Coastal Migratory Pelagic Special Engagement Session Summary Coastal Migratory Pelagic Advisory Panel February 13, 2024

During the Coastal Migratory Pelagic Advisory Panel meeting held on February 13, 2024, a special engagement session was held. Advisory Panel members were asked a series of questions designed to gather broad input on the health and dynamics of the stock, fishing behavior, and ecosystem interactions of coastal migratory pelagic species which includes king mackerel, Spanish mackerel, and cobia.

A number of themes emerged during the discussion. King mackerel was discussed most frequently and Spanish mackerel was mentioned the least; however, many observations often applied across all three species. The following is a list of main themes that emerged during the Special Engagement Session:

- All three species are experiencing some decline in abundance and/or size of available fish.
- King mackerel and cobia seem to be found further offshore than usual.
- Changes in migratory patterns seem to be occurring in relation to timing, area, and size of schools.
- Recreationally, none of the three species are the primary target species because they're not as readily available. This is a departure from historical behavior.
- The removal of rig structure has disrupted fish movement and targetability.
- Bait that used to attract fish has nearly disappeared in inshore environments and has changed locations and availability.
- Shark depredation is driving increased release mortality.
- Commercially, there is increased competition for fish in the Southern Zone and a decline in pressure in the Western zone. Additionally, the commercial king mackerel fishery remains economically viable because the increase ex-vessel price due to a decreased supply has kept pace with increasing costs associate with targeting the fish which are harder to find.
- Fishing regulations are not limiting harvest. Instead, ecological challenges and decreased availability of each species stop catch limits from being harvested.
- Changes in salinity, water temperature, degradation of habitat, harmful algal blooms, and areas of low dissolved oxygen are driving population decline and impacting migratory behaviors.

The following is a full summary of the questions and responses received during the workshop:

- 1) Have there been substantial changes in the fishery in recent years. If so, describe the timing, location and reason for the change for:
 - a) King mackerel
 - Near shore, off the coast of Orange Beach, Alabama a lot more undersized fish were encountered.

- The fishery off coastal Alabama has not been as consistent as usual.
- Production in the Western Gulf Zone had dropped dramatically since 2020. Most of the traveling commercial fisherman that used that zone have retired. Additionally, those fishermen use to show the young fishermen where to fish and the loss of historical knowledge will impact production in that zone for the future.
- The fish in the Florida Keys and off Naples, Florida are smaller than they have been historically. There are very few fish over 8-pounds and most are around 5-pounds.
- b) Spanish mackerel
 - There has been a decline in abundance over the last 6-10 years.
 - They used to be more prevalent although large schools still show up in the Northern Gulf in July and August.
- 2) Have there been changes in the effort and/or fishing techniques used to target each species:
 - a) King mackerel
 - In the Northern Gulf, fishermen have switched to using live bait and chumming to catch instead of trolling because trolling was less productive.
 - In tournaments, the size and range of the boats has increased to find the fish.
- 3) Have there been changes in the migratory patterns or behaviors of each species as they relate to time, area, and depth?
 - a) King mackerel
 - Fish in the Keys are fewer and farther between. They are not seeing the schools in the number or frequency that they used to.
 - The winter fishery off the Florida Keys reef line is not what it used to be. The large fish are not south of the reef, they're much farther north. The fish come through sooner in the spring, and move through quicker in the fall than they have historically.
 - Some fishermen without historical perspective might perceive the run to mean the fishery is healthy but the number and size of the fish in the run has declined.
 - Off the Florida coast, the fish come through thinner in the spring and quicker in the fall than they have historically.
 - The fish are found further offshore and don't cruise the beaches like they used to.
 - In the Western and Northern Zones, the fish are not showing up on time, their movement is delayed by a number of weeks.
 - Last year, the fish held south of Tampa Bay, Florida for weeks like they used to in the 1970's.
 - Fish are still concentrated in their historically spawning area off the Big Bend of Florida in the spring.
 - The fish are no longer sitting off of Grand Isle, Louisiana like they used to.
 - Off peninsular Florida, the fish have moved offshore onto yellowtail snapper and blue runner schools that didn't use to be there.

