

Goliath grouper management stakeholder project



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Stakeholder Perspectives on Goliath Grouper Management: Overview Report



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&
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The Management Challenge

- Divergent stakeholder views and high scientific uncertainty pose challenges to management agencies in reaching satisfactory decisions
- Many stakeholders feel their views and experiences are being ignored (e.g. individual fishers out on the water as well as divers & concerned citizens)
- *Required: Systematic, pro-active exploration of stakeholder views and experiences and constructive debate to develop shared understanding of management issues and options*
- Complements systematic use of biological information in stock assessments and management!

Goliath Grouper Stakeholder Project Activities

Stakeholder survey: An internet-based survey of diverse stakeholders' views and experiences regarding goliath grouper and its management.

Stakeholder workshop: A project workshop with invited representatives of diverse stakeholder groups, aimed at developing a shared understanding of management issues and options.

Presentation of outcomes of the survey and workshop to:
Gulf of Mexico Fisheries Management Council (June 2013)
South Atlantic Fisheries Management Council (September 2013)
Florida Fish and Wildlife Conservation Commission (October 2013).

Evaluation of stakeholder views on the effectiveness of the engagement process developed in the project.

Who are the Stakeholders?

People interacting directly with goliath

- Fishers (recreational and commercial)
- Divers

Businesses serving the above

- Fishing and dive charter operators
- Dive shops, tackle shops etc.

Others with an interest in goliath

- Conservationists
- Scientists

Stakeholder Survey

File Edit View Favorites Tools Help



Goliath Grouper Stakeholder Survey

Informed Consent



File Edit View Favorites Tools Help



Goliath Grouper Stakeholder Survey



Please read this consent page
(Please note: Notification of the following up on a different noti

4. In what marine waters have you fished over the last 12 months? Check all that apply.

- Coastal Texas, Louisiana, Mississippi, and Alabama
- Coastal Georgia, South Carolina, and North Carolina
- Northwest Florida (North of Pinellas County in the Gulf)
- Southwest Florida (Pinellas County and South in the Gulf)
- Northeast Florida (North of Brevard County in the Atlantic)
- Southeast Florida (Brevard County and South in the Atlantic)
- Florida Keys

Other (please specify)

5. Over the past 12 months, approximately how many days have you spent fishing in the following marine habitats? Please enter a numeric value.

Inshore Natural Habitat	<input type="text"/>
Inshore Artificial Habitat	<input type="text"/>
Offshore Natural Reefs	<input type="text"/>
Offshore Artificial Reefs	<input type="text"/>
Bottom Fishing	<input type="text"/>

Survey implementation

Open: May 3rd –June 13th, 2013

Respondents approached through:

Samples of FL fishing license holders:

Recreational saltwater license holders

Commercial license holders

Charter license holders

Email lists, websites, forums, personal contacts:

Dive community (dive shops, clubs, PADI Facebook)

Sea Grant network

Project website

CCA Email list

Ocean Conservancy Email list

Responses received:

