A. Octocoral Alternatives

There are very limited and scattered data on population status and dynamics for octocorals. Therefore the AP reviewed existing fishery-dependent information for indications of decline over time. Consensus of the AP was:

- Additional information is needed to make a scientific judgment of fisheries capacities (MSY, OFL, ABC, ACL).
- Limited local and regional data on gorgonian populations exist; however, data need to be collated and reviewed to determine the type, quantity and distribution of additional data needed for a scientific evaluation.
- Best Professional Judgment and knowledge was that, while acknowledging that the available information is severely limited, current information does not indicate decline or jeopardy in the octocoral fishery at this time.
- Conservative approach would be to base interim fisheries measures (MSY, OFL, ABC, ACL) on existing levels of take.
- The AP requests additional fishery-dependent information (in addition to that included on Trip Tiks) to assist in gathering needed data.
- The AP chose to develop a list of priorities for scientific information needs to assist in assessing the status of the fishery's population and vulnerability (see item B below).
- 1. Options under MSY = 50,000 colonies (MSY = current combined OY for GOM and SA)

OFL = 50,000 ABC = 50,000 $ACL = 26,228^{a}$	OFL = 26,228 ABC = 26,228 ACL = 13,114	ACL = 0 No harvest
OFL = 50,000 ABC = 50,000 $ACL = 13,114^{b}$	OFL = 26,228 ABC = 26,228 ACL = 15,000	
OFL = 50,000 ABC = 50,000 $ACL = 15,000^{\circ}$	OFL = 26,228 ABC = 13,114 ACL = 13,114	
OFL = 50,000 ABC = 26,228 ACL = 26,228		

OFL = 50,000 ABC = 26,228 ACL = 13,114 OFL = 50,000 ABC = 26,228 ACL = 15,000 OFL = 50,000 ABC = 13,114ACL = 13,114

ABC = 11,000

ACL = 0

a = 200% of maximum annual harvest in federal waters between 2000 and 2008 b = maximum annual harvest in federal waters between 2000 and 2008 c = maximum annual harvest in federal waters between 2000 and 2008 + 10%

2. Options under MSY = 11,000 colonies (just above mode of maximum annual harvest for 2000-2008)
OFL = 11,000
ABC = 11,000
ACL = 11,000
OFL = 11,000

3. Options under MSY = 49,170 colonies (GOM/SA quota split by percentage of harvest)

Same as options under MSY = 50,000

4. Options under MSY = 30,000 colonies (app. twice max. annual harvest 2000-2008)

OFL = 30,000	OFL = 30,000	ACL = 0 No harvest
ABC = 26,228	ABC = 13,114	
ACL = 26,228	ACL = 13, 114	
OFL = 30,000	OFL = 30,000	
ABC = 30,000	ABC = 26,228	
ACL = 26,228	ACL = 13,114	

OFL = 30,000	OFL = 30,000
ABC = 30,000	ABC = 26,228
ACL = 13,114	ACL = 15,000
OFL = 30,000 ABC = 30,000 ACL = 15,000	

• Modify the Live Rock Aquaculture permit system if octocoral harvest in federal waters is prohibited.

Option 1. No action. Do not modify the existing live rock aquaculture permit system.

Option 2. Modify the existing live rock aquaculture permit system to allow harvest of octocorals within aquaculture sites only and nowhere else in federal waters.

Option 3. Modify the existing live rock aquaculture permit system to allow harvest of octocorals within aquaculture sites only and nowhere else in state or federal waters.

- Considerations when modifying the existing system:
 - *Initial seed from wild stock would be required* to harvest octocorals within aquacultured sites as there would not be enough natural recruitment. Consider allowing transplants/clippings (specify max. size and with no holdfast attached)
 - Most popular octocoral species do not grow in environment where aquaculture sites are located.
 - Include provision for harvest of broodstock to ensure that final harvest is cultured and not wild (ex: mount on epoxy base that is then harvested along with the octocoral).
 - Consider a tiered endorsement system? Federal permit requirement?
 - Include a provision that would allow for exclusive harvest of octocorals within the modified live rock aquaculture permit system (i.e., not require that live rock be harvested within the sites).

B. Information Needs and Recommendations

• Inventory existing octocoral distribution data from regional programs. Conduct data gap analysis for determination of data needs.

