

2003 Opinion Survey of U.S. Virgin Island Recreational Fishing Club Members

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INTRODUCTION

Biological surveys are only one part of any assessment of fisheries and marine resources when developing management strategies (Gordon and Uwate 2003). It is also important that the opinions and insights of user groups be heard and considered. Without such input, assessment and management of these resources would be incomplete.

In 2001, at the request of the St. Thomas/St. John Fisheries Advisory Committee, the Division of Fish & Wildlife (DFW) completed an opinion survey of commercial fishers (see Uwate et al 2001). The results identified issues the user group views as problems and priorities.

In FY 2002, the U.S. Fish & Wildlife Service mandated that each state (and territory) develop a strategic plan for fish and wildlife (see Gordon and Uwate 2003). In response to this mandate, DFW initiated work on a U.S. Virgin Islands fish and wildlife strategic plan.

As part of this plan, user group opinions and insights were solicited and obtained through opinion surveys. Opinion surveys were completed for commercial fishers as well as the marine recreational industry in the U.S. Virgin Islands (Gordon and Uwate 2003). This report documents the opinions of recreational fishing club members in the U.S. Virgin Islands.

METHODOLOGY

The Universe – The universe was defined as members of the two existing recreational fishing clubs in the U.S. Virgin Islands: (1) the Virgin Islands Game Fishing Club (VIGFC) on St. Thomas, and (2) the Golden Hook Fishing Club on St. Croix.

The Questionnaire – The questionnaire used in this survey was modified slightly from the ones used in Gordon and Uwate (2003). The draft modified questionnaire was reviewed by DFW and a member of the VIGFC.

The questionnaire was a single page so that it would not be a burden to respondents. A copy of the questionnaire is attached in Appendix 1.

Fielding – Participation in this survey was voluntary.

On St. Thomas, the questionnaire was mailed to members of the VIGFC in the monthly mailing on 5/15/03. Nine responses were obtained. Another wave of mailings was planned for the July VIGFC monthly mailing. However, the Executive Director of the VIGFC became very ill and no monthly mailings were completed until 10/3/03. Seven additional responses were received based on this second mailing. After discussion with VIGFC officials, permission was granted to field the questionnaire at the Wahoo Windup Fishing Tournament on 11/9/03. An additional 4 responses were obtained from this effort.

On St. Croix, 18 surveys were completed at the 4th Annual Guy-Gal Reel Challenge on 5/16/03. Additional surveys were completed by telephone and personal contacts. This effort continued from May to June 2003.

RESULTS

Of the 19 Virgin Islands Game Fishing Club respondents, two also belonged to the Golden Hook Fishing Club on St. Croix (Question 1). Of the 22 Golden Hook Fishing Club respondents, two also belonged to the VIGFC. Respondents with membership in both clubs were not the same individuals since all 19 VIGFC respondents lived on St. Thomas and all 22 Golden Hook Fishing Club respondents lived on St. Croix (Question 2).

Most St. Thomas fishing club member respondents targeted tuna/dolphin/wahoo (78.9 %, Question 3, see Table 1). All St. Croix fishing club member respondents targeted tuna/dolphin/wahoo. Most St. Thomas fishing club member respondents participated in catch and release recreational fishing (73.7%, Question 4, see Table 2). All St. Croix fishing club member respondents participated in catch and release recreational fishing. Both St. Thomas and St. Croix fishing club member respondents released about 70% of catch (Question 4, see Table 3).

Respondents rated their fishing resources (Question 5) as poor, fair, good or excellent. Results are presented in Table 4. For both St. Thomas and St. Croix, most rated their fishing as “fair” or “good”. For St. Thomas, when these rating categories are converted to numerical values (with poor = 1, fair = 2, good = 3, and excellent = 4), the average rating is 2.95 (variance 0.55). This overall rating is good (good = 3). For St. Croix, when rating categories are converted to numerical values, the average rating is 2.63 (variance 0.592). This overall rating is also good (good = 3).

Respondents provided their opinions on the major issues and problems regarding fisheries in the U.S. Virgin Islands (Question 6, see Table 5). The major areas of concern for St. Thomas respondents included: BVI relations, enforcement, foreign longliners, overfishing, and pollution. The top areas for concern for St. Croix respondents included: gillnets, longliners, overfishing, fish traps, and Buck Island expansion.