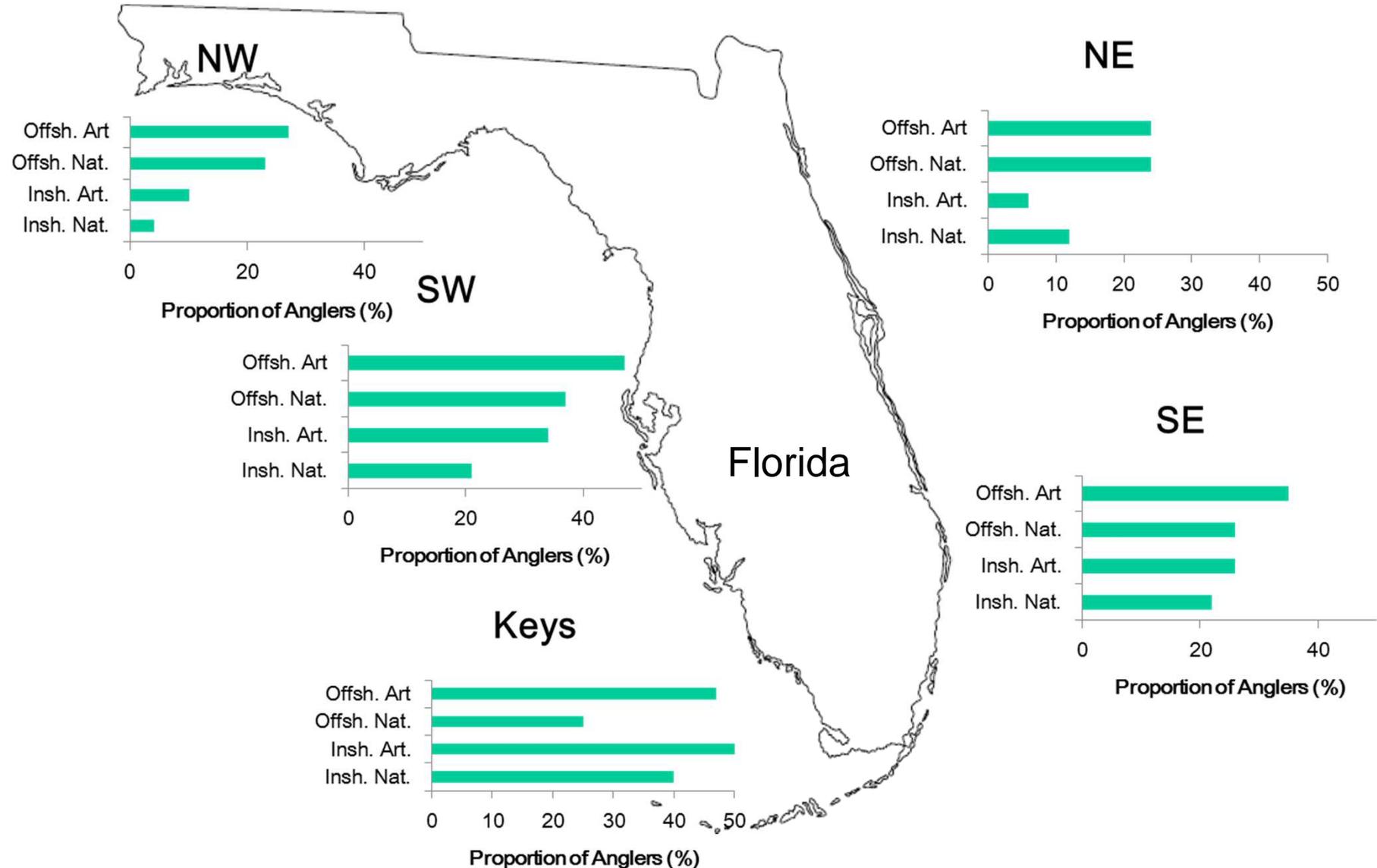
5882, with representation of all major stakeholder groups

Goliath encounters, responses and perceptions

	Commercial fishers			Recreational fishers			Sightseeing divers ^(e)
	All	Bandit gear ^(a)	Spear fishers ^(b)	All	Hook & line ^(c)	Spear Fishers ^(d)	(Non-fishing)
Respondents (n)	697	117	146	3005	1518	574	352
Encountered goliath in the past 12 months (%)	61	75	90	25	20	59	inshore 20 reef 50
Targeted goliath for:							
Catch & release fishing (%)				12	11		
Diving/viewing (%)			18			16	54
Take measures to avoid goliath interaction (%)	42	43	87	21	15	56	(not asked)
Judge measures effective (%)	52	38	59	60	68	64	(not asked)
Interested in harvesting (%)	68	82	80	78	72	81	(not asked)
View goliath encounters as:							
Desirable (%)	32	28	25	52	50	49	87
Neutral (%)	33	33	32	32	35	26	6
Undesirable (%)	35	39	43	16	15	25	7

Frequency of goliath encounters

Proportion of recreational anglers having caught at least one goliath in the past 12 months



