



United States  
Coast Guard



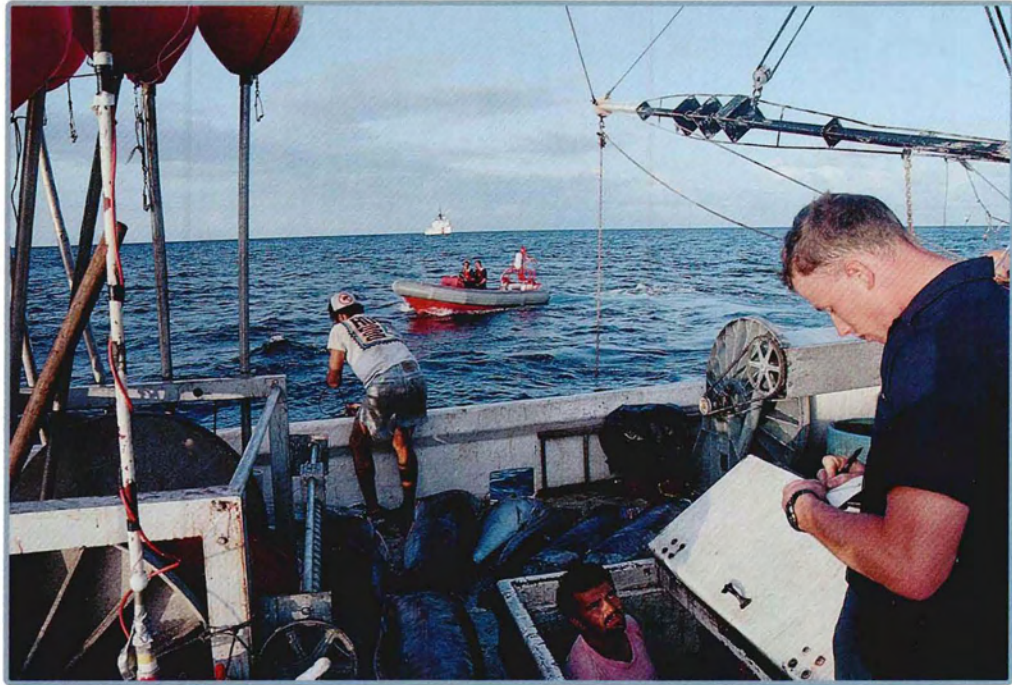
# PROTECTING AMERICA'S FISHERIES





T

he ocean is a dangerous place for those who make their living in this unpredictable environment. In addition to the harsh working conditions, fishers are now confronted by the reality that the world's fisheries are in a serious state of decline. The situation is so drastic that foreign governments have used armed force to protect their fisheries from foreign vessels.



The fisheries resources of the world were once thought to be limitless. It is now all too obvious that these resources are finite and in jeopardy. To protect these valuable resources, prudent management and enforcement action is necessary.

In the future, the United States can anticipate increased foreign fishing vessel incursions into the Exclusive Economic Zone. This could have serious economic consequences for the United States. Protecting and preserving our living marine resources has become a matter of national security. The Coast Guard is the only federal agency capable of projecting a U.S. law-enforcement presence throughout the Exclusive Economic Zone and in key areas of the high seas.

Protecting the U.S. Exclusive Economic Zone and key areas of the high seas is an important mission for the Coast Guard. The Coast Guard is charged with enforcing all U.S. maritime law, including laws that protect the economic livelihood of those who rely on commercial fisheries.

The U.S. fishing industry possesses the ability to virtually eradicate stocks by over-harvesting.

Protection of marine mammals is another key enforcement issue for the Coast Guard. Laws and treaties that protect marine mammals help improve the chances of survival of numerous endangered species.

#### The Coast Guard's Role in Living Marine Resource Enforcement

The Coast Guard has four overall objectives in its living marine resources mission:

- To prevent illegal encroachment of the U.S. EEZ by foreign fishing vessels.
- To ensure compliance with U.S. laws and regulations.
- To monitor compliance with international agreements.
- To develop viable enforcement schemes to support marine resource management plans.

Enforcement of the fishery management plans that protect and manage our fish stocks and marine mammals falls to the National Marine Fisheries Service and the Coast Guard.

NMFS estimates 96 species of fish and shellfish are endangered or at risk in the EEZ.

The recreational and commercial fishing industry has an economic impact of more than \$20 billion to the United States, employing tens of thousands of people and providing a food source for millions of Americans.

The United States has the largest EEZ in the world, 2.25 million square miles, containing an estimated 20 percent of the world's fisheries resources.

There are also a significant number of marine mammals at risk, or endangered, including the Northern Right Whale, with approximately 300 in existence.

The United States is the fifth largest fishing nation in the world, with approximately 110,000 commercial vessels. The capacity of the U.S. fishing fleet alone far exceeds all fish stocks' capabilities to reproduce. Many U.S. fisheries are threatened by over-capitalization of the industry, excessive incidental by-catch and habitat degradation. Increased effort by U.S. fishers results in a reduction of spawning stock and an increase in the harvest of immature fish.

Habitat degradation has occurred due to massive water diversions for agricultural projects and the negative impact of urban development.

In recent years on an international level, competition for declining resources has resulted in a number of violent confrontations as some of the world's fishers resort to illegal activity.

Some of these unfortunate incidents include:

- Three Thai fishermen who were killed by Vietnamese maritime authorities.



