NOAA FISHERIES SERVICE

SUMMARY

NOAA Aquaculture-Enforcement Workshop
Hosted by the Northeast Regional Office
National Marine Fisheries Service
and the NOAA Aquaculture Program
Gloucester, MA
September 9-10, 2009

NOAA/NMFS Offices represented at the workshop:

- NMFS Northeast Regional Office Directorate
- NOAA Aquaculture Program Office
- NMFS Office of Law Enforcement
- NOAA Office of General Counsel
- NMFS Northeast State, Federal and Constituent Programs Office
- NMFS HQ Office of Sustainable Fisheries
- NMFS Northeast Protected Resources Division
- NMFS Southeast Regional Office

Introduction:

The workshop examined the relationship between marine aquaculture development, fishery management mandates, and associated issues relating to fisheries enforcement. In certain cases, wild stock management measures, such as Federal regulatory restrictions implemented under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), may require that products of commercial aquaculture be distinguishable from wild harvest products to ensure that wild organisms are not being illegally marked as aquaculture products and to maintain the integrity of wild stock fishery management plans (see list in Attachment 1). In addition to wild stock fishery management regulations under the MSA, Federal regulations also exist under the Atlantic Coastal Fisheries Cooperative Management Act for American lobster, Atlantic sturgeon, striped bass and weakfish. The challenge for NMFS is to work with commercial harvesters, aquaculture producers, and food service companies

to design effective and efficient enforcement measures that do not put unnecessary or unfair burdens on aquaculture or wild harvest interests.

Constituent requests for NMFS review of proposed aquaculture initiatives are currently dealt with on an ad-hoc basis. Such requests are expected to rise with the growing emphasis on domestic seafood supply in the United States. When the culture activity involves a species with existing Federal management measures and associated regulations under the MSA, questions arise particularly with respect to fishery enforcement. Enforcement-related guidelines, therefore, are a critical, proactive step that the agency could take in its overall strategy of enabling the development of sustainable marine aquaculture while ensuring compliance with existing regulations.

In light of increased involvement of, and requests from, constituents in New England and the Mid-Atlantic for guidance and waivers when involved in aquaculture of MSA-managed species, a two-day workshop with NOAA Fisheries staff was held in Gloucester, Massachusetts, on September 9-10, 2009, to discuss enforcement issues associated with culture of finfish and shellfish species that are covered by fishery management plans under the purview of the MSA. The purpose of the workshop was largely to facilitate a dialogue within NMFS regarding enforcement, fishery management, and regulatory issues raised by industry's growing interest and involvement in aquaculture, using the NMFS Northeast Region as a "pilot". Discussion of these issues is timely because NOAA announced in September 2009 that the agency will develop a new aquaculture policy to enable the development of sustainable marine aquaculture within the context of NOAA marine stewardship and management missions such as ensuring compliance with existing MSA regulations. Additional work on aquaculture enforcement issues by NOAA Fisheries including outreach to industry and other constituencies may follow the development of a new aquaculture policy.

Workshop Proceedings

This report, which summarizes discussions among Northeast, Southeast, and Headquarters staff during the September 2009 workshop, is divided into three sections: an overview of enforcement precepts; guidance to constituents; and enforcement-related concerns to be considered in associated aquaculture legislation and regulations.

1. Overview of Enforcement Precepts

Concerns relative to fisheries enforcement are broad and inter-connected and are relevant to Department of Commerce and NOAA aquaculture policy and to Federal regulation under the MSA, Lacey Act, and other statutes. Left unchecked, these concerns present challenges to enablement of marine aquaculture, enforceability of federal (MSA and other) regulations, and seafood marketing.

Workshop participants discussed a three-pronged approach to aquaculture enforcement issues intended to encourage compliance with applicable laws and regulations and facilitate successful monitoring of aquaculture products, consisting of 1) inspection, 2) auditing, and 3) investigation. This approach emphasizes the value of clear and distinct labeling or tracking of cultured seafood products and traceability of seafood from production to the retail level, particularly within the context of MSA-managed finfish and shellfish.