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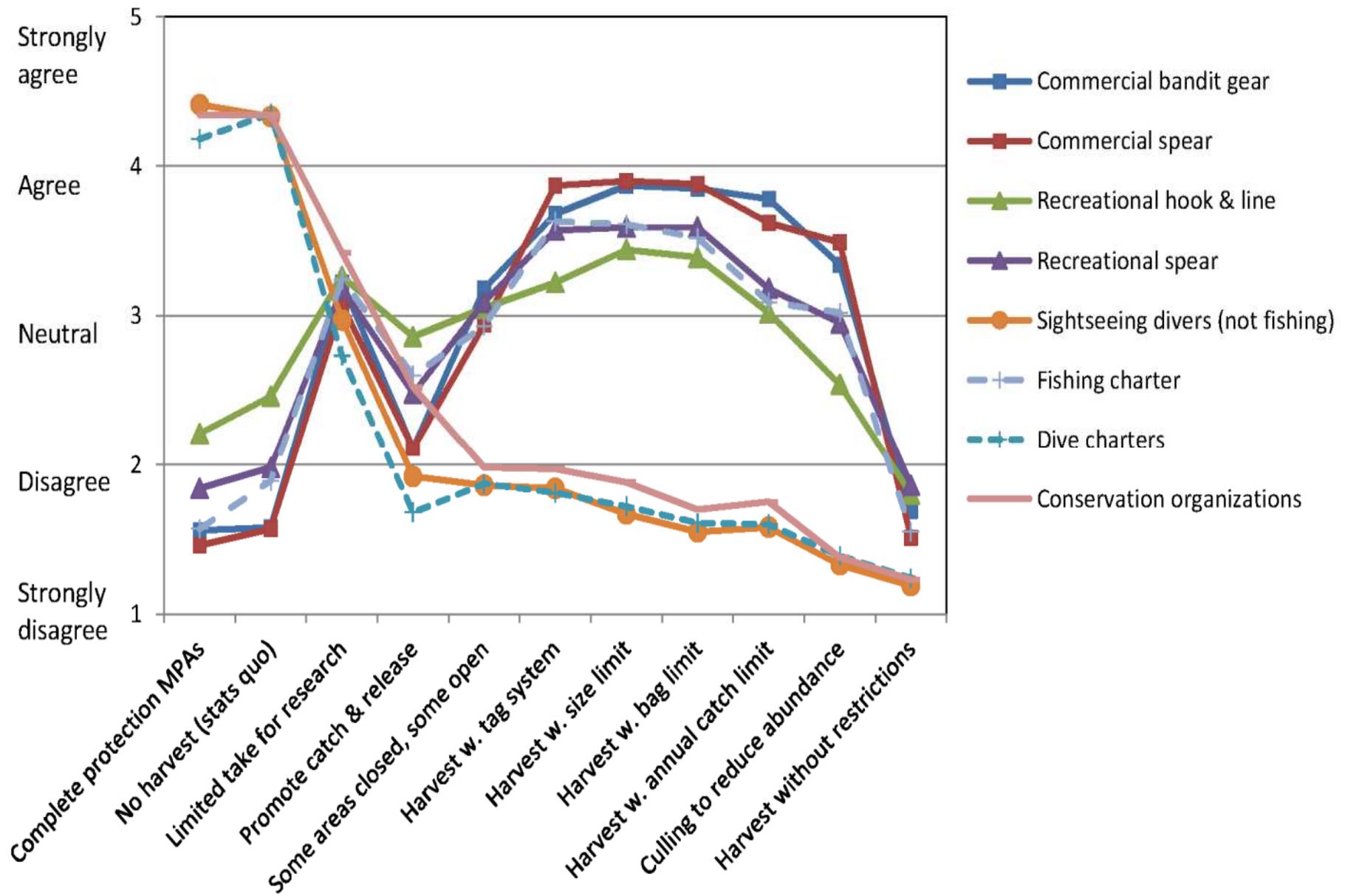
Views on goliath, biodiversity & reasons for participation in decision making