*The recreational and commercial fishing industry has an economic impact of more than \$20 billion to the United States, employing tens of thousands of people and providing a food source for millions of Americans.*





- Two Spanish fishermen were injured when their vessel was fired on by a Portuguese patrol boat within Portuguese waters.
- The Canadian patrol vessel fired at a Spanish boat illegally fishing in an internationally patrolled area in the North Atlantic.
- A Russian Border Guard ship fired on two Japanese vessels thought to be poaching; one ship was hit, and fishers on board were injured.
- An Argentine gunboat fired on and sank a Taiwan fishing vessel.
- A patrol boat from the Falklands chased a Taiwan fishing vessel more than 4,000 miles.

These, and other similar incidents underscore the high stakes being played out across the world as declining fish stocks put increasing pressure on fishing nations to undertake more aggressive action. In the future, fishing treaties will become the source of greater diplomatic attention.

#### Magnuson-Stevens Fishery Conservation and Management Act

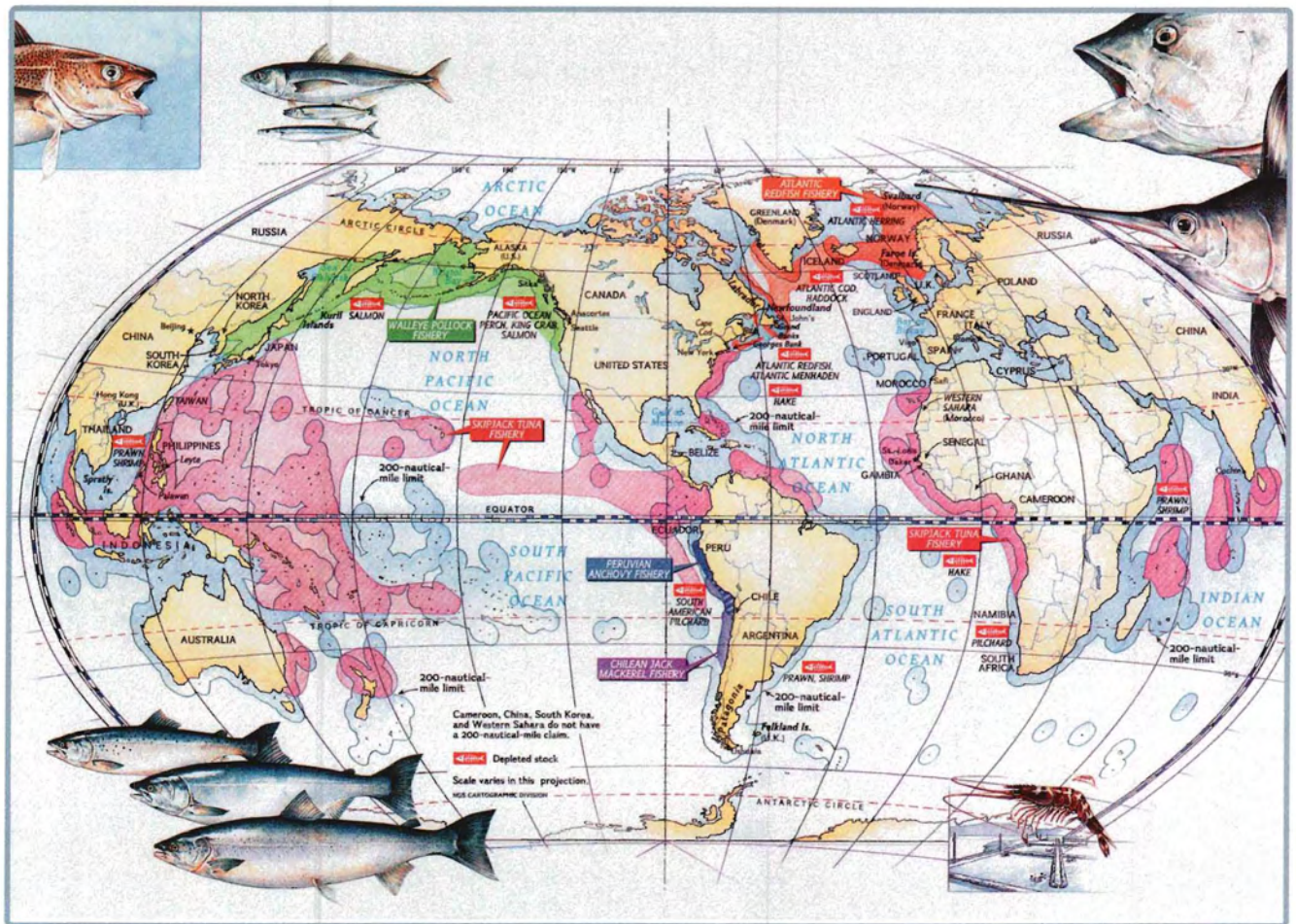
Among the earliest fisheries laws enacted were the 1889 laws protecting U.S. salmon fisheries. However, only since the end of World War II has conservation of living marine resources become of significant interest to the United States and other coastal nations.

During the 1950s, the United States instituted the Northwest Atlantic Fisheries Act, which implemented the International Convention for Northwest Atlantic Fisheries, as well as the Tuna Conventions and Northwest Pacific Fisheries Acts. The Coast Guard documented violations by foreign vessels but had little direct enforcement authority.

The Bartlett Act, passed in 1964, prohibited foreign fishing in U.S. territorial waters and authorized the seizure of foreign vessels in violation. Amendments to the act broadened the protected area to include the 12-mile contiguous zone, prohibited processing operations and provided a maximum penalty of \$100,000.