Respondents also made various suggestions on how to improve fisheries problems in the U.S. Virgin Islands (Question 6, see Table 6). Suggestions from St. Thomas respondents were varied with no single suggestion made more than once. Suggestions from St. Croix respondents that were made more than once included enforcement, fish trap ban, and gillnet ban.

Question 7 asked respondents to rate marine resource conditions in the U.S. Virgin Islands as fair, poor, good or excellent (see Table 7). Respondents in St. Thomas rated conditions mostly as good, while respondents in St. Croix rated them as fair. The overall rating for St. Thomas/St. John (with poor=1, fair = 2, good = 3, excellent = 4) is 2.94 (variance 0.41), which is good (good = 3). St. Croix received an overall rating of 2.42 (variance 0.69), which is fair (fair = 2).

Respondents then identified major problems for marine resources that need to be addressed (Question 8, see Table 8). For St. Thomas respondents, pollution was the only issue that was mentioned more than once. For St. Croix respondents, enforcement and overfishing were the only issues that were identified more than once.

Respondents also provided their suggestions to fix marine resource problems in Question 8 (see Table 9). St. Thomas respondents suggested a variety of solutions, but none was mentioned more than once. For St. Croix respondents, only fish size limits was suggested more than once.

Question 9 asked about the respondent's awareness or possible involvement in the Fisheries Advisory Committee (FAC). Results are provided in Table 10. About half of the St. Thomas respondents were aware of the FAC. About 2/3rds of St. Croix respondents were aware of the FAC. Only 10 percent of St. Thomas respondents were willing to join the FAC while 2/3rds of St. Croix respondents were willing to join it.

Question 10 asked respondents for suggestions for a location for a new boat ramp (see Table 11 for St. Thomas and Table 12 for St. Croix). St. Thomas respondents provided a variety of suggested locations, the most common suggestion was that a boat ramp was needed on the east end of St. Thomas. St. Croix respondents also provided a variety of suggestions, the most common suggestions included the south shore and repair of the Fredriksted ramps.

Respondents were asked if they would like to participate in a workshop regarding fishing and marine resource rules and regulations (Question 11, see Table 13). Between 60 to 70 percent of respondents indicated that they would participate in such a workshop.

Finally, respondents were asked for additional comments (see Table 14). St. Thomas respondents listed several suggestions, but none was suggested more than once. The most common suggestion by St. Croix respondents was for more enforcement.

DISCUSSION

Survey responses from the VIGFC (St. Thomas) were treated separately from responses from the Golden Hook Club (St. Croix). The reasons for this have to do with the differences in geographical location, geology, and socio-economics between the two islands (see Gordon and Uwate 2003). For example, St. Croix has a narrower shelf with shallower water depths than St. Thomas/St. John. In St. Croix, the shelf area extends less than 3 nautical miles from the shoreline, and the shelf depth is generally <12 m. The shelf around St. Thomas and St. John extends much further (8 nautical miles to the south, and 20 nautical miles to the north), and is primarily between 25 to 45 m deep. Additionally, the islands of St. Thomas and St. John draw more tourism, provide better job opportunities, and have a lower poverty rate than St. Croix.

Based on results here, it appears that most fishing club members target tuna/dolphin/wahoo (see Table 1). In addition, most participate in catch and release (see Table 2) and most of their catch is released (see Table 3).

Both fisheries and marine resources were rated as fair and good by respondents from both islands (see Tables 4 and 7). However, St. Thomas respondents tended to rate their resources a bit higher than St. Croix respondents.

Overfishing, longliners, gillnets, fish traps, and enforcement (lack of) continue to be key fishery problems in the USVI (see Table 5). However, there does appear to be differences in perceived problems. St. Croix respondents rated longliners, gillnets, and fish traps as problems (by more than one respondent). These were not commonly identified problems for St. Thomas respondents. Many of these identified problems coincide with previous opinion surveys (see Gordon and Uwate 2003, and Uwate et al 2001).

Identified marine resource problems were similar to those identified for fisheries (compare Tables 5 and 8). Enforcement, pollution, and reef damage were common USVI identified marine resource problems.

Suggestions on how to fix problems with fisheries and marine resources showed little difference (compare Tables 6 and 9). Banning gillnets, fish traps, and increasing enforcement were common suggestions to fix the fishery resource (Table 6), while instituting fish size limits and cleaning up pollution were common suggestions for fixing the marine resources. Again, these suggestions were similar to those suggested in earlier opinion surveys (see Gordon and Uwate 2003 and Uwate et al 2001).

