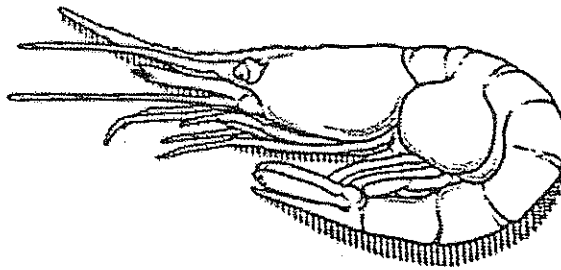


A Report from the Task Force to Study Limited Entry  
in the Maine Shrimp Fishery

presented to

The 119<sup>th</sup> Legislature's Joint Standing Committee  
on Marine Resources



Pursuant to Public Law 1999, Chapter 69

January 18, 2000

## INTRODUCTION

Management of the shrimp fishery has been a very intensive process ever since a major collapse in the fishery in the 1970's. Landings in the fishery have been volatile. The current level of resource is at a low point. This low abundance and concerns about significant effort being shifted into the shrimp fishery from other fisheries, e.g. groundfish, have prompted interest in limiting effort in the shrimp fishery. Interstate management of the fishery is the responsibility of the Atlantic States Marine Fisheries Commission (ASMFC). That body established the Northern Shrimp Section which is comprised of the ASMFC Commissioners from Maine, New Hampshire and Massachusetts.

In other fisheries we are also seeing stressed resources. The result has been that access to several fisheries has been severely restricted. Fishermen, whose access is either denied to those fisheries or restricted, seek opportunity in any fishery that has some manner of access still available. In this context, and with the understanding that the shrimp fishery is highly volatile, it is appropriate to look at all forms of management, including limited entry.

As the ASMFC Northern Shrimp Section considers further management strategies, effort or the capacity to fish becomes increasingly important. In order to establish what that effort is, participants must be identified. During the first session of the 119<sup>th</sup> Legislature, the Marine Resources Committee passed a bill to establish a commercial shrimp permit. This legislation established a shrimp permit that, in addition to the commercial fishing license, must be held by an individual to fish for shrimp. The new law also requires permit holders to fill out logbooks in order to gain a better understanding of the fishery and assess what management measures to take to assure sustainability. Fundamentally, this legislation establishes the basis for supporting management of the fishery into the next century.

The Legislature also established a Task Force in 1999 to look at the prospect of imposing a limited entry program on the shrimp fishery. Many individuals within the shrimp industry have been discussing the option of limited entry as other fisheries have become more restrictive. The Task Force met seven times between July 1999 and January 2000. There were also four public meetings held along the coast in October 1999. This is the final report of the Task Force and is submitted to Joint Standing Committee on Marine Resources.

## A BRIEF OVERVIEW OF SHRIMP MANAGEMENT

The Atlantic States Marine Fisheries Commission, Northern Shrimp Section, manages the shrimp fishery in the Gulf of Maine. There are three members from each state who participate in the Shrimp Section meetings. Senator Jill Goldthwait, Commissioner George Lapointe and Pat White represent Maine on the Northern Shrimp Section. Senator Goldthwait is chair of the Section.

The first discussions of interstate shrimp fishery management started in the mid 1970's. By 1986, a final Shrimp Fisheries Management Plan was established by ASMFC. The Plan manages the shrimp resource based on "optimum yield". Annual biological assessments along

with economic considerations are taken into account to establish the annual catch. The Technical Committee, made up of regional fisheries scientists, recommends catch limits to the Shrimp Section based on their annual stock assessment. Every fall the Shrimp Section votes on catch limits and open days for fishing based on the recommendations from the Technical Committee and recommendations from an Industry Advisory Panel.

The Maine shrimp fishery is in compliance with the provisions of the ASMFC Shrimp Management Plan. In addition, a commercial shrimp permit has been established for Maine fishermen. The new shrimp permit will provide a more accurate picture of the number of individuals in the fishery and will also provide useful data by requiring permit holders to maintain a logbook. The Department of Marine Resources has adopted rules to specify the shrimp logbook requirements (DMR Regulations Chapter 45.24).

## DISCUSSION

Under Public Law 1999, Chapter 69 the Department of Marine Resources (DMR) was instructed to establish a task force to "*study whether access to the Gulf of Maine shrimp fishery should be limited for the purpose of conserving the shrimp resource.*" The Task Force met over the course of six months to comply with the Legislature's request. There were seven industry representatives on the Task Force and a scientist from the DMR with expertise in the shrimp fishery. Proctor Wells served as Chair. The minutes from the meetings and a list of Task Force members may be found in the appendix of this report.