The most significant legislation is the Magnuson-Stevens Fishery Conservation and Management Act. Adopted by Congress in 1976, the act established the 200-nautical-mile Exclusive Economic Zone. More recently, President Clinton advocated responsible stewardship of the earth's resources, including the goal of sustainable development of fisheries. This directive sought to project a U.S. leadership role in the proper management of ocean resources for the rest of the world.

The Coast Guard also enforces the Lacey Act, which makes it unlawful for any person subject to the jurisdiction of the United States to import, export, transport, sell or receive fish or wildlife taken in violation of any U.S. law, treaty or foreign law.



© C BRUCE MORSE/NATIONAL GEOGRAPHIC SOCIETY IMAGE COLLECTION

### Regional Fishery Management Councils

In addition to establishing the EEZ, the Magnuson Act created eight Regional Fishery Management Councils, tasked with developing Fishery Management Plans to improve the sustainability of fish in the EEZ.

The councils are comprised of principal state officials with fishery management responsibility, individuals nominated by the governors of the states within the councils' areas and NMFS regional directors. These members are representatives of the fishing industry, the recreational fishing community or others with substantial knowledge of fisheries. The Coast Guard provides enforcement and safety guidance on proposed management regulations and updates on existing regulation enforcement.

In creating the councils, Congress intended that they reflect the diversified interests of regional stakeholders, including the fishing industry, recreational fishers, environmentalists, and federal and state fisheries regulators.

The councils are required to prepare FMPs in partnership with NMFS, subject to the approval of the Secretary of Commerce. There are presently 39 FMPs in

effect. NMFS has classified 86 species as "over-fished" and 10 that are "approaching an over-fished condition."

### The Role of NOAA and NMFS In Fisheries Management and Conservation

The National Marine Fisheries Service, as part of the National Oceanic and Atmospheric Administration, manages the fisheries and shares enforcement responsibility with the Coast Guard.

NMFS management consists of biologists, economists and managers who work closely with the regional fisheries management councils to develop Fishery Management Plans. Coast Guard and NMFS enforcement personnel provide enforcement guidance to the managers prior to implementing the FMP.

NMFS agents are considered subject-matter specialists for fisheries enforcement. During at-sea boardings involving foreign vessels, the Coast Guard ensures that NMFS is involved in decisions prior to any action taken for violations of the Magnuson-Stevens Act. In addition, NOAA's General Counsel is responsible for adjudicating civil penalty cases against vessels violating the Magnuson-Stevens Act.



#### Deterrence of Foreign Poaching

To counteract the threat of foreign encroachment, the Coast Guard patrols the EEZ with long-range surveillance aircraft, cutters and patrol boats, which also conduct on-scene enforcement.

Areas most often subject to incursions include:

- The Bering Sea at the U.S./Russia Maritime Boundary.
- The western Pacific around U.S. territories.
- The U.S./Mexico maritime border.

In fiscal year 1997, the Coast Guard took action against 169 foreign vessels fishing illegally inside the U.S. EEZ. When successful, foreign fishing fleets steal a valuable resource from the, resulting in a total economic loss to the American public.

#### Enforcement of the United Nations Moratorium on High Seas Drift Nets

The Coast Guard monitors a number of international agreements, treaties and conventions, including the UN moratorium on High Seas Drift Net Fishing. This indiscriminate fishing method uses large-scale drift nets, sometimes more than 25 miles in length. The nets have been banned on the high seas since 1991. Before 1991, there were as many as 1,400 vessels engaged in this type of destructive fishing in the northern Pacific Ocean. As a result of U.S.-led efforts, supported by Coast Guard aircraft and cutter patrols, the nations operating these vessels have virtually abandoned this practice.

Despite the moratorium and international compliance, there are still attempts to break the law by vessels generally operating beyond control of any flag-state authority.

The most recent case involving a high seas drift net vessel occurred in July 1997. A Canadian aircraft spotted the vessel Cao Yu 6025 fishing 1,100 miles northwest of Midway Island. After spotting the surveillance aircraft, the vessel's crew attempted to flee. Canadian and U.S. Coast Guard aircraft tracked it, while the CGC Basswood attempted an intercept. After a 1,700-mile chase, the Bass-



*The most significant legislation regarding fisheries management and conservation is the Magnuson-Stevens Act. Adopted by Congress in 1976, the act established the 200-nautical-mile Exclusive Economic Zone.*

wood, along with the CGC Chase, boarded the vessel in the East China Sea. The Cao Yu's catch of 120 tons of albacore, swordfish and shark fins was seized, along with the vessel itself. The vessel was escorted to Guam, where its catch was ultimately sold at auction.

#### Regional Fisheries Summary

The United States is blessed with a tremendous variety of fisheries and other marine resources, generating wide-ranging conservation, management and enforcement issues that vary greatly by region. Enforcement challenges in the Northeast, for example, are much different than in the western Pacific. The common denominator is the necessity of careful stewardship to maintain healthy stocks and restoration of depleted stocks to ensure the availability for generations to come.

