Mid-Atlantic Fishery Management Council (Council)
Summer Flounder, Scup, and Black Sea Bass Fishery Performance Reports (FPR)
June 2012

The Council's Summer Flounder, Scup, and Black Sea Bass Advisory Panel met jointly with the Atlantic States Marine Fisheries Commission (Commission) Summer Flounder, Scup, and Black Sea Bass Advisory Panels on June 27, 2012 to review fishing information documents for all three species and develop fisheries performance reports based on advisor perspectives on these fisheries.

The following Council advisors attended the meeting: Robert Allen, Rick Bellevance*, Carl Benson, James Cicchitti, Greg DiDomenico*, Harry Doerte, Skip Feller*, James Fletcher, James Lovegren*, Adam Nowalsky, Joe O'Hara, A. Ross Pearsall, and Thomas Siciliano.

The following Commission advisors attended the meeting: Rick Bellevance*, Greg DiDomenico*, Skip Feller*, Frank Folb, Paul Forseberg, Mark Hoffman, James Lovegren*, James Tietje, and Bill Shillingford.

*Serve on both Council and Commission Advisory Panels.

Summer Flounder

Market Issues

For summer flounder, the higher prices that have been seen in recent years may be due to more restrictive management measures in the New England groundfish fishery. It was noted that without a constant supply for the commercial market, substitutes enter and erode the market. The big increases and decreases in landings limits have made the market tumultuous. There should be a multi-year plan for setting landings limits to provide some stability, allowing commercial and recreational fisheries to know what to expect each year. The current way measures are being set is not a way a business should be run. There aren't any one year business plans.

There are members of the Scientific and Statistical Committee (SSC) with socio-economic backgrounds, but there has not been enough discussion about economic impacts. The decisions on quotas and harvest limits should be made with consideration of optimum yield (OY). If more consideration was given to the economic impacts, it may demonstrate that a slow economy results in less fishing effort and associated catch. Adjustments to management measures could be made to increase fishing effort which would have a positive impact on coastal communities and the national economy. A greater focus and emphasis should be placed on these socioeconomic impacts. The advisory panel should be more formally organized and provide better and more formal input, similar to how things are done at the New England Fishery Management Council or Commission, where the panel has meetings outside the organization capabilities of the Council. The AP can be better utilized and leveraged to inform the process. There were concerns that the more formal and organized AP process used by the New England Council has been used to the panel members' advantage, and in some cases has resulted in self-serving behavior or disproportionate influence. .

Environmental and Ecological Issues

For summer flounder, the range may be extending farther North. In addition, warmer water temperatures have resulted in fish moving to the North and the East. The fishery is changing, and similarly the migratory patterns are changing. These changes may also be driven by a stronger population now that the stock is rebuilt; every age-structure is represented now whereas older fish were not seen when the stock was at lower levels in the 1980's and early 1990's. It was noted that landings during this earlier time period were lower in part because fishermen chose not to fish because the catch per unit effort was low.

Increased numbers of smaller fish (12-14 inches) are being observed in Rhode Island and in areas farther to the east where they weren't previously observed. The population itself is likely distributed with about 50 percent North of Hudson Canyon and the other 50 percent to the South. Approximately 70% of the allocation is to the states from New Jersey to North Carolina, which sets up a bit of an overfishing situation in the southern areas.

It is unclear whether the observed distributional differences in the summer flounder population are due to range expansion, due to changing water temperature, or population expansion as the stock has rebuilt.

The three most recent winters have been extremely variable, at warm and cold extremes, and this may affect the information that is being gathered and evaluated.

The predation mortality of age-0 fluke due to spiny dogfish is very high. In addition, the striped bass stock could be the cause of the lower recruitments in recent years. The stock assessment scientists should examine these interactions in more detail. Single species management has resulted in impacts on other species (e.g., black sea bass are affecting lobsters, etc.) that are not being considered. The increase in the spiny dogfish population has been a major factor affecting resources in the Northeast.