The Task Force discussed several reasons why limited entry should be considered for Maine's shrimp fishery. The primary reason established was to protect and conserve the resource from an influx of effort (through participants) as other fisheries become further restricted. Limiting entry by itself will not conserve the shrimp resource. However controlling entry will aid in conservation by allowing managers to have a fixed number of participants as they assess and use other management options.

The shrimp fishery is a very volatile fishery and its success from year to year depends largely on environmental conditions. The size of the shrimp resource varies a great deal, depending on the successful survival of larvae. Larval survival is in turn controlled by sunlight and water temperature. The year class survival is the key signal used by scientists to predict for a particular annual shrimp stock. At the same time, there is also some parent/progeny relationship so that a strong adult year class is more likely to spawn a strong year class. This relationship is linked to water temperature. It is unclear which factor is more controlling – the parent/progeny relationship or the environmental conditions. It is clear, however, that the environment has a strong impact on how many larvae survive. If there is a good year class predicted, it may be prudent to slow down the rate of fishing to try to take advantage of the good year class over a three year period. If there is a series of years which are not strong, then a limited entry plan could help with conservation by restricting the number of participants. If effort could be limited during the years where females needed to survive this would help conserve the resource at critical times. A lower biological limit could be established that, when reached, would trigger a limited entry system.

A limited entry system can also be justified from an economic and historical fishing point of view. In this case, one of the goals is to allow an identified number of boats that have been in the fishery to make a reasonable living each year. Members of the shrimp fishery are fearful that because the economic choice to fish for shrimp is not regulated, if other fisheries decline or face more severe restrictions, then harvesters will opt to go shrimp fishing even in bad times when the resource cannot withstand the additional effort. Historically, the cost of gearing up to go shrimp fishing has served as a disincentive, keeping people out in low stock years because the benefits do not outweigh the costs. Using this rationale, limiting entry is a step to safeguard the fishery from more participants in years when the catch is down and therefore will aid in conservation goals.

The Task Force discussed various ways in which entry could be limited in the shrimp fishery, ranging from a point system based on landings and years in the fishery to a cap at 1999 levels. They agreed the most liberal approach would be to devise criteria that would include the greatest number of historical participants in the shrimp fishery. There was a peak in the number of participants between 1995 and 1996. Four hundred seventy-seven individuals checked off that they fished for shrimp in 1995. Therefore, the Task Force decided to go back to the 1994 fishing year to capture a large number of individuals. This was also the year in which federal logbooks were implemented.

The Task Force also acknowledged that the trap fishery and the drag fishery have separate characteristics and therefore should be treated as separate categories. This distinction, however, should be for future entry into the fishery and not effect how harvesters are currently fishing. By 2002, therefore, levels of effort in terms of number of licenses by gear type should be established.

The Task Force worked through several draft proposals to establish limited entry criteria. The final draft proposal suggested setting qualifying criteria for a 2001 shrimp license based on possession of a Maine commercial fishing license in any one of the years between January 1, 1994 to May 24, 1999; and landing 10,000 pounds in any one year from January 1, 1994 to May 24, 1999 for a Shrimp Drag License; or landing 5,000 pounds in any one year from January 1, 1994 to May 24, 1999 for a Shrimp Trap License. A boat license was also recommended. See the appendix for the full draft proposal.

The Draft Shrimp Limited Entry proposal and a meeting notice was sent to all holders of a 1998 commercial fishing license. Four informational meetings were held in October on the draft limited entry proposal. The meetings were held in Portland, Rockland, Boothbay and Ellsworth and were attended by Commissioner Lapointe and several Task Force members. The Portland fishermen showed the greatest support for limited entry, but there was concern about the boat license suggestion in the draft document. Rockland's meeting focused on discussions about landing criteria and the need to account for people who are intermittently in the fishery. In Ellsworth there was no support for either limited entry or a boat license. The Stonington Fisheries Alliance came forward with an alternative proposal to control access. Boothbay shrimp harvesters were concerned with the proposed boat license and didn't support limited entry in

general. Concerns were also raised about the effect of requiring landing history on the small boat fishermen. The public comments generally fell into one of the following:

- Questions about how Maine's limited entry plan would fit in with ASMFC process.
- Concerns about creating a shrimp boat license proposal instead of an individual.
- Questions about how future entry into the fishery will be determined.
- Concerns about access for the eastern half of the state when the fishery recovers.
- Desire to provide a way for people to get in during the winter months to keep flexibility.
- Concerns about using landing data as a criterion for entry.

The Stonington Fisheries Alliance suggested an alternative proposal to control effort. The full proposal can be found in the appendix following the minutes of the Ellsworth informational meeting.

After much discussion, the Task Force determined that a boat license should not be pursued. There was not unanimous agreement on this point. The Task Force also conceded that the landing criteria may exclude genuine participants from the fishery, especially small boats from the eastern part of the state where there is less central distribution of product. Therefore, the landing criterion was deleted.