- Request that the state of Florida conduct a revision of the Marine Life Rule include a field guide/handbook for enforcement personnel identifying "top-ten" harvested species. Coral AP requests that the Council to make a recommendation to the state of Florida on this issue.
- Look at export data to ascertain level of harvest of some species.
- Request that the state of Florida conduct a revision to the trip ticket program including:
 - Issue: if collections occur both on state and fed waters in the same day, there is only one location that gets reported on the trip tik. Therefore, location information is very, very general. Some harvesters fill out two trip tiks, one for Fed waters and one for state. Change how harvest area gets reported on the trip tiks to make it more specific.
 - Add on trip tiks a way to gather quantitative information on distribution of catch within each category ("red", "purple", "other"). Simple list of "top-ten" species could be included under each category.
 - Trip tiks do have "small, medium, large" category that can be added but need to come up with criteria of what constitutes each one.
- Information is still needed on recruitment, growth, and reproduction (i.e., mode of reproduction, size at reproduction) and habitat associations for individual species. Also sources of natural mortality, size-class distribution and specific regions utilized for different target species.
- Data are needed on characteristics of species that are most favorable in the aquarium trade (i.e., how different species tolerate life in aquaria, etc)
- Approach the NOAA Coral Reef Conservation Program, the state of Florida (FWC) and any entity that has a mandate to manage with scientific data, to assist with needed information.
- Need to characterize the fishery; baseline data exist but comes from anecdotal information. Is this representative of the entire fishery? What species are generally being targeted? What is the demand? Octocoral fishery characterization should include the following steps:
 - a) identify what is known about the fishery;
 - b) characterize the industry;

- c) identify what we think we know about the fishery (this step should look into the level of confidence we have in anecdotal information); and
- d) identify what is not known and need to know in order to better manage the fishery.
- Need information on the status of Marine Life Permits in Florida.
- Quantify how much EFH is being removed as a result of this fishery.

C. Encrusting Gorgonians (*Erythropodium* sp. and *Briaerum* sp.)

- The Coral AP does not have any compelling evidence to continue to exclude these two species from the fishery. If harvest is to be allowed, however, require that the morphotype encrusting on rock be collected without the substrate and measure 6" or less in diameter.
- Take of these two species should be tallied on trip tiks along with pertinent information (depth, location).
- MSY, etc. for these two species will be captured within the octocoral measures.

Concern: Less information is available for encrusting species than other gorgonians because they cannot easily be enumerated. Encrusting colonies range greatly in size; this can potentially entail more take of hardbottom substrate, which is designated EFH for corals.

D. Orange Cup Coral

- There is compelling evidence that Orange Cup Coral is an exotic species, e.g., it is absent from natural substrate (Fenner and Banks 2004).
- Strongly recommend to the Council that they develop a policy regarding invasive species to inform advisory panels. Cross-advisory panel subcommittee to draft?
- Clarify "invasive" vs. "exotic". *T. coccinea* appears to be an exotic species.

Recommendations:

- This scleractinian coral species is targeted in the aquarium trade, however uncertainties regarding its origin, implications of introduction to other areas, etc. should be assessed before the species is considered for harvest.
- Wait for Council guidance on how to handle take of exotic species.
- Coral AP requests guidance from the Council on how to apply sustainability measures to something that we are not attempting to "sustain" but rather eradicate.

E. Essential Fish Habitat – Habitat Areas of Particular Concern

- Coral AP supports designation of EFH-HAPC any hardbottom habitat from the shore to the eastern boundary of the EEZ south of Cape Hatteras.
- Add Coral HAPCs to the list of EFH-HAPCs Agencies are not clear on how a CHAPC differs from an EFH-HAPC and this creates problems for NMFS when conducting EFH Consultations and providing EFH Conservation Recommendations.
- Coral AP supports designation of the Deepwater Marine Protected Areas as EFH-HAPCs.
- The AP intends to discuss a nomination process for more site-specific HAPC areas to more clearly justify each proposed designation.

F. Deepwater Corals

Coral AP recommendations/comments on the NOAA Deep-Sea Coral Priorities Workshop for the South Atlantic report:

- Draft workshop report to be sent out to AP when available, so that comments may be consolidated (Note: The Council participated in the workshop and will have an opportunity to comment on the draft workshop report.).
- Coral AP will develop a formal response to the Final Workshop Report that states specific Council priorities under each of the objectives
- The Coral AP needs to list specific mapping and key ecological/biological research questions.
- Recommend that the Council is represented on the NOAA deep-sea coral planning team for FY10 activities in the South Atlantic region.

G. Spiny Lobster

The Coral AP discussed possible alternatives under Action 7 of the developing Spiny Lobster Amendment 6:

Limit trapping in certain areas to address Endangered Species Act (ESA) concerns for staghorn and elkhorn corals.

Alternative 1. No action. Do not limit trapping in certain areas to address ESA concerns for staghorn and elkhorn corals.

Alternative 2. Prohibit trapping on known hardbottom (federal waters beyond 3 miles, less than 30 meters).

Alternative 3. Develop alternative based on map of critical habitat overlaid on SAFMC jurisdiction and spiny lobster fishing effort to determine "areas of known densities and areas of probable recruitment of coral" where trapping should be prohibited.

"Areas of known densities and areas of probable recruitment of coral" –more specific definition/criteria are needed.

Consider use of buffer zones?

Consider alterations to gear to increase stability?

The Coral AP recommends that the spatial approach under Alternative 3 above be used to determine candidate areas for trapping prohibitions.

References

Fenner, D., K. Banks. 2004. Orange Cup Coral *Tubastraea coccinea* invades Florida and the Flower Garden Banks, Northwestern Gulf of Mexico. Coral Reefs 23: 505–507.