Management Issues & Management Induced Effort Shifts

Fishermen follow the catch-per-unit effort and may steam a distance for better catch rates; essentially, it makes better economic sense to follow the catch rates.

In North Carolina waters, the management measures in place which include the turtle excluder device (TED) regulations have made it economically unfeasible to fish there. It is more economical to fish off New Jersey and catch scallops (where the abundance is high) and summer flounder, and then return to North Carolina to land the fish. The regulations have made it such that fishermen must leave their home ports, causing frustration because there may be fish to the south that are being underutilized. North Carolina has a mix of summer and southern flounder, so there is difficulty in knowing which are being landed. TED regulations do not apply above the boundary line in Virginia; therefore, fishermen stay to catch flounder off New Jersey while they are there for scallops, rather than deal with additional regulations to the South.

It was suggested that the fishing effort in the southern areas is lower, so an expansion in range or abundance may not be well-reflected here. It was also noted that fishermen are fishing in areas to the North because the fish aren't available in the southern areas in the same abundance.

For the recreational fishery, discard mortality is an area for improvement for management. Commercial fishing practices have improved and reduced discard mortality. For the hook and line recreational fishery, the discard mortality rate is about 10 percent for summer flounder. Millions of fish are dead due to this mortality. Those fish are not available for future harvest, and do not spawn and contribute to spawning stock biomass (SSB). There are some techniques that result in higher numbers of gut hooked fish, essentially resulting in the hook being ripped out of the stomach of fish. Unattended fishing poles and fishing more than one pole may contribute to this problem. Fishermen should be cutting the hooks for these gut hooked fish, but most are thrown back dead. Large numbers of these fish are small. Fishermen are frustrated by the number of short fish that are caught and thrown back. For some fishermen, a 5-o hook does not result in catches of many under 14 inch fish early in year, until the smaller fish move into nearshore areas. A 2-o is what is primarily used by fishermen. An education program addressing hook size and techniques needs to be conducted. Managers should be educated as to whether it makes more sense to keep these smaller fish, even though they haven't spawned, than to throw them back dead. Wide-gap hooks and 5-o hooks were discussed by advisors in past years. Wide gap hooks do not produce gut hooked summer flounder. The use of barbless hooks may also reduce the discard mortality. Fishermen should take the steps to affect their fisheries positively with respect to gear and fishing practices even if the measures are on the regulations.

There were fewer landed fish in 2010 than in 1989. The rate of release is a larger issue than is characterized by MRFSS/MRIP. In recent years, fishermen have been killing 1.53 fish to keep 1 fish, given a 10 percent discard mortality applied to total numbers discarded. The percent of released fish in recent years is over 90 percent. The mean weight for summer flounder has continued to increase from about 1 lb in 1981 to over 3 lb in 2011, while the mean weight of a fish landed in the commercial fishery has averaged 2.2 lb since 2007. Sixty percent of the summer flounder fishery (commercial fishery) results in a mean weight of 2.2 lb/fish, with the recreational 40 percent averaging 3.35 lb/fish in 2011. The discard rate was 94 percent in 2010. At a release mortality rate of 10 percent, recreational fishermen killed an additional 1.53 fish for each keeper. If a lower average weight was used, states would receive a larger quota in numbers, and be able to manage their fisheries with lower minimum sizes and less restrictive regulations. Discards would be reduced. The age classes landed in the recreational fishery have shifted to ages-3, 4, and 5. The larger more fecund summer flounder are being landed. If a lower average weight was used, states would receive a larger quota in numbers, and be able to manage their fisheries with lower minimum sizes and less restrictive regulations. There are few male summer flounder over 19 inches. The fishery on the recreational fishery is targeting female fish. Many of the New England commercial vessels are using a 6 or 6.5 inch meshes in their trawls for groundfish, which results in larger summer flounder (females) being targeted in the commercial fishery as well. Something needs to be done by managers to enable targeting of the males, and prevent the fastest growing females from being targeted. There is a threshold at which the minimum size gets so large that the resulting discard rates become counterproductive. Managers should allow a certain number of gut hooked fish to be kept (cut line in gut hooked fish). The discard rate is conservative and is a low number. The advisors are concerned about the number

of fish being thrown back. It is important to get scientists to weigh in on how important these issues are for this stock.