In the Northeast, traditional stocks of cod, flounder and haddock are dangerously low, estimated to be at only 10 percent of their historic levels. To complicate the situation, cod and haddock are slow-growing

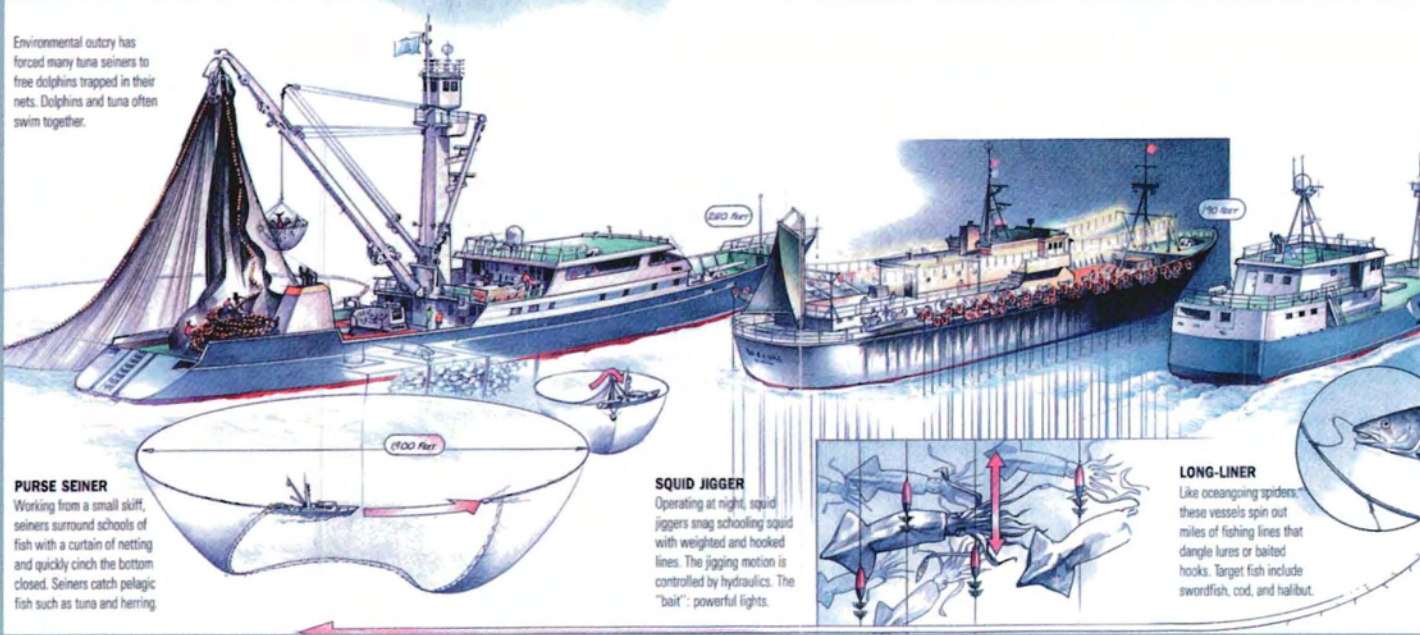
species, requiring five to seven years to reach maturity. Currently 20 percent, or 6,600 square miles, of traditional fishing grounds are closed, and larger net mesh sizes have been implemented to decrease catch of juvenile fish. The Coast Guard monitors an estimated 25,000 fishing vessels in the Northeast and Mid-Atlantic, keeping them out of closed areas, and inspecting gear.

The Mid-Atlantic area is experiencing increasing numbers of fishers due to the migration of commercial fishing boats from the New England region, while recreational fishers are applying pressure for greater access to fishing areas.

The Coast Guard also enforces regulations on Atlantic Bluefin Tuna as required by the International Convention for the Conservation of Atlantic Tunas, which impacts both commercial and recreational fishing fleets.

In the South Atlantic and the Gulf of Mexico, a major issue is the requirement for commercial shrimpers to use

Environmental outcry has forced many tuna seiners to free dolphins trapped in their nets. Dolphins and tuna often swim together.

