DeVoe@scseagrant.org).

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