Ecosystem SSC Summary Gulf Council Office Tampa, FL February 25, 2015 9:00 a.m. - 5:00 p.m

Members Present:

Cameron Ainsworth, Vice-chair Joan Browder Columbus Brown Stephen Holiman Alan Matherne Glenn Thomas Wei Wu

NMFS-SERO Staff

Nick Farmer

Others present

J.P. Brooker Felicia Coleman Chad Hanson Frank Helies Will Heyman Chris Hoenig Tom Wheatley

Council Staff

Morgan Kilgour Charlotte Schiaffo

Council Member

Roy Williams

The Ecosystem SSC February 25, 2015 agenda was adopted as written.

There were some minor edits to the Ecosystem SSC minutes from June 3-5, 2014, and the minutes from the last meeting were approved as revised.

The Ecosystem SSC was presented information on the shelf-edge fishing reserves in the Southeastern U.S. from 2003-2009. Both Madison-Swanson and Steamboat Lumps were identified as "fished out" before the reserves were put into place. The steep edges of the reserves (particularly Madison-Swanson) have spawning aggregations of gag, scamp and red snapper. Steamboat lumps is a series of terraces where red grouper build excavation pits along the edge. Red snapper use same spawning sites as gag grouper on Madison-Swanson. For gag grouper in Madison-Swanson, males declined in the population relative to fishing pressure, and males remain offshore while females migrate relative to spawning season. For gag grouper there is a higher percentage of transitional males post spawning-aggregation than pre or during the spawning aggregation, and sex change is initiated during the spawning time. These transitional males take about 2-3 months to transition from female to male. There has been no observed change in sex ratio for red grouper since the 1960s. The number of known red grouper pits has increased over time, and lionfish (more abundant on Pulley Ridge) are using red grouper excavation pits. Scamp grouper were the same size and abundance inside and outside the reserves, but all other fish were bigger and more numerous inside the reserve than outside the

reserve.

These reserves are functioning by protecting: juvenile, adult and spawning habitat; sex ratios, age and size structure; reproductive output of other species. The reserves also allow for monitoring baselines, habitat protection and benefit fisherman by spillover. It was recommended to the Ecosystem SSC that other areas along the shelf edge at intervals should also be made into reserves to protect groupers and other taxa.

Poaching was observed on the reserve at night. The Ecosystem SSC discussed law enforcement issues such as poaching, prosecution of poachers, using VMS as an enforcement tool, and education to reduce poaching. There was concern that increasing the number of reserves would limit protection as enforcement would be overextended.

The Ecosystem SSC was presented additional work on four areas: Madison-Swanson, Steamboat Lumps, Twin Ridges and the Edges. Stations at each location were selected by strata and sites were sampled using baited cameras. Scamp, red porgy, almaco jack, and red snapper were observed in 50% or more of the observations from Madison-Swanson. The Edges had the fewest red snapper, gag grouper and red grouper. The multi-beam coverage is scarce in the Edges so adequate site selection may explain the lack of fish observations. Gag grouper were most closely association with coral formations and steep edge habitats. Red grouper and red snapper were associated with sessile invertebrates. The average abundance for gag appears to be higher in Madison-Swanson, but the result was not significant. However, the size of gag grouper on Madison-Swanson was significantly higher. Red grouper seemed to be more numerous on Steamboat Lumps, but the result was not significant. The area to the north of Steamboat Lumps was recommended to be considered as a spawning area in the future.

There was considerable discussion on the effects of coastal development and anthropogenic forces on juvenile habitat. The Ecosystem SSC felt that there should be more of an effort to protect juvenile habitat areas.

Based on the discussion about law enforcement in the reserve areas, the Ecosystem SSC recommends: To have the Council have the Law Enforcement Committee look at options for improving enforcement including looking at the tables of penalties for fishing in Marine Protected Areas and at problems associated with building viable cases for prosecution. Motion carried with no opposition.

The Ecosystem SSC recommends: To have the Council have the Outreach & Education Committee review mechanisms for public outreach with respect to benefits of MPAs and compliance with MPA regulations.

Motion carried with no opposition.

The Ecosystem SSC discussed asking the Council to review options for preventing species of special concern from being caught such as hook restrictions, etc. The Ecosystem SSC discussed the ongoing problem with fishing in Madison Swanson and Steamboat Lumps because fishing is allowed at certain times of year. The Ecosystem SSC discussed how more MPAs and reduced fishing pressure may help improve the spillover effects of the marine reserves (such as Madison-Swanson). It was further discussed that the presence of vessels in reserves with some type of

allowable harvest provides an opportunity for illegal catch. The Ecosystem SSC made the following recommendations:

On the basis of the encouraging news the SSC heard from two scientific studies on reef fish stock recoveries in Madison Swanson and Steamboat Lumps MPAs, the Ecosystem SSC recommends that the Council consider other opportunities to establish MPAs.

Approved by consensus.

The Ecosystem SSC recommends that the Council establish year-round closures for all species in the Madison Swanson, Steamboat Lumps, and the Edges Reserves.

Approved by consensus.

The Ecosystem SSC recommends that the Council recommend to the HMS Management Division that they close the following Reserves (Madison-Swanson, Steamboat Lumps, and the Edges) to fishing year round.

Approved by consensus.

The Ecosystem SSC was presented with information on collaborative fish spawning aggregation studies and closures in the Caribbean. Fisherman helped with the process and areas were closed to prevent fishing on spawning aggregations. The fishermen were part of the process which has led to the success of the closures. Similar attempts at protecting spawning aggregations are in effect in the South Atlantic. The South Atlantic Fishery Management Council has established an MPA expert working group to help identify important areas. In the Gulf of Mexico, there are attempts to identify more spawning aggregations with fisherman.

It was discussed that different fish require different MPA sizes. To protect gag grouper aggregations, an area of sufficient size is necessary. Red grouper do not aggregate, they live in a "permanent aggregation" where a male is surrounded by many females. The goal for ecosystem management would be to find the best areas to protect. The group also discussed how each life stage needs to have protection. The Ecosystem SSC wanted to be clear that juvenile habitat is critical and was concerned that the Council address protection of juvenile habitat. The Ecosystem SSC made the following recommendation:

Borrowing from a powerful approach to identifying and protecting spawning aggregations of reef fish and other associated species already implemented in Belize and elsewhere in the Caribbean and underway in the South Atlantic, the Ecosystem SSC recommends that the Council form an MPA Working Group made up of scientists, fishermen, law enforcement, managers and other stakeholders to work together, each using their best tools and knowledge, to make recommendations for the creation of an effective MPA network in the Gulf of Mexico.

Approved by consensus.

The Ecosystem SSC discussed that juvenile habitat should be further deliberated with the new SSC formation. The group expressed concern that the juvenile habitat would be overlooked with no specific recommendations.

The Ecosystem SSC was presented with the summary of the Ecosystem Based Fishery Management Working Group.

The Ecosystem SSC recommends: That the Ecosystem Based Fishery Management Working Group continue working on developing a set of suggested goals and objectives of an ecosystem based fisheries management plan that considers measurable targets.

Motion carried with no opposition.

A report on the meeting of Lenfest Task Force Meeting was given. The objective of the meeting was to come up with case studies to look at what ecosystem plans would look like and the end goal would be a policy statement paper.

The meeting adjourned at 5:00 p.m.