Although there were many concerns about establishing how new entrants may come into the fishery in the future, among both the general public and Task Force members, designing a controlled entry program is a complicated endeavor and the Task Force felt there was not enough time to give it careful consideration. The shrimp resource is in a current low point. The cap established by the proposed qualification criteria for 2001 may allow more people to be eligible for a shrimp license than predicted 1999 effort levels. Current predictions by Dan Schick at the Department of Marine Resources are that the shrimp resource will take between three to four years to rebound. The Task Force determined that new entrants should not be permitted until the year 2004 which is the first possibility for improvement in the stock.

## CONCLUSION

Limiting entry into the Gulf of Maine shrimp fishery could aid in the overall conservation of the resource by limiting participants. However, the limited entry plan needs to be flexible to accommodate different fishing styles in different areas of the coast and to respond to the volatile nature of the shrimp resource. The Task Force has outlined criteria to place a cap on the number of participants who would be eligible for a 2001 shrimp permit. Additional work needs to be done to devise an appropriate method of allowing new entrants into the fishery as the resource recovers from its current low point.

## TASK FORCE RECOMMENDATIONS

### *What are the concerns we are trying to address?*

The shrimp fishery is one of the last fisheries without entry controls; therefore the potential for escalation on effort is high. The problem we are trying to address is to avoid potential influx beyond historical participation.

### *What is the goal of limiting entry?*

To aid in maintaining and protecting fishing communities by allowing an identified number of boats that have historically been in the shrimp fishery to make a reasonable living recognizing the biological volatility.

### *What are the objectives of this limited entry system?*

- Cap effort at the current level.
- Create a more manageable shrimp fishery by determining number of participants.
- Create more stability and less volatility in the shrimp fishery.
- Preserve remaining Maine commercial shrimp fleet.
- Enhance regulations to conserve the resource.
- Provide a tool in the overall management system.

### *What are the pros and cons of limiting/controlling entry in the shrimp fishery?*

#### Pros:

- Establishes a known effort which would allow science to have some good information;
- Assures that shrimp are not over harvested due to economics or further restrictions in other fisheries (i.e. influx from other fisheries);
- Could provide a mechanism to reduce effort during years of low abundance; and
- Maintains alternative for groundfish fishermen.

#### Cons:

- Reduces flexibility for commercial fishermen;
- Causes economic hardship for some no matter how you design it;
- Has no influence on environmental factors which drive the fishery; and
- Requires determining the number of boats that can survive in a low year vs. high year

### *What guidelines should be used when limiting entry in the shrimp fishery?*

- Allow the maximum number of historical participants.
- Maintain traditional part-time nature of fishery.
- Share responsibility in the management process with both harvesters and processors.
- Apply to both draggers and trappers.
- Avoid using a quota system.

### ***QUALIFICATION FOR A SHRIMP LICENSE:***

- Held a commercial fishing license in any two consecutive years and checked off that they fished for shrimp for those years between January 1, 1994 to May 24, 1999 and
- Must show proof of ownership of a registered or documented vessel or be designated as the operator by the owner of the vessel on forms provided by the Department of Marine Resources.
- Qualification must be done by December 31, 2001.
- May choose either a trap or drag license, but must stay in that category for future years.
- After January 1, 2002, an individual must have held a license in previous calendar year to be eligible for a license but is not required to document landings.
- An appeals process should be established to allow people to appeal a license denial if they were ineligible due to a medical reason or service in the armed forces such as established for the lobster fishery.

*Between 1995 and 1996 there was a spike in the landings. Therefore, the Task Force suggests going back to 1994 to include the highest landing year when the most participants would be included but does not suggest new entrants at this time.*

### ***NEW ENTRY AND REPORT TO LEGISLATURE:***

- By December 31, 2001 the total number of trap and drag licenses will be known. A Report to 121st Legislature in 2003 should be required to determine if further measures regarding entry should be made including, but not limited to, family transferability, apprenticeship programs and other means of allowing new entrants for the 2005 fishing year.
- A Task Force should be established to continue work on a solution that includes both entry and exit provisions based on the following principles:
  - Entry should be based on prior experience in the fishery to promote stewardship of the resource. At a minimum:
    - Prior deck experience (e.g., crew names in shrimp logbook or individual crew licenses),
    - CPR and First Aid courses, and
    - Letter of intent to fish for shrimp submitted to the Commissioner.
  - A large influx in entrants should be avoided by creating a circuit breaker (i.e. an overall cap or maximum number of licenses given out each year).
  - New entrants should be geographically distributed.
  - Any limited entry system should include both entry and exit provisions.

The Task Force may also discuss other methods of controlling effort in the shrimp fishery.