Results of these surveys provide insights into the priority areas, as perceived by fishing club members. These priorities are real to the respondents, but may be unknown or not yet significant to policy makers. Opinion surveys such as those completed here should provide policy makers with new insights and perceptions of problems and solutions for fisheries and marine resource management. Also, it is evident that St. Thomas is fundamentally different from St. Croix, therefore the Division of Fish and Wildlife's management strategy (strategic plan) should recognize this. St. Thomas priority issues may have to be approached differently with respect to those of St. Croix because of the different priorities expressed by respondents from each district to this survey.

REFERENCES CITED:

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Uwate, K.R., W. Tobias, P. Nieves, H. Rivera, W. Ventura, and L. Critchley. 2001. Survey of U.S. Virgin Islands commercial fisher opinions and usage of new national monument areas (Buck Island and south of St. John). Bureau of Fisheries, Division of Fish and Wildlife, Department of Planning and Natural Resources, U.S. Virgin Islands. 13 pp.

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	STT		STX		TOTAL	
	No. of responses	%	No. of responses	%	No. of responses	%
Reef fish	3	15.8	1	4.5	4	9.8
Tuna/Dolphin/Wahoo	15	78.9	22	100.0	37	90.2
Billfish	7	36.8	17	77.3	24	58.5
Other	0	0	1	4.5	1	2.4
Total Responses	25		41		66	
Total Respondents	19		22		41	

*Note: Some respondents provided multiple responses to this survey question.

	STT		STX		TOTAL	
	No. of Responses	%	No. of Responses	%	No. of Responses	%
Yes	14	73.7	22	100	36	87.8
No	5	26.3	0	0	5	12.2
Total	19		22		41	

	STT Responses	STX Responses	USVI Responses
average	76.82	70.83	73.10
variance	846.36	1247.79	1068.60
minimum	25.00	10.00	10.00
maximum	100.00	100.00	100.00
No. of responses	11	18	29

	STT		STX		TOTAL	
	No. of Responses	%	No. of Responses	%	No. of Responses	%
Poor	0	0	2	8.3	2	4.4
Fair	6	28.6	7	29.2	13	28.9
Good	10	47.6	13	54.2	23	51.1
Excellent	5	23.8	2	8.3	7	15.6
Total	21	100	24	100	45	100

*Note: Some respondents provided multiple responses to this survey question.

Table 5. List of Major Fisheries Problems Identified by Fishing Club Member Respondents (Question 6)						
Major Problems	STT		STX		TOTAL	
	No. of Responses	% *1	No. of Responses	% *1	No. of Responses	% *1
Buck Island expansion			3	17.6	3	11.1
BVI relationship	2	20			2	7.4
Enforcement	2	20	2	11.8	4	14.8
FADs overfished (too many commercial/charter boats)	1	10			1	3.7
Fish traps	1	10	4	23.5	5	18.5
Fishing area too small	1	10			1	3.7
Foreign longliners (down island, not considered in catch reports)	2	20			2	7.4
Ghostfishing			1	5.9	1	3.7
Gillnets			5	29.4	5	18.5
Large fishing floats down island			1	5.9	1	3.7
Longliners			5	29.4	5	18.5
Overfishing (fewer fish, poor fishing)	2	20	4	23.5	6	22.2
Pollution (runoff, dumping)	2	20			2	7.4
Reef fishery			2	11.8	2	7.4
Spearfishers			1	5.9	1	3.7
Undersized fish being taken			1	5.9	1	3.7
West end (nowhere to get fuel/water for boats)			1	5.9	1	3.7
Total # of responses (*2)	13		30		43	
Total # of respondents that answered question	10		17		27	

*Notes:

1. Percentages based on total number of respondents who answered the question.
2. Some respondents provided multiple responses to this survey question.