2. Guidance to Constituents

Requests from constituents for guidance and/or waivers of certain requirements for marine aquaculture activities have focused on regulatory restrictions (e.g., minimum size requirements, closed seasons, etc.) in place for wild stock management under the MSA. In this vein, attention has been afforded to species such as

Atlantic sea scallop, summer flounder, black sea bass, and Atlantic cod. The most recent example, in March 2008, pertained to the culture of black sea bass at a land-side facility in Virginia. This request was similar to others received by the NMFS Northeast Region inasmuch as the aquaculture activity occurred in state waters and the constituent did not possess either a Federal black sea bass harvesting permit or a Federal dealer permit. Accordingly, the response from NMFS Northeast Region advised the constituent to facilitate NMFS enforcement by taking steps to 1) clearly mark cultured fish during transport as well as at the market location to distinguish between cultured and wild individuals; 2) provide a bill of lading that accurately lists the weight, number, and price of cultured fish; and 3) check with laws of any state into which cultured fish would be transported to avoid potential Lacey Act implications.

In the event where an aquaculture activity either takes place in Federal waters (for example, obtaining broodstock from the wild) or involves a participant who holds a Federal harvesting (vessel/operator) permit or a Federal dealer permit, appropriate authorizations (such as an Exempted Fishing Permit or Letter of Authorization) for possession and sale of cultured products need to be ascertained on a case by case basis. This pertains to future constituent requests, as well as for aquaculture research and development projects funded under NMFS or other Federal agency grant programs.

The guidance NMFS Northeast Region provided to constituents may need to be re-evaluated in the future -- for example, if domestic or foreign companies flood the market with sub-legal size fish or in some other situation deemed by NMFS to compromise MSA conservation and management.

Discussions during the workshop addressed various specific scenarios where aquaculture-enforcement concerns arise as a result of aquaculture research and development funded under NMFS (or other Federal) grant or contractual programs. For example, specific information requested of and provided by prospective principal investigators could help "front-load" the level of needed information to evaluate future federally funded aquaculture research involving finfish or shellfish managed under the MSA.

3. Enforcement- Related Concerns Relative to Federal Aquaculture Legislation and Regulations Discussed During the Workshop

- Need to draft regulations with "up front" input from NMFS Enforcement to enhance enforceability and enforcement capabilities –e.g., identification of inspection authority from harvester to dealer to end user; consider need for prioritizing by species depending on established parameters
- Requirement for Certificate of Origin to follow product through the marketplace
- Address need for comprehensive "tamper proof" documentation trail requirement to verify authenticity of cultured or wild product
- Determine NMFS internal enforcement capabilities and interjurisdictional "buy-in" relative to required enforcement resources (time, money and logistics). Domestic production is currently small, so needed resources may not be necessarily overwhelming
- Regulations applicable to aquaculture freight/trucking
- Regulations to consider implications of cultured product imports, re-imported exports, and international markets -- e.g., vis-à-vis ports of entry, CITES protocols, role of Customs, preventing black market imports, etc.
- Need to evaluate level of "acceptable risk" (regarding potential for illegal products in the marketplace)
- Need to evaluate and balance public/industry perception concerning "acceptable risk" as it relates to wild stock (MSA) restrictions and stock status and associated steps to prevent illegal markets
- Consider regulatory provision for aquaculture license for harvesters and dealers
- Evaluate potential benefits of establishing an "aquaculture registry" for federal/state law enforcement access/reference