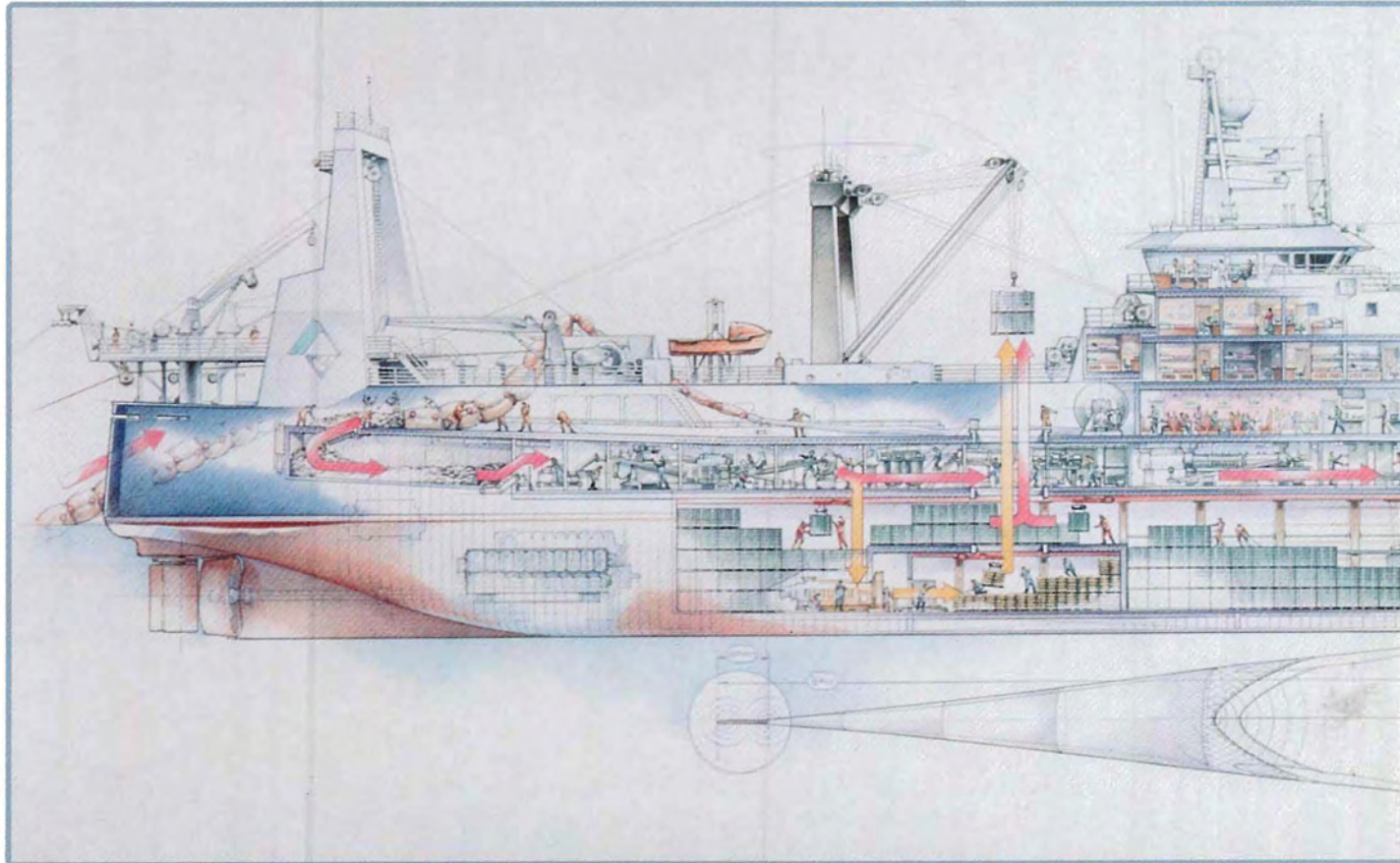


**PURSE SEINER**  
Working from a small skiff, seiners surround schools of fish with a curtain of netting and quickly cinch the bottom closed. Seiners catch pelagic fish such as tuna and herring.

**SQUID JIGGER**  
Operating at night, squid jiggers snag schooling squid with weighted and hooked lines. The jiggling motion is controlled by hydraulics. The "bait": powerful lights.

**LONG-LINER**  
Like oceangoing spiders, these vessels spin out miles of fishing lines that dangle lures or baited hooks. Target fish include swordfish, cod, and halibut.

© C BRUCE MORSE/NATIONAL GEOGRAPHIC SOCIETY IMAGE COLLECTION

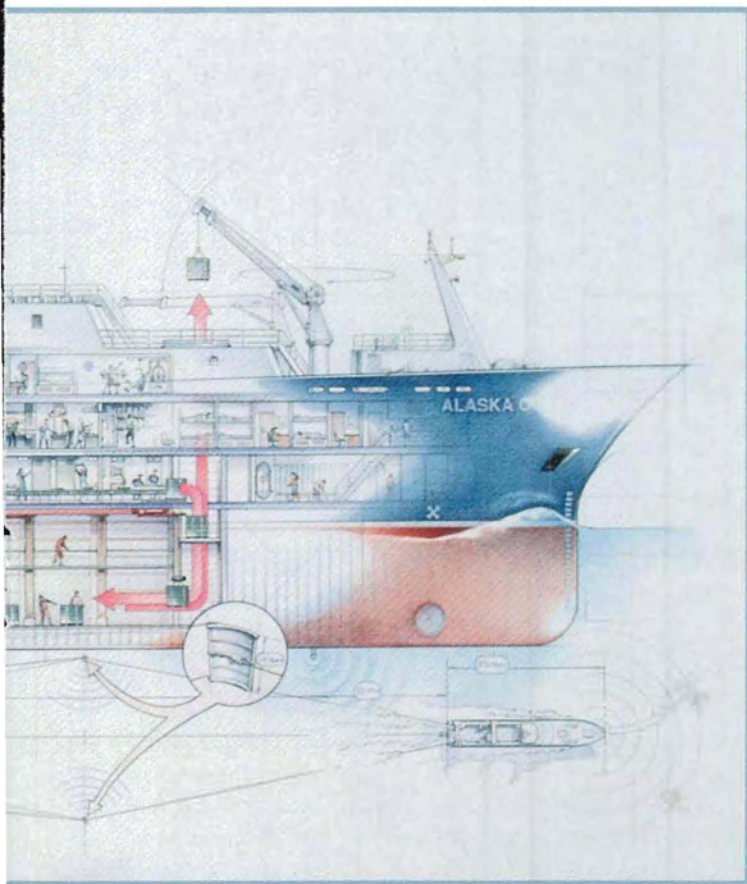


© C BRUCE MORSE/NATIONAL GEOGRAPHIC SOCIETY IMAGE COLLECTION



*The United States has the largest EEZ in the world, 2.25 million square miles, containing an estimated 20 percent of the world's fisheries resources.*

*The United States is the fifth largest fishing nation in the world, with approximately 110,000 commercial vessels. But the capacity of the U.S. fishing fleet alone far exceeds all U.S. fish stocks' capabilities to reproduce.*



More than a million fishing vessels now sift the world's oceans for seafood — twice as many as in 1970. Yet the global fleet, subsidized for decades by national governments, is poised for major down-sizing. "Many of the small mom-and-pop operations are going to be left behind," said an expert with the U.S. National Marine Fisheries Service. "The trend is going toward fewer, bigger, more efficient boats." The Alaska Ocean (left) could be a flat ship for this new era of industrial fishing. Based in Anacortes, Washington, the ship can process more than 600 metric tons of pollock a day. At 376 feet it is one of the largest factory trawlers in the world.