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Respondents (n)	697	117	146	3005	1518	574	352
View goliath as a nuisance species (%)	42	61	57	20	14	37	9
Perceive negative impact of goliath on biodiversity (%)	49	59	68	27	19	51	13
Goliath and biodiversity: Contributes positively (LS)	2.96	2.75	2.75	3.49	3.59	3.08	4.21
Impacts negatively (LS)	3.36	3.54	3.78	2.83	2.67	3.38	1.95
Reasons for participation in decision making:							
Impacts own livelihood (LS)	3.26	3.63	3.69	2.33	2.23	2.53	2.47
Impacts ecosystem (LS)	3.91	4.06	4.22	3.74	3.60	3.99	4.44

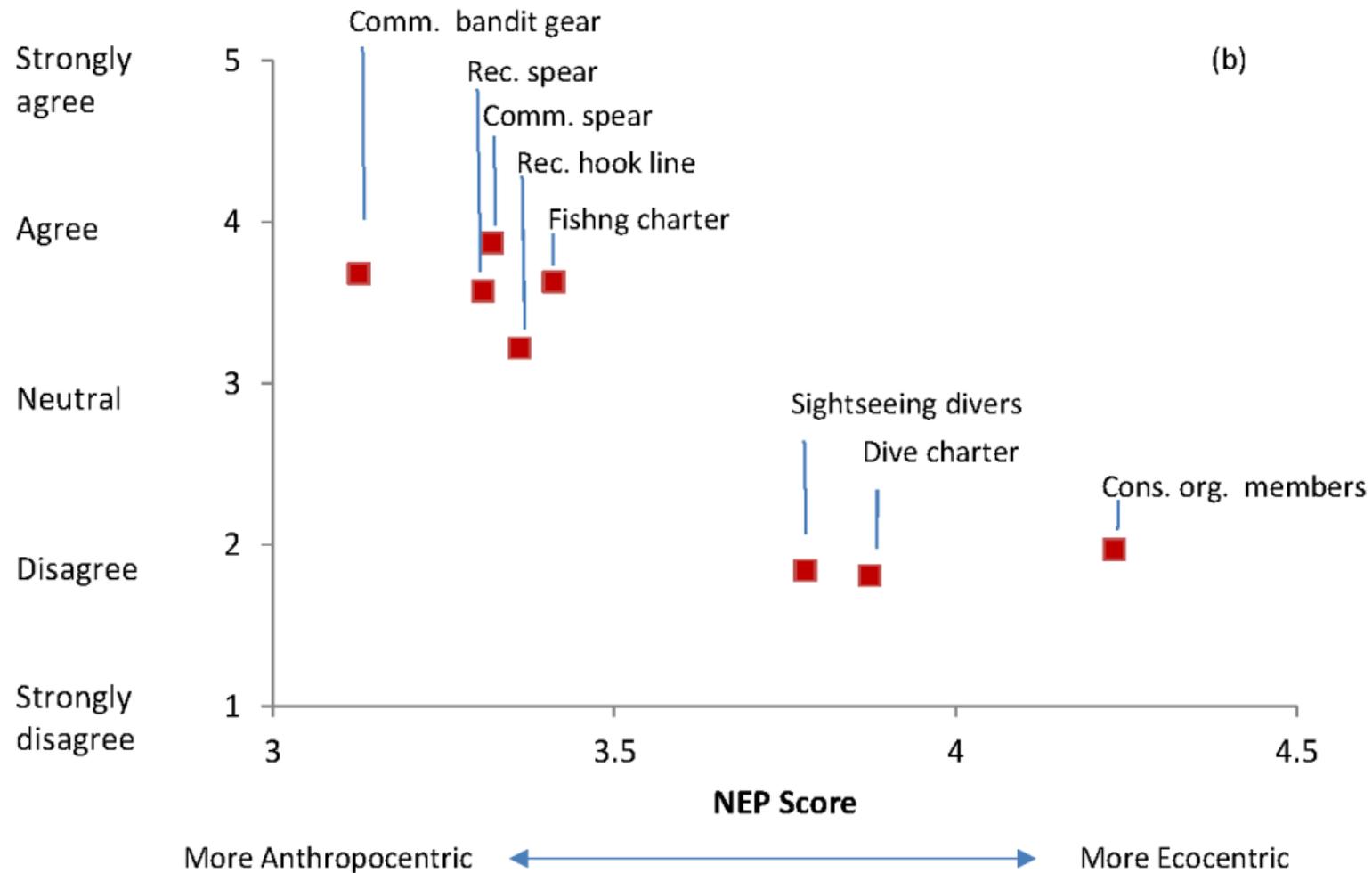
Fishing and dive charters

	Fishing charters	Dive charters
Respondents (n)	191	116
Perceive present business impact of goliath as:		
Positive (%)	19	75
Neutral (%)	56	17
Negative (%)	24	8
Expect business impact of allowing harvest to be:		
Positive (%)	56	10
Neutral (%)	36	8
Negative (%)	8	82
View goliath as a nuisance species (%)	42	5
Perceive negative impact of goliath on biodiversity (%)	51	10
Goliath and biodiversity:		
Contributes positively (LS)	3.05	4.45
Impacts negatively (LS)	3.40	1.63
Reasons for participation in decision making:		
Impacts own livelihood (LS)	3.21	4.05
Impacts ecosystem (LS)	4.09	4.66

Preferences for management measures



Agreement with opening the fishery and fundamental ecological beliefs



Stakeholder Workshop May 21-22, Tampa



Stakeholder Workshop

May 21-22, Tampa

Objectives

- Shared understanding of management issues and likely outcomes of different management options as perceived by stakeholders.
- Brainstorm a menu of management options and explore the pros, cons and uncertainties of each option

Method

- Facilitated workshop

Participants

- Invited based on a situation assessment & interviews; criteria included knowledge of subject and willingness to engage
- Invited: 24, able to attend: 16
- Recreational and commercial fishing sectors, recreational divers, fishing and dive charter operators, conservation organizations, outdoor writers.

Menu of options with pros and cons

Option	Pros	Cons
Fishery closed to harvest (status quo)	<ul style="list-style-type: none"> Good for dive tourism Avoid returning to overexpl. GG will increase abundance Stability of regulations 	<ul style="list-style-type: none"> User conflict Exclusion of certain user groups Leads to negative attitude by some user groups