The managers and scientist do not know how to convert hooking release and discards into mortality. The scientists are limited in their knowledge and education and the input they provide to the SSC. After 1990, the Northeast Fisheries Science Center information changed. The fishery scientists aren't acknowledging what the fishermen are telling them. A 5-inch trawl mesh with full retention of all landings, with a vessel length based trip limit would allow the commercial fishermen to be economically viable.

General Fishing Trends

The changes in regulations on the recreational side are difficult to manage. The recreational data is more difficult and variable to use to manage the fishery, particularly on an annual basis. Looking for trends in the recreational catch and landings information is important because of this variability and limited amount of information (data points) to characterize what is happening to the stock and fishery. The trends are more reliable than individual data points.

The commercial fishery is more likely to utilize their quota because of the data collection system and management measures that are in place. The recreational catch is in large part driven by economic and other factors that are more likely affect the catch, regardless of what the quota is. For example, the recreational fishery is more constrained by weather conditions, particularly on weekends. There may be some recoupment of fishing activity during the week, but it is unlikely to equal all of the effort that was lost due to poor weather conditions. Fish availability also drives the recreational landings patterns; it may be a better indicator of fish availability than commercial sector catch rates. Recreational fishing may also be affected by reports of fishing activity. If there are good reports, fishermen go fishing. High costs are keeping fishermen at home, unless the fishing is going to be very good. Because of the high fuel costs and other constraints, fishermen are not going fishing. Economic issues for the recreational fisheries such as fuel prices, boat maintenance costs, and empty slips are important factors to be considered.

The increase in summer flounder minimum fish size has reduced the participation of shore-based anglers in the fishery.

Scup

Market Issues

Advisors wonder if a cross reference/comparison of the price of scup versus price of tilapia has been conducted. When the scup commercial fishery was very restrictive, the tilapia product entered the market and now the tilapia price is driving the price of scup. Tilapia has taken over the market shares that were previously filled by scup.

There are market issues that affect the affect landings patterns of scup. Prices have been down since the trip limit increased. In the past, the price could be over $2/lb for scup, in recent years it is rarely $1/lb. The fresh fish market can only absorb a certain number of fish. Processors are

trying to set up a base, but the market is not particularly strong. Some fish are going to processors, others to the markets. The trip limits in Winter II may be constraining landings in that period. A state like New Jersey is focused on Winter I, so the Winter II fishery trip limits are not as important. For other areas it may be. Smaller trip limits also result in higher discards, as it is difficult to catch just a few thousand pounds of scup. In Rhode Island, September/October fishery is primarily prosecuted with pots, so the trip limits are not constraining during that time period. The trawlers/draggers would want a higher trip limit in November/December (Winter I).
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The ethnic groups of fishermen are being excluded from this fishery as a result of the regulations. The people who have eaten fish with bones in them have died off, and the persons who are eating large fileted fish have gone up due to the current size limits. The management system has resulted in extensive waste of product, with a large portion of the fish being unutilized. The higher price of fish is good for the fishermen, but is it good for the consumer? Scup management has driven consumers to Tilapia.

Environmental and Ecological Issues

Many of the issues described for summer flounder in terms of changes in fish distribution and the most recent 3 variable winters also apply here. The statistical areas that are dominant for producing commercial landings will be different this year. Scup were further east and north, and inshore longer in response to the warmer water temperatures. They were found in these areas in large numbers. There is some disagreement as to whether the stock is declining. One viewpoint is that the scup population is on the downward trend, contrary to the stock assessment information because commercial fishermen are not seeing scup in the large numbers suggested. Other think this may be a dispersion issue, and the scup stock is distributed in areas it hasn't been before. Scup are being found at other depths and time periods than they would normally be found. Large scup are being found in the winter, offshore; and fishermen are catching scup instead of cod and groundfish. It is noted that the trawl survey can be highly variable and may not be the best indicator of the trend in any year.

