

## St. Thomas Fishermen's Association: Involving Fishermen in Fishery Management

### Asociación Pescadores de St. Thomas: Involucrando a los Pescadores en la Administración Pesquera

### L'Association des Pêcheurs de St Thomas: Impliquer les Pêcheurs dans la Gestion des Pêcheries

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#### ABSTRACT

The St. Thomas Fishermen's Association (STFA) was formed in 2005 when fishery management authorities proposed to close significant areas of St. Thomas shelf to fishing. The STFA was able negotiate seasonal closures as a substitute for the proposed areal closures. STFA members catch around 80% of the fish trap catch and 95% of the spiny lobster catch in St. Thomas. Since its formation STFA members have been appointed to the Scientific and Advisory panels of the Caribbean Fishery Management Council, the Territorial Fishery Advisory Committee and testified twice to the United States Congress on fishery management issues. In addition, in collaboration with NOAA agencies and through direct grants, the STFA has carried out scientific studies in support of fishery management. STFA members are now well informed, involved and participating in management of their fisheries.

KEY WORDS: Fishermen, management, Virgin Islands

#### INTRODUCTION

Seafood in the Virgin Islands is an integral part of the culture and has been since the end of slavery as it represented one of the only protein sources available. Today, local seafood is the source of a vibrant cuisine, sung about in calypso songs, and argued about on talk radio.

Fisheries landings in St. Thomas U.S. Virgin Islands have been relatively constant for the past three decades despite major increases in the technologies employed. Currently the fishery is dominated by the trap fisheries for fish which land around 450,000 pounds annually, the hand line fishery which lands around 110,000 pounds annually, a directed lobster trap fishery which lands a similar amount of lobster and a traditional seine net fishery which lands around 100,000 pounds annually (Figure 1).

Fish are marketed directly to the consumer from the back of the fishermen's pickup trucks, mostly early on Saturday mornings. All of these transactions go unrecorded and data regarding the quantity of seafood being landed comes from the fishermen themselves who report daily catches on a monthly basis and who undergo four catch port samplings annually by the Territorial Division of Fish and Wildlife.

Consequently, despite the nearly 600,000 catch reports which have been supplied since 1974 and over 50,000 catches which have been port sampled, fishery managers have consistently avoided developing management recommendations based upon actual Virgin Islands Data.

In 2005, in order to meet the requirements of the Sustainable Fisheries Act, the U.S. National Marine Fisheries Service (NMFS) pressured the Caribbean Fishery Management Council (CFMC) to identify "overfished" species within its area of jurisdiction and to address "overfishing" through reductions in fishing effort.

Given their reluctance to employ actual Virgin Islands data, NMFS and the CFMC utilized qualitative methods in which panels of "experts" provided opinions regarding the status of Virgin Islands resources and determined that queen conch, snappers, parrotfish and groupers were undergoing overfishing.

The recommended response to address this "overfishing" was to close large areas of the St. Thomas/St. John shelf to fishing (Figure 2).

Coupled with other Territorial and Federal MPAs, Monuments and National Parks, the proposals would have limited Virgin Islands fishermen to slightly over half of their traditional fishing area.

The impacts, which would have likely driven most fishermen out of business, provided the incentive for the formation of the St. Thomas Fishermen's Association (STFA).

The newly formed organization attended the CFMC's 2005 decision meeting in San Juan, determined to find alternatives to draconian closures. At that meeting they were supported by the Virgin Islands Delegate to Congress who took the Red Eye from Washington D.C. in order to attend the meeting. Delegate Christiansen has continued her efforts to support local fishermen since that time.

Eventually, NMFS and the CFMC agreed to address their imagined "overfishing" through seasonal rather than areal closures (except for protection of the Grammanik Bank spawning area).

At that meeting STFA members began to understand that simple opposition to management was not going to be sufficient to protect the fishery in the long term and that there was a need to improve the information base upon which management decisions were being made.

There was also an understanding that, despite serious disagreement surrounding the directions being proposed for managing Virgin Islands fisheries, both sides were seeking the same end result, sustainable fisheries.

### STFA FISHERY MANAGEMENT EFFORTS

Following the 2005 meeting, STFA members became more active in the process of management including:

- i) Appointment to the CFMC Advisory and Scientific and Statistical Committees,
- ii) Appointment to the Territorial Fishery Advisory Committee,
- iii) Testimony to the Congress of the United States (twice),
- iv) Testimony to the Legislature of the Virgin Islands,
- v) Passage of Senate Resolution 29-0322 preventing passage of compatible regulations until such time as the CFMC addresses certain National Standard inconsistencies with current Allowable Catch Limit regulations.

