Group 40% SPR and Research and Monitoring
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(First session)
There was discussion about the SPR table produced by Bob Muller and was assumed to be a starting point providing a broad array of example choices. We asked for the table showing the calculated times that snook, on the average, would be vulnerable in example slots. We agreed that the model of the existing rule predicted too long a time for snook in the slot. This prediction appeared to be similar to anecdotal on the water experiences of some in the group.

We agreed that the full group consider reducing the bag limit to one on the Atlantic Coast and maintain the existing bag limit of one on the West Coast. The idea of extending boat limits to all on board was rejected.

We examined the initial table and decided that Bob Muller needed to join our group. Various questions were asked about the table. We asked Bob to obtain one model prediction using a slot of 28-32 inches and a four month open season (March-April and September-October). These results were promising.

There was no discussion about research and monitoring.

(Second session)

We had extensive discussion with Butch Constable about his concern with the slot of 28-32 inches. The inlets in his area have mostly over-slot size fish during the fall open season, primarily September. Given the sizes he described these fish are nearly all females. Either there are missing class sizes (smaller males and females) or these fish are elsewhere in the area. Butch believed the problem, if one exists, is associated with habitat changes. If he is correct, then it does not matter what rule is proposed because the rule addresses fishing morality, not habitat.

We recommended that Bob Muller run more models using a sliding scale within a 4 inch slot and four open months (March-April and September-October) along with the average time snook would be in the slot for full discussion at the next meeting.

40% SPR Recommendations:

1. Committee asks staff to develop options for regulations which have a four month open season (Spring and Fall) the months of: March and April and September and October.
2. Examine a number of four inch slot sizes including:
    1. 28-32
    2. 29-33
    3. 30-34
3. A bag limit of one snook during the harvest seasons.

Research and monitoring recommendations arose directly out of the discussions associated with the models that Bob Muller provided and his presentation in the morning session.

The Research and Monitoring is all done in support of reaching the 40% SPR goal. There was no discussion of a lower floor which would lead the closing of the fishery to harvest. Nor was there discussion of trigger levels which would result in more intense sampling to confirm a downward trend in

populations prior to reaching the lower floor causing closure.

The history of snook biology and population trends has been subject to significant changes in information associated with sex at size and age. Previous models have been affected by the quality of information. Models have estimated the status of snook in a retrospective manner, a function of the way data must be collected. There are two methods which may help predict future population levels: 1) obtaining reliable estimates of the young of the year; 2) incorporate estimated the growth in rates of fishing pressure extended to near-field future (3-5 years). These issues were generally discussed but not in any detail.

Bob Muller identified the fact that peer reviewed models are being used by FMRI. He stated that there has been informal internal reviews of the data and assumptions relating to the information going into the models. Our group believes that an external peer review may be useful concerning existing data and assumptions.

Since it is a requirement to have a fishing license and therefore the snook stamp when fishing for snook from a boat (unless under 16 or over 65), all people fishing from shore are exempt from the snook stamp. Our group was not sure how much each of these exempt groups can affect estimates of fishing intensity and harvest of snook during the open seasons and release mortality during closed seasons.

Natural mortality rates may need to be adjusted by having better mortality estimates from red-tide events along the West Coast.

More information is needed on general movements of snook in Florida. Passive tags and genetics may be helpful. Temporal and spatial patterns in identifiable genetic populations may provide useful data about snook at the southern end of Florida affecting the present management areas by coasts. The Jupiter-Palm Beach area, from anecdotal information, may require additional attention concerning movement of reproductively active snook in time and space to determine if males are under represented during spawning season.

Our group believes that the full group needs to have a better understanding of uncertainty in model predictions of change as the result of potential changes to the existing rule. This information should help justify recommendations to the Commission. Some over regulation of snook to reach the goal should be better for snook, whereas under regulation may lead to smaller populations and less economic value to the State. Uncertainty can play a significant role in affecting fisheries management, often delay of more strict regulation in favor of more study by those affected parties being regulated, to the disadvantage of a robust resource and economics in the long term.

Recommendations:

1. Examine (external peer review) facts and assumptions which FMRI uses in the two peer reviewed models

2. Explicit estimates of the fishing pressure (mortality) and tied to general population and fishing projections with reasonable bounds.

3. Age classes present between Jupiter-Palm Beach, need description

4. Snook movement along East Coast emphasis north of Jupiter and south of Palm Beach

5. Description of genetic variation and its relationship to management alternatives