Limited take for science, by scientists	<ul style="list-style-type: none"> Scientific benefits Take limited to research needs Easier to control than other take options 	<ul style="list-style-type: none"> Likely criticism of scientists for consumptive research
Limited take for science, collaborative with fishers	<ul style="list-style-type: none"> Scientific benefits Inclusion of user groups Cost sharing Perception of managers listening 	<ul style="list-style-type: none"> Potential for abuse Difficulty of controlling harvest Likely criticism from general public
Limited take for harvest	<ul style="list-style-type: none"> Stakeholder perception of proactive management Some economic benefits to fishers and fishing charters 	<ul style="list-style-type: none"> User conflict Negative attitude by some groups Neg. econ. imp. on dive charters Management costs Enforcement concerns Any revenue will not go back to the resource

Stakeholder workshop participants:

- Felt the situation was often misunderstood - universally advocated more education and communication.
- Considered continued closure of the fishery and a limited take for research by scientists or cooperatively with fishers as possible options in the current situation where no accepted scientific (stock) assessment is available.
- Overall participants were more supportive of continued closure but felt that they could agree to a limited take for research if a solid scientific case for such a take was made.
- (*Consideration of the scientific case for a limited take is beyond the scope of this project, which focused on the assessment of stakeholder perspectives.*)

Overall project recommendations

Consideration of the future management of the goliath grouper fishery may benefit from

- more in-depth consideration of the differentiated and nuanced stakeholder perspectives detailed in this study *in conjunction with* scientific assessments of population status and ecological interactions of goliath.
- continued dialogue among stakeholder groups and participatory research may help in defining and measuring a shared set of indicators for population status and ecological effects.

Acknowledgements

- All 5882 survey respondents!
- Workshop participants
- Florida Fish and Wildlife Conservation Commission for funding support



Questions?

<http://www.aquaticresources.org/goliath.html>

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