In addition the STFA has played a significant role in the redesign of the Territorial Catch Reporting system and has submitted a proposal for electronic daily reporting<sup>1</sup>.

In recognition of the deficiencies in data available for management, STFA has also carried out a number of research efforts listed in Table 1.

Currently STFA member land around 80% of the fish and over 90% of the lobster and, therefore, actions taken by the organization are likely to have a major impact upon the fisheries. In addition, the very magnitude of the fishing effort by STFA members represents a significant resource in providing sampling effort to undertake studies to provide improved data for fishery management.

The first area addressed by the STFA was in the area of bycatch from local fisheries. National Standard 9 of the Magnuson-Stevens Fishery Conservation and Management Act as amended through January 12, 2007 (Section 104-297) states that “*Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.*” The STFA response to this issue by carrying out a series of studies of tra-related bycatch that led to the eventual design of an escape vent which eliminated much of the bycatch (Table 2).

At that time, almost nothing was known about local bycatch. A first opportunity was provided by Bob Trumble of MRAG Americas who was undertaking a field study of bycatch in the Virgin Islands. He made arrangements for the St. Thomas Fishermen’s Association to carry out the field work. The MRAG study was a relatively small effort involving 78 trips but it went a long way towards describing the species involved in the St. Thomas Fisheries and providing initial data on size of both catch and bycatch species.

STFA followed up on the MRAG effort with a “trip ticket” study carried out under NMFS’ Marine Fisheries Initiative in which fishermen provided data on bycatch from 1,854 trips.

Once an understanding of the amount of bycatch was known, the Association began to examine how to reduce the amount by development of escape vents, first with a pilot study in 2008 and then with the 2010 – 2012 study being reported at this meeting. This effort has been highly successful both in developing fishery life history information and in convincing NMFS and CFMC that trap vents could offer significant improvements in the fishery<sup>2</sup>.

In addition to the bycatch studies, the STFA has currently on-going tag-recapture efforts with yellowtail snapper (*Ocyurus chrysurus*) and spiny lobster (*Panulirus argus*) which are both species of importance to STFA members<sup>3</sup>.

Like all STFA projects, these efforts are based on taking advantage of the fishing effort and expertise

**Table 1.** Summary of research projects carried out by the STFA.

#### Bycatch Studies.

- ⇒ 2005 study with MRAG Americas funded by CRP.
- ⇒ 2006 “trip ticket” bycatch study funded by MARFIN.
- ⇒ 2008 pilot study to develop fish trap escape vents. Funded by CFMC, SeaGrant and SEFSC.
- ⇒ 2010-12 CRP study to engineer escape vents.
- ⇒ Yellowtail tag-recapture study.
- ⇒ Spiny lobster tag-recapture study.

Lost Traps. Cooperative study with NOAA’s Biogeography program.

Ciguatera. Involvement with [www.caribcatch.org](http://www.caribcatch.org) multi agency study. Supply suspect fish to FDA for analysis.

Gear Reduction. Negotiated (with CFMC and Territorial Government) 20% reduction in number of fish traps.

<sup>1</sup>The proposal to NMFS CRP program was not funded but STFA is working with Ecotrust on a subsequent effort.

<sup>2</sup>At the 140<sup>th</sup> CFMC meeting in September, following an STFA presentation on the trap vent project, the CFMC Executive Director proposed funding to implement the vents and the NMFS Regional Director said that implementation of the vents might allow for increases in the Magnusan Act Allowable Catch Limits.

provided by member fishermen. Also, like all of our projects, participants are compensated financially for their effort and expertise. We note that, by compensating fishermen for funded studies there is a willingness to volunteer when funding is not available. For example the MARFIN project reached its proposed sample size in 60% of the time proposed for sampling. Fishermen then continued to provide samples for the rest of the year without compensation so that the data could cover a complete annual cycle.

**WHAT DOES THE FUTURE HOLD?**

The STFA understands that fishery management is an on-going process and that there is no end in sight. We also understand that, if unopposed, Federal managers are likely to rush into management actions without ever considering the impacts of prior actions. In a small place like the US Virgin Islands, it would be easy for them to constrain the fishery to the point where it could simply disappear.