Cape May and Port Judith were historically areas in which fisheries for scup operated and were large areas for scup landings for 50 years. Cape May is not even in the top 10 ports for scup. Something has changed in the distribution/abundance which is affecting those landings patterns. Scup are no longer seen or caught commercially in these southern areas, down towards Wilmington canyon, where a fishery had historically operated. In New Jersey, large scup have been seen in the spring in inshore waters out to 15 fathoms recently. It has not been uncommon to catch some jumbo scup in the spring in the last 3 years.

For the commercial fishery, the recent inability to catch all the landings could be access related. Are the scup on hard bottom or other areas not accessible to the commercial fishery? It is not clear.

Scup and black sea bass are very dense and are eating large numbers of lobster.

Management Issues & Management Induced Effort Shifts

Recreational for hire vessels (party/charter) are not able to utilize the scup resource. This does not necessarily suggest that a shift in allocation is needed, but there may be a creative way to utilize some of that resource. The bonus fishing season (in states waters with higher possession limits) is driving the party/charter participation and landings. Recreational anglers (private) think a possession limit of 10 fish is okay, but the party boats tend to be more directed and specific in their anglers and needs. Private anglers likely aren't directing/targeting scup, but are catching them when targeting other species; however, for a party/charter vessel, it is very important to see the higher possession limits.

No one has told recreational fishermen how to avoid fishing for species when their seasons are closed. An incidental catch limit in the recreational fishery for scup would be a way to reduce mortality during closed seasons (e.g., maybe 1 fish as a bycatch). This is similar to what was used for tautog, where 1 fish was allowed to be retained during a portion of the fishing season. A separation of the measures applied for the for-hire versus the private fishery could address the different need of these groups. Red drum in North Carolina, for example, has a bycatch fishery where X number or pounds of red drum can be retained as long as you have X amount of other species also retained (e.g., some fraction of the total catch are allowed to be retained). The bycatch in the recreational fishery is primarily in the winter season in 100-500 feet of water. This bycatch is predominantly in the party/charter fishery and some of these approaches would be a way to reduce the discard rate; however, other modes (private and shore-based anglers) should not be excluded from this type of approach.

General Fishing Trends

The purpose of fishing for scup recreationally is different than for many other species. The purpose of fishing for scup tends to be for food and there is a large ethnic component to this fishery. This difference may not be reflected in summaries of reasons for fishing for all Northeast fishermen for all species combined.

Other Issues

Discards should be turned into landings in the commercial fishery (by reducing the minimum size from 9 inches to 8 inches) to reduce discard mortality given scup are fully mature by 8 inches.

Black sea bass

Market Issues

The "high end" black sea bass commercial market was ruined when all the fishing closures/restrictions went into effect. The collapse of the red snapper fishery in the Gulf has helped raise the price in the black sea bass market. For large and jumbo fish, the market wasn't

what it should have been this past year. This year, a large influx of small fish into the New York market (from the Gulf and South that were closed) early in the year (April) took the prices of the medium fish to lower levels.

Environmental and Ecological Issues

The best available science, as conducted by Moser on Shepherd with a tagging study examining fish migration, suggest there are two different management units (i.e., one North of Hatteras and one South of Hatteras). However the study suggest there may be multiple sub-groups of fish within the Northern management unit that exhibit different migratory patterns (e.g., a black sea bass caught in 60 feet in Maryland, wouldn't likely show up in 20 feet in Massachusetts). The component of the population that is found offshore in the wintertime and inshore in Massachusetts in the summertime has expanded and is very abundant. This is supported by the catch and landings patterns in the commercial and recreational fisheries. The inshore fishery hasn't seen the same population explosion/expansions. The MA-DMF data suggest there may be slightly higher growth rates for their fish when compared to fish from other areas, which suggests it may be a different group. Black sea bass been managed on a coastwide basis, but more of a regional or state basis may be appropriate given this research. This information reiterates how important an examination of the state-by-state data are. In Virginia, fuel prices have meant that the for-hire fleet has dominated the fishery because the fish are found further offshore. In more Northern states, black sea bass is caught in more nearshore waters.