— National Geographic Society

*The fishing industry is the most hazardous in the United States.*

*Fatality rates for commercial fishers are significantly higher than any other industry.*

Turtle Excluder Devices on nets which allow sea turtles to escape. This is a highly controversial issue; shrimpers claim the TEDs result in a high loss of shrimp, while environmentalists claim shrimping activity is the cause of numerous dead sea turtles washing up on beaches.

The Gulf shrimp harvest is \$300 million annually, and the Coast Guard must monitor more than 36,000 boats. To effectively ensure compliance, multiple boardings are sometimes required. As in all law enforcement situations, the pressure to catch the few who break the law can cause frustration for the vast majority of law-abiding fishers.

#### Pacific Northwest-Alaska

California, Oregon and Washington all have significant commercial and recreational fisheries. Many salmon species in this area of the Pacific are on the verge of collapse.

The state of Alaska has the most substantial fishery in the United States, representing 40 percent of the annual U.S. yield. If Alaska were a sovereign nation, it would rank 10th worldwide in the harvest of fish. More than five billion pounds of fish, worth \$1.4 billion are caught annually by the state's industry. The Alaska fishery operates year round with 17,000 fishing vessels working in some of the most severe weather in the world. There are approximately 60 factory trawlers operating in Alaskan waters, which have the capacity for large-scale harvesting.

In Alaska, the Coast Guard provides critical search and rescue services, as well as surface and air law enforcement patrols to monitor compliance of the U.S. domestic fleet. The foreign fishing activity on the Russian side of the U.S./Russia Maritime Boundary has become of increasing concern. In recent years, the Coast Guard has resorted to near-daily C-130 flights and continuous cutter presence along the boundary line during peak fishing seasons to ensure that the huge foreign fleets, including Russian, Japanese, Polish, Chinese and Taiwan fishing vessels operating near the line do not violate the U.S. EEZ.



#### Western Pacific

The Western Pacific region encompasses a huge area with significant international competition for the valuable tuna resources in the area. Major competitors include Japan, South Korea, the People's Republic of China and Taiwan. There have been reports of more than 500 fishing vessels from the People's Republic of China and Taiwan in this vast region. The challenge for the Coast Guard is to patrol a massive area and prevent foreign incursions into our eight non-contiguous EEZs. Because of dwindling stocks elsewhere, the pressure by foreign fleets is growing.

With its great distance from the mainland, it's easy to ignore issues that are specific to the region. Most Americans are unaware that the top fishing port in the U.S., in terms of revenue, is Pago Pago in American Samoa. Agana, Guam, and Honolulu are also in the top ten.

The Western Pacific EEZ covers approximately 1.5 million square miles, representing nearly half the total U.S. EEZ. The total operating area for the Coast Guard in the region is 3 million square miles. There are very few deep water ports, so cutter and aircraft on-scene time is seriously impacted by transit time to patrol areas. With the rising number of foreign fishing vessels and the large area, the Coast Guard anticipates a growing threat requiring more assets and improving technology to meet demand.

#### Great Lakes

The Great Lakes represents one of the last major freshwater fisheries in the world. The Coast Guard and the Fish and Wildlife Service enforce the Special Maritime and Territorial Jurisdiction that protects living marine resources from foreign poaching. In a recent case, a helicopter from Air Station Detroit videotaped a Canadian vessel fishing illegally. The owners of the vessel agreed to plead guilty and pay a civil fine. On Lake Erie, Canadian commercial fishing vessels have conducted illegal fishing operations in U.S. waters. On Lake Superior, the Fish and

Wildlife Service has prosecuted 15 Lacey Act felonies with 26 indictments pending in federal court.

#### Marine Mammal and Endangered Species Protection

The Coast Guard's role in protecting marine mammals goes back to the days of the Revenue Cutter Service, when the Coast Guard began its first patrols of the new Alaskan territory in the 1860s. The first marine mammal protection laws were enacted in 1868 with the Fur Seal Protection Act. During the 1950s, the United States instituted the Whaling Convention and reversed the trend of unrestricted hunting of whales.

Today, a number of laws are designed to protect marine species. The principal laws are the Endangered Species Act and the Marine Mammal Protection Act. Additionally, the Coast Guard shares responsibility with state enforcement agencies for enforcing the Marine Protection, Research and Sanctuaries Act, which established a number of marine sanctuaries around the country.

Marine mammals protected under the MMPA include whales, manatees, porpoises, dolphins, seals, sea lions, walrus, otters and polar bears. NMFS is the lead federal agency in enforcing the act. As the only U.S. maritime agency capable of at-sea enforcement, the Coast Guard enforces the MMPA. The MMPA prohibits the taking of marine mammals and makes it unlawful to possess, transport or sell any marine mammal.

The Endangered Species Act identifies and protects species in danger of extinction and prohibits the taking of, importation, selling or possession of such species. The ESA includes mammals, fish, plants, birds, amphibians, reptiles, mollusks, crustaceans and other invertebrates. The act charges the Coast Guard, along with NMFS and the Fish And Wildlife Service, with enforcement authority. One of the major enforcement responsibilities for the Coast Guard is the requirement for Turtle Excluder Devices. TEDs allow endangered sea turtles to escape unharmed from trawl nets. Shrimp trawlers fishing in the Atlantic and Gulf of Mexico are required to have TEDs in each net.