- The bait seems to be holding further north in peninsular Florida.
- b) Spanish mackerel
 - Off of peninsular Florida they seem to show up earlier and leave later. Sometimes they don't leave at all during warm winters.
- c) Cobia
 - They're not found close to the beaches off the Northern Gulf like they used to be.
 - They're still found on buoys and shipping channels in the Northern Gulf but they are less common.
 - They're only found farther offshore.
 - Historically, the fall migration skipped the Big Bend area of Florida. That area always had a strong spring migration but it seems like they may be cutting west in the spring now and skipping the northeastern Gulf.
- 4) Have there been changes in discard trends for each of the species?
 - a) King mackerel
 - Sharks are a problem. Fishermen noted more cut-off fish from shark interactions.
 - There has been a minor increase in the number of small king mackerel released.
- 5) In your sector, how have recent changes to the stock affected your economic performance for each species?
 - a) King mackerel
 - Targeting them commercially is still viable because the high ex-vessel value of the fish balances the increased use and cost of fuel and increased time and effort to harvest worth it.
 - Private anglers rarely take trips targeting a limit of king or Spanish mackerel.
 - b) Spanish mackerel
 - Spanish are typically only targeted on charter trips when other fishing is slow.
 - c) Cobia
 - Cobia are so rare nobody takes trips just to target them anymore.
- 6) In your sector, how have recent changes to the stock affected your behavior or your lifestyle as it relates to each species?
 - a) King mackerel
 - There is an increase in gear conflicts between the gillnetters and hook and line fishery in the Southern Zone because there are fewer, smaller pods of fish to chase. Each fleet used to be able to target their own pods but now they're competing for the same ones because there are so few.
 - The gillnet season in the Southern Zone is lasting much longer. This is in part because there are less fish and in part because the fleet is intentionally targeting smaller amounts at a time to drive up the price and avoid flooding the market.

- It's not unusual to cover 60-100 extra miles during a tournament to avoid shark depredation.
- Tournaments have created tighter area restrictions to ensure that smaller boats still have a place in competitions.
- There is less motivation to fish tournaments because it takes more time and effort to pre-fish compared to what it used to.
- b) Cobia
 - The fleet in Alabama has self-imposed their own limits. It's not popular to bring them home anymore and it's frowned upon. Instead, it's more socially acceptable to take a photo and release them.
- 7) Provide feedback on the appropriateness of current regulations and catch limits for each species:
 - a) King mackerel
 - Since we're not meeting the catch limits, the quotas and regulations are working.
 - It's not the fishing limits that area controlling harvest, its environmental factors and stock health.
 - b) Spanish mackerel
 - Recreational limits may be more liberal than the desire to keep them.
- 8) Are there any environmental or ecological factors or recent events that are influencing each of the species?
 - a) King mackerel
 - Issues related to coastal estuaries in Louisiana that have limited inshore spawns of shrimp and pogy have negatively impacted the fish.
 - b) Removal of oil platforms has impacted the migration behaviors of the fish. They're not being drawn in like they used to.
 - Estuaries are full of more fresh water than they used to be.
 - Harmful algal blooms are more frequent and vary more in type than they used to.
 - Changes in water temperatures could be impacting the stocks.
 - Areas of low dissolved oxygen are driving changes.
 - Traditional king mackerel grounds over live bottom are dead offshore of Naples, Florida so the fish bypass them now.
 - Intense hurricanes in recent years off the coast of Florida and corresponding high freshwater inflows are impacting the stocks.
 - The use of social media to teach people how to be effective anglers has increased efficiency of the angling community.
 - Technological improvements including spot lock trolling motors have turned people into better anglers.
 - c) Cobia
 - Cobia use to travel the rigs and stick around them but, removal of oil and gas platforms has stopped drawing them in.
 - The lack of bait near the beaches and estuaries may be driving the fish offshore.

• Increasing populations along the coast which impacts light pollution may drive them away from inshore areas.