In Massachusetts, the commercial fishery has been taking their quotas very quickly. The Massachusetts commercial quota is allocated by gear type, and each gear-based fishery has closed quickly. The Moser and Shepherd study migration patterns mimic what the fishermen are seeing in terms of fish distribution/availability. There are distinct differences between the inshore Virginia fishery and the fish abundance in the inshore areas near Morehead City, North Carolina. There used to be large numbers of large black sea bass at the Chesapeake Bay Bridge Tunnel. Some recreational fishermen are catching some black sea bass at the rocks around the tunnels. Others indicate they aren't seeing that many black sea bass in the area.

Scientific uncertainty is the reason why the catch limits are reduced substantially from the OFL. The issue of the life history strategy (protogynous hermaphrodites), has been a major issue in terms of uncertainty. Some research is being done by Rutgers to examine changes in sex and timing of those sex changes. Recaptures have shown that some black sea bass are showing up on the same wrecks in different years. During the Shepherd tagging study, 2 of the fish tagged on a wreck were caught in the same location 22 months later (with consecutive tag numbers). It is thought that the fish moved offshore and then returned to the exact same locations.

The distribution of eggs/larvae is influenced by circulation which would not result in black sea bass larvae consistently settling in the same areas each year.

Black sea bass lends itself well to enhancement, and enhancement approaches have not been discussed for this stock or others. A strong artificial reef program has been set up off South Carolina and has resulted in a large numbers of black sea bass in these inshore reefs.

Dogfish predation is an issue for black sea bass, and multi-species dynamics should be considered. In the 2009-2011 fishing years, areas have had large numbers of dogfish wreaking havoc with the black sea bass population. If there are more dogfish out there than scientists predict, this may explain some of the dynamics being seen for black sea bass and other fish species.

Management Issues & Management Induced Effort Shifts

In North Carolina, the management unit boundary is Cape Hatteras. This boundary is a concern for fishermen in this region, and advisors acknowledge that the fish mix to some degree in these areas.

The stock is fully rebuilt, when will the quotas be increased? The current levels of quota for the black sea bass fisheries (recreational and commercial) are constraining.

The discard mortality rates in shallow waters are different than in deeper waters (i.e., higher in deep waters greater than 30 feet). The mortality rate is very high in deep waters, and fishermen are throwing back more fish than are being kept with a very high mortality rate. The number of fish thrown back needs to be reduced and fishermen should be able to retain more fish. Most of the fish in New York /Northern New Jersey are in the 12-13 inch range, so the number of fish thrown back is very high. Consideration should be given to reducing the size limit, and hopefully improving stock productivity so the quota can be increased.

The Rutgers study described above tagged fish, many of which were in 60 feet of water. From this study, some discard mortality results will be produced as a secondary outcome of that research project. Inshore of 15 fathoms the discard mortality rate is very low. How many fish would be caught if all fish were retained (retention rate in numbers and poundage)?

Venting techniques were discussed and are required in the Gulf, but there is generally mixed and inconclusive evidence of its effectiveness. It is unclear whether or not those approaches are worthwhile for use in the Northeast.

The areas of New Jersey and South should be regionalized for the recreational black sea bass fishery.

For the headboat and party boat industry, there should be a multi-year approach to management to provide stability for trip planning and advance business planning.

A common sense approach needs to be applied to the management of black sea bass and consideration should be given to shifts in fishing effort. The closure of one fishery may impact another fishery resulting in unanticipated effort shifts that might negatively impact other fisheries.

General Fishing Trends

From 2004-present, private recreational anglers have been responsible for a larger proportion of black sea bass landings. This is a shift in how the fishery was being prosecuted in the past where party/charter mode landings were dominant. This may be due to an increase in popularity and access to the black sea bass recreational fishery. Differential GPS has made access to the fishery easier for the private angler.

Other Issues

Research priorities have been set in the Northeast, and the Council should continue to push for tier 4 stocks (data poor stocks) to get the research needed to move out of tier 4.