#### The Northern Right Whale

The right whale is the world's most endangered species of whale. At one time, more than 10,000 right whales lived in the north Atlantic Ocean. Today, approximately 300 survive.

The right whale was hunted to the brink of extinction by 19th century whalers. The whale got its name from the fact that whalers considered this species the "right whale" to hunt because it swam slowly, floated when it was killed and yielded large quantities of oil and baleen. The right whale was first protected from hunting in 1935 by a resolution adopted by the League of Nations. In 1949, the International Whaling



*The major issue for the Coast Guard in the Southern Atlantic and Gulf regions is the requirement for devices that allow turtles to escape from nets. Gulf shrimpers, who harvest \$300 million annually, claim the device results in a high loss of shrimp.*





Commission banned all harvesting of right whales.

Unfortunately, after 60 years of federal and international protection, the species has not recovered. Sadly, their numbers appear to decline each year. The Coast Guard, along with many other agencies, is increasing its efforts to educate mariners about the right whale to ensure species protection.

The Coast Guard assists Right Whale Recovery Implementation Teams and provides funding for the northeast and southeast Early Warning Systems (EWS). The Coast Guard developed a training course for lookouts and watchstander personnel in marine mammal identification. The service educates the public through an outreach program as well as participating in Take Reduction Team meetings. Working closely with other agencies and organizations, the Coast Guard continues to identify steps to further right whale protection.

#### Regional Fisheries Training Centers

In 1992, the Coast Guard conducted an in-depth study on all aspects of fisheries law enforcement, including the training and professional development of Coast Guard personnel conducting fisheries enforcement. As a result, the Coast Guard established five Regional Fisheries Training Centers. The centers teach Coast Guard boarding officers fisheries regulations and knowledge of the industry they regulate. The five centers are located in Kodiak, Alaska; Alameda Calif.; New Orleans, La.; Charleston, S.C.; and on Cape Cod, Mass.

Courses range from basic fisheries identification to complex fisheries regulations. Instructors conduct both on-site training and regularly deploy aboard cutters during patrols to reinforce classroom lessons.

A key to their success is the involvement of the commercial fishing industry. Such interaction provides valuable insight for boarding officers in understanding their customer's perspectives.

#### Fishing Vessel Safety

According to the National Research Council, the fishing industry is the most hazardous in the United States. Fatality rates for commercial fishers are significantly higher than any other industry. The commercial fishing industry comprises about 50 percent of the employment in the entire maritime industry. Of the 140,000 commercial vessels regulated by the Coast Guard, more than 80 percent are fishing vessels.

To address and correct the unacceptable safety record of the commercial fishing industry, Congress passed the Commercial Fishing Industry Vessel Safety Act of 1988. In response, the Coast Guard developed regulations which took effect in 1991. The regulations require vessels to carry safety equipment, including lifesaving equipment, survival craft, communications equipment, distress signals, Emergency Position Indicating Radio Beacons, fire extin-

guishers, emergency alarms and bilge pumps. The new regulations also developed guidelines for watertight integrity and stability.

The act established a Commercial Fishing Industry Vessel Advisory Committee made up of fishers, marine-safety and insurance representatives and safety-equipment vendors. The committee meets annually and provides the Coast Guard with recommendations on safety and equipment items. The committee plays a part in the development of realistic regulations. This has fostered greater industry acceptance of the requirements. The core program is a no-cost, no-fault, voluntary dockside safety examination program. Fishers can request a Coast Guard vessel examination to ensure they have the proper types and quantities of safety gear. This is non-adversarial, and the examinations are used as an educational tool, as well as a means to encourage future compliance.

The voluntary exams are complemented by the Coast Guard's at-sea law enforcement program. Critical safety items are checked at sea during fisheries law enforcement boardings. Citations are issued for safety deficiencies, and, in more serious cases, vessels may be ordered back to port. The Coast Guard's success has been measured by the steady reduction of commercial fishing deaths since 1992. The combination of regulations, industry awareness and participation is helping make a dangerous occupation safer.

#### The Future

Working closely with NMFS and other federal agencies, the Coast Guard is responsible for enforcing the laws and international treaties that protect our living marine resources. This is not an easy task. It is growing more complex as the need for additional regulations to ensure the sustainability of species at risk increases. The needs of the fishing industry are important to consider, because of the significant number of people whose livelihood depends on these resources.

The ramifications of improper management and enforcement can be severe. Economic disaster from the collapse of a fishery is a very real possibility. In the early 1990s, Canada shut down its Newfoundland groundfish fishery to protect cod and haddock stocks on the verge of collapse. In the process, 40,000 Canadians were put out of work. In the U.S., effective management and enforcement efforts have resulted in the recovery of Atlantic striped bass, herring and mackerel stocks on the East Coast.

In the Bering Sea, pollock, which migrate between the U.S. and Russian EEZs were nearly wiped out by international fisheries in the "Donut Hole" area. The U.S./Russia-led Donut Hole fishing moratorium, in effect since 1993, demonstrates the potential of international cooper-

ation in addressing fisheries problems.

The Coast Guard's role in monitoring other international treaties and resolutions will increase. In spite of the United Nations moratorium against large-scale drift net fishing, there are those who still try to use the method. The recent case of the CAO YU 6025 underscores the need for a continued presence on the high seas. This is particularly true of the Western Pacific EEZs, which are rich in natural resources and encompass a vast area. For the Coast Guard to provide an adequate enforcement presence in such a large area, significant assets or sensors are needed.