Thus we completely understand the need for an organization like ours to try and slow the process down and force evaluation of each and every action that is implemented. In addition, we are continually attempting to educate Federal managers about the differences between Virgin Islands fisheries and those in the Continental United States.

At the same time, we also understand that the best management will come when it is based upon sound and reliable information. Historically, both the Territory and the Federal government have been unable to carry out successful research in the Virgin Islands. The University

of the Virgin Islands has been carrying out excellent work on spawning aggregations but is primarily a scientific research organization and not oriented towards fisheries and the interaction between the resources and the stakeholders.

Consequently, we see that we have a continuing role to play in developing new information for use in managing our fisheries while at the same time continuing our active participation in the management process and lobbying for information-based management.

**Table 2.** Summary of bycatch studies carried out by the St. Thomas Fishermen’s Association.

Source	# Trips	Effort	Landings
<b>MARG Study (2005-06)</b>			
Fish Traps	27	1700 <sup>a</sup>	2869 <sup>d</sup>
Lobster Traps	16	1729 <sup>a</sup>	1517 <sup>d</sup>
Hand Line	21	42 <sup>b</sup>	1784 <sup>d</sup>
Seine Net	11	23 <sup>b</sup>	792 <sup>d</sup>
Long Line	1	1 <sup>b</sup>	44 <sup>d</sup>
<b>MARFIN Study (2006-07)</b>			
Fish Traps	767	63,524 <sup>a</sup>	138,099 <sup>d</sup>
Lobster Traps	364	41,181 <sup>a</sup>	54,587 <sup>d</sup>
Hand Line	410	827 <sup>b</sup>	40,026 <sup>d</sup>
Seine Net	247	248 <sup>b</sup>	60,314 <sup>d</sup>
Diving	8	16 <sup>b</sup>	478 <sup>d</sup>
Rod and Reel	56	130 <sup>b</sup>	3,480 <sup>d</sup>
Spear fish	2	5 <sup>b</sup>	20 <sup>d</sup>
<b>CRP Study(2008, 2010-12)</b>			
Diving Studies	48	946 <sup>a</sup>	3,404 <sup>d</sup>
Field Testing	304	3136 <sup>a</sup>	14,526 <sup>d</sup>

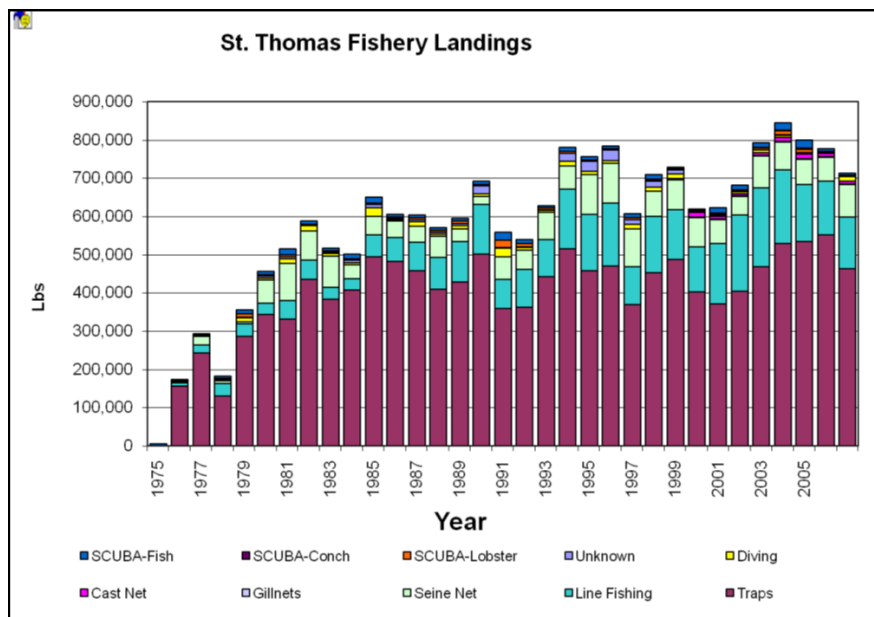
<sup>a</sup> Effort Unit = Trap Hauls

<sup>b</sup> Effort Unit = Man Days

<sup>c</sup> Landings in # of Fish

<sup>d</sup> Landings in # Lbs.

<sup>3</sup>The spiny lobster project is being carried out in St. Croix also with the St. Croix Commercial Fishermen’s Association.



**Figure 1.** Commercial fish landings from St. Thomas/St. John, US Virgin Islands.