- Consider relevance and applicability of Joint NMFS-State Law Enforcement Agreements (since aquaculture of MSA-managed species in the Northeast occurs primarily in state waters)
- Coordinate aquaculture enforcement-related concerns with the States, Fishery Management Councils, the Marine Fisheries Commissions, and other Federal agencies (e.g., Coast Guard, Customs, Interior, etc.)
- How to incorporate measures to encourage compliance with existing prohibitions on poaching of cultured products
- How to tailor enforcement related concerns depending on type of aquaculture (e.g., commercial production, stock enhancement, aquarium trade, research, enhancement of recreational fisheries)
- Need to evaluate "liability" concerns relating to marine aquaculture – i.e., where grower/harvester responsibilities end and where liabilities of aquaculture dealers begin
- Consider potential use of vessel monitoring systems (VMS) as an aquaculture-enforcement tool
- Evaluate aquaculture-enforcement related success in other countries, where applicable
- Research needs: genetic and other types of marking or distinguishing wild and aquaculture products (accuracy/benchmarks); field genetic testing logistics and applicability (e.g., microfiche); morphology markers; market-genetic techniques (e.g., tissue plugs, etc); species-specific genetic databases; genetic risk analysis (vis-à-vis litigation purposes, etc.)

Attachment 1. Fish and Shellfish Species Managed in the NMFS Northeast under the Magnuson-Stevens Fishery Conservation and Management Act.

Fishery Mgt Plan
Species/Occurrence.

Atlantic Mackerel, Squid and Butterfish
Atlantic mackerel - Gulf of Maine / Cape Hatteras
Butterfish - Gulf of Maine / Cape Hatteras
Longfin inshore squid - Georges Bank / Cape Hatteras
Northern shortfin squid - Northwestern Atlantic Coast

Atlantic Salmon
Atlantic Salmon - New England

Bluefish
Bluefish - Atlantic Coast

Summer Flounder, Scup and Black Sea Bass
Black sea bass - Mid-Atlantic Coast
Scup - Atlantic Coast
Summer flounder - Mid-Atlantic Coast

Surfclam and Ocean Quahog
Atlantic surfclam - Mid-Atlantic Coast
Ocean quahog - Atlantic Coast

Tilefish
Tilefish - Mid-Atlantic Coast

Atlantic Herring
- Atlantic herring - Northwestern Atlantic Coast

Atlantic Sea Scallop
- Sea scallop - Northwestern Atlantic Coast

Deep-Sea Red Crab
- Red deepsea crab - Northwestern Atlantic

Northeast Multi-species Fishery
- Acadian redfish - Gulf of Maine / Georges Bank
- American plaice - Gulf of Maine / Georges Bank
- Atlantic cod - Georges Bank
- Atlantic cod - Gulf of Maine
- Atlantic halibut - Northwestern Atlantic Coast
- Haddock - Georges Bank
- Haddock - Gulf of Maine
- Ocean pout - Northwestern Atlantic Coast
- Offshore hake - Northwestern Atlantic Coast
- Pollock - Gulf of Maine / Georges Bank
- Red hake - Gulf of Maine / Northern Georges Bank
- Red hake - Southern Georges Bank / Mid-Atlantic
- Silver hake - Gulf of Maine / Northern Georges Bank
- Silver hake - Southern Georges Bank / Mid-Atlantic
- White hake - Gulf of Maine / Georges Bank
- Windowpane - Gulf of Maine / Georges Bank
- Windowpane - Southern New England / Mid-Atlantic
- Winter flounder - Georges Bank
- Winter flounder - Gulf of Maine
- Winter flounder - Southern New England / Mid-Atlantic
- Witch flounder - Northwestern Atlantic Coast
- Yellowtail flounder - Cape Cod / Gulf of Maine
- Yellowtail flounder - Georges Bank
- Yellowtail flounder - Southern New England / Mid-Atlantic

Northeast Skate Complex
- Barndoor skate - Georges Bank / Southern New England
- Clearnose skate - Southern New England / Mid-Atlantic
- Little skate - Georges Bank / Southern New England
- Rosette skate - Southern New England / Mid-Atlantic
- Smooth skate - Gulf of Maine
- Thorny skate - Gulf of Maine
- Winter skate - Georges Bank / Southern New England

Monkfish
- Goosefish - Southern Georges Bank / Mid-Atlantic
- Goosefish - Gulf of Maine / Northern Georges Bank

Spiny Dogfish
- Spiny dogfish - Gulf of Maine / Northern Georges Bank