When ratified, the UN agreement on Straddling Stocks and Highly Migratory Species will allow for non-flag state action against foreign vessels operating in violation of regional international agreements. A greater Coast Guard presence beyond that currently available will be necessary to these developing regional management regimes.

Many nations look to the Coast Guard for leadership and guidance in the enforcement of laws protecting marine resources. The stakes are high and failure may be irreversible.

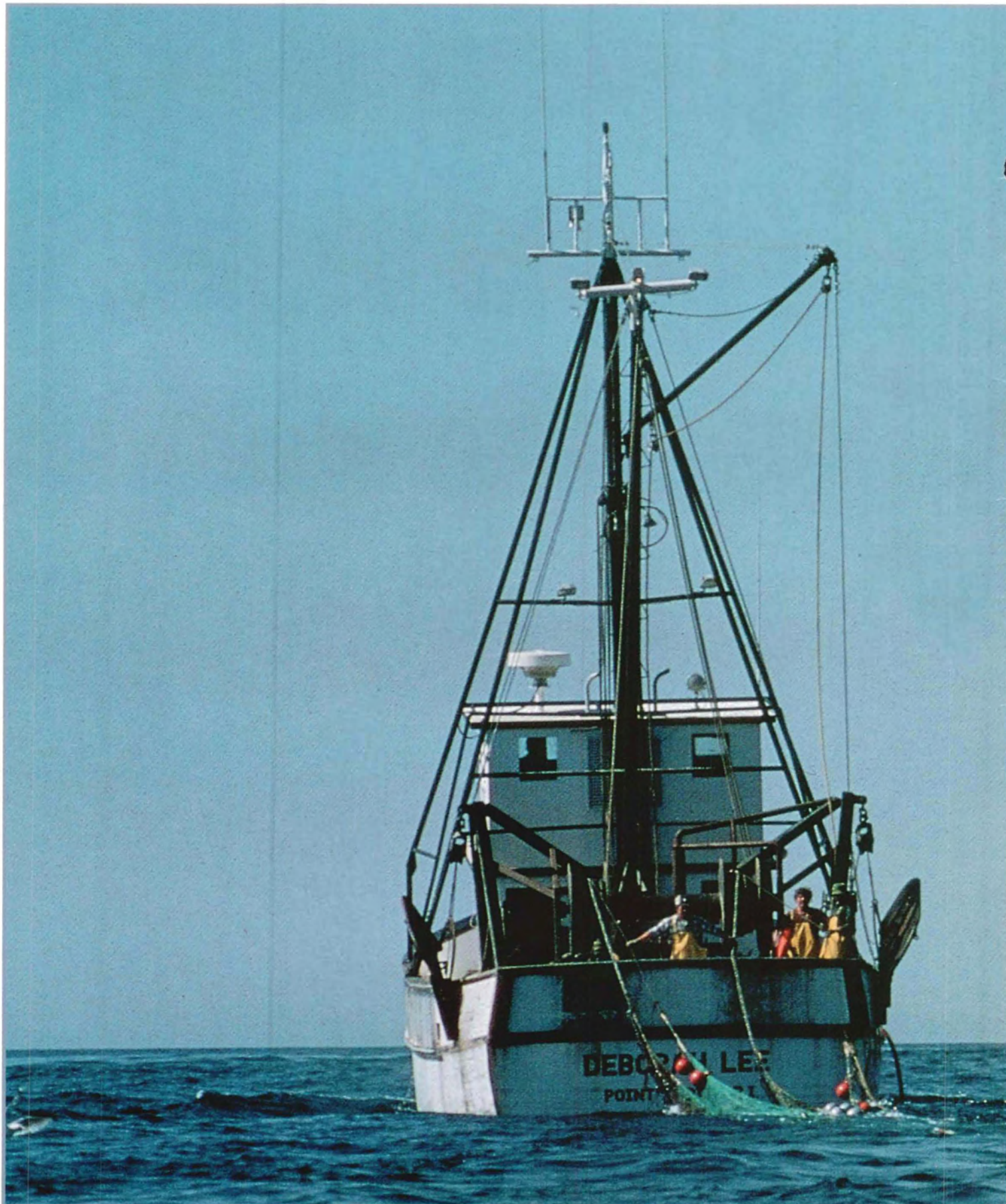
Accomplishing the daunting task of managing the fisheries will require prudent regulation, industry support and the assets to effectively enforce all laws.

The United States can anticipate increased enforcement responsibilities as the world's fish stocks decline and more pressure is put on the Coast Guard to protect U.S. fisheries resources. To accomplish this, the Coast Guard will need to patrol millions of square miles of the EEZ and the high seas. This is a daunting challenge for an agency with a finite number of assets responsible for patrolling vast areas.

*Protecting America's Fisheries* is an insert to the May 1998 issue of *Coast Guard*. Written by LT John Garofolo, G-OPL-4. Edited and designed by PA1 Gary Openshaw, G-CP-2m. Photographs from *Coast Guard* file. For additional copies, write to: Commandant (G-OPL), 2100 2nd St., SW, Washington DC 20593-0001; or call (202) 267-1890.











*According to National Geographic, more than a million fishing vessels now ply the world's oceans for seafood — twice as many as in 1970.*

*Although fish stocks are down in many areas, the \$20 billion per year industry is lucrative enough to lure thousands into one of the deadliest occupations in the world.*

*If left unchecked, fishing could destroy the world's natural marine resources.*