Table 6. Suggestions by Fishing Club Member Respondents on How to Fix Fishery Problems (Question 6)						
Suggestions	STT		STX		TOTAL	
	No. of Responses	% *1	No. of Responses	% *1	No. of Responses	% *1
Areas – clearly determined fishing zones	1	16.7			1	8.3
BVI – closer cooperation	1	16.7			1	8.3
Catch and release for small fish	1	16.7			1	8.3
Education – boat safety for commercial fishers			1	16.7	1	8.3
Enforcement			2	33.3	2	16.7
Fish traps – change mesh size			1	16.7	1	8.3
Fish traps – restrict size	1	16.7			1	8.3
Fish traps (ban them, stop fishing)	1	16.7	2	33.3	3	25
Gill nets (ban them, stop fishing)	1	16.7	2	33.3	3	25
Regulation			1	16.7	1	8.3
Small fish – don't take	1	16.7			1	8.3
Tournaments – abolish when fish aren't used for food	1	16.7			1	8.3
Total # of responses (*2)	8		9		17	
Total # of respondents to question	6		6		12	

*Notes:

1. Percentages based on total number of respondents who answered the question.
2. Some respondents provided multiple responses to this survey question.

Table 7. Rating of Marine Resource Conditions by Fishing Club Member Respondents* (Question 7)						
	STT		STX		TOTAL	
	No. of Responses	%	No. of Responses	%	No. of Responses	%
Poor	0	0	3	12.5	3	7.1
Fair	4	22.2	10	41.7	14	33.3
Good	11	61.1	9	37.5	20	47.6
Excellent	3	16.7	2	8.3	5	11.9
Total	18	100	24	100	42	100

*Note: Some respondents provided multiple responses to this survey question, while others provided no response.

Table 8. List of Marine Resource Problems Identified by Fishing Club Member Respondents (Question 8)

Problems	STT		STX		TOTAL	
	No. of Responses	% *1	No. of Responses	% *1	No. of Responses	% *1
Education – lack of			1	8.3	1	5.3
Enforcement			3	25.0	3	15.8
Fishing areas- decrease	1	14.3			1	5.3
Hatcheries and restocking – need more	1	14.3			1	5.3
Marine resources – not enough are worked on						
Overfishing	1	14.3	2	16.7	3	15.8
Pollution – sewage, runoff	2	28.6	1	8.3	3	15.8
Reef damage			1	8.3	1	5.3
Regulation – not enough			1	8.3	1	5.3
Regulation – too much			1	8.3	1	5.3
Sewage closures by Feds	1	14.3			1	5.3
Small fish – only ones brought to market			1	8.3	1	5.3
Soil erosion			1	8.3	1	5.3
Traps – too many			1	8.3	1	5.3
Undersize catch being taken – conch/lobster/fish			1	8.3	1	5.3
Total # of responses (*2)	6		14		20	
Total # of respondents that answered question	7		12		19	

*Notes:

1. Percentages based on total number of respondents who answered the question.
2. Some respondents provided multiple responses to this survey question.

Table 9. Suggestions by Fishing Club Member Respondents on How to Fix Marine Resource Problems (Question 8)						
Suggestions	STT		STX		TOTAL	
	No. of Responses	%*1	No. of Responses	%*1	No. of Responses	%*1
Bag limits			1	20	1	12.5
Baitfishing – limit use of nets	1	33.3			1	12.5
Education – need more			1	20	1	12.5
Fish size limits			2	40	2	25
Minimum weight for tournaments	1	33.3			1	12.5
Net size limits	1	33.3			1	12.5
Pollution – cleanup coastline, mangroves	1	33.3	1	20	2	25
Pot fishing – eliminate for several years			1	20	1	12.5
Pots – keep close to shore/brightly lit	1	33.3			1	12.5
Total # of responses (*2)	5		6		11	
Total # of respondents to question	3		5		8	

*Notes:

1. Percentages based on total number of respondents who answered the question.
2. Some respondents provided multiple responses to this survey question.

Table 10. Awareness of the Fisheries Advisory Committee by Fishing Club Member Respondents (Question 9)						
	STT		STX		TOTAL	
	No. of Responses	%	No. of Responses	%	No. of Responses	%
Aware	10	52.6	14	66.7	24	60.0
Not Aware	9	47.4	7	33.3	16	40.0
Total	19	100.0	21	100	40	100
Willing to join	10	52.6	14	66.7	24	60.0
Not willing to join	9	47.4	7	33.3	16	40.0
Total	19	100.0	21	100	40	100

Table 11. Suggestions by St. Thomas Fishing Club Member Respondents for new Boat Ramps and Public Jetties in St. Thomas (Question 10)		
	STT	
	No. of Responses	% *1
American Yacht Harbour – installation needed	1	12.5
East End, St. Thomas – ramp needed	3	37.5
Enighed Pond, St. John – installation needed	1	12.5
Hull Bay ramp – repairs needed	1	12.5
Independent Boat Yard – installation needed	1	12.5
Old sea plane ramp – installation needed	1	12.5
Red Hook – ramp needed	1	12.5
Water Island – installation needed	1	12.5
Total # of responses (*2)	10	
Total # of respondents that answered question	8	

*Notes:

1. Percentages based on total number of respondents who answered the question.
2. Some respondents provided multiple responses to this survey question.

Table 12. Suggestions by St. Croix Fishing Club Member Respondents for new Boat Ramps and Public Jetties on St. Croix (Question 10)		
	STX	
	No. of Responses	%*1
Boy Scout Camp – repairs needed	0	0.0
Frederiksted – jetty needed	1	11.1
Frederiksted – repairs needed	2	22.2
Marina in Frederiksted	1	11.1
Marina on South Shore	1	11.1
Salt Pond – installation needed	1	11.1
South Shore – installation needed	3	33.3
West End	1	11.1
Yacht Club – installation needed	1	11.1
Total # of responses (*2)	11	
Total # of respondents that answered question	9	

*Notes:

1. Percentages based on total number of respondents who answered the question.
2. Some respondents provided multiple responses to this survey question.

	STT		STX		TOTAL	
	No. of Responses	%	No. of Responses	%	No. of Responses	%
Yes	12	70.6	14	63.6	26	66.7
No	5	29.4	8	36.4	13	33.3
Total	17	100	22	100	39	100

Comments	STT		STX		TOTAL	
	No. of Responses	% *1	No. of Responses	% *1	No. of Responses	% *1
BVI controversy – resolve it	1	25			1	10
Closures – positive impact			1	16.7	1	10.0
Conservation			1	16.7	1	10.0
Enforcement – more needed			4	66.7	4	40.0
FAC – no progress			1	16.7	1	10.0
FADs – additional installments			1	16.7	1	10.0
FADs – only way I see my money being spent to help me	1	25		0.0	1	10.0
Keep up good work			1	16.7	1	10.0
Prior notice for new regulations			1	16.7	1	10.0
Public draft			1	16.7	1	10.0
Recreational fishers – should be licensed and do CCRs	1	25		0.0	1	10.0
Sea turtles – more abundant than in 80s			1	16.7	1	10.0
Thanks	1	25		0.0	1	10.0
Tournament – host one out west			1	16.7	1	10.0
Total # of responses (*2)	4		13		37	
Total # of respondents that answered question	4		6		10	

*Notes:

1. Percentages based on total number of respondents who answered the question
2. Some respondents provided multiple responses to this survey question.

ATTACHMENT 1
RECREATIONAL FISHING CLUB MEMBER OPINION SURVEY
JUNE 2003

The Division of Fish & Wildlife is asking for your opinions regarding fisheries and marine resources issues in the U.S. Virgin Islands. Please take a moment and answer this questionnaire. Your responses are confidential. They will be compiled together and will provide DFW with insight into the priorities and problems identified by you, recreational fishing club members. This will assist DFW in designing projects to address priority issues. Please return this form to Division of Fish & Wildlife, 6291 Estate Nazareth, St. Thomas, VI 00802-1118, fax: (340) 775-392.

1.	Which fishing club do you belong? VI Game Fishing Club Golden Hook Fishing Club Neither Club
2.	Where do you live? ST. THOMAS ST. JOHN ST. CROIX other (please specify): _____
3.	What do you target when you fish? [] reef fish [] tuna/dolphin/wahoo [] billfish [] other (please specify): _____
4.	Do you participate in catch and release fishing in the Virgin Islands? YES NO If YES, what percentage of the fish you catch do you release? _____%
5.	How would you rate fishing resources in the U.S. Virgin Islands? POOR FAIR GOOD EXCELLENT
6.	What are the major fisheries problems that you see? How can they be fixed? _____ _____
7.	How would you rate the marine resource conditions in the U.S. Virgin Islands? POOR FAIR GOOD EXCELLENT
8.	What are the major marine resource problems that you see? How can they be fixed? _____ _____
9.	Do you know about the Fisheries Advisory Committee? YES NO Would you be interested to volunteer to be on the Fisheries Advisory Committee? YES (please print your name/contact number: _____) NO
10.	Do you have any suggestions for new boat ramps and public jetties? _____
11.	Would you like to participate in a workshop to learn about fishing and marine resource rules and regulations? YES NO
	Do you have any additional comments? _____

Thank you for taking the time to answer and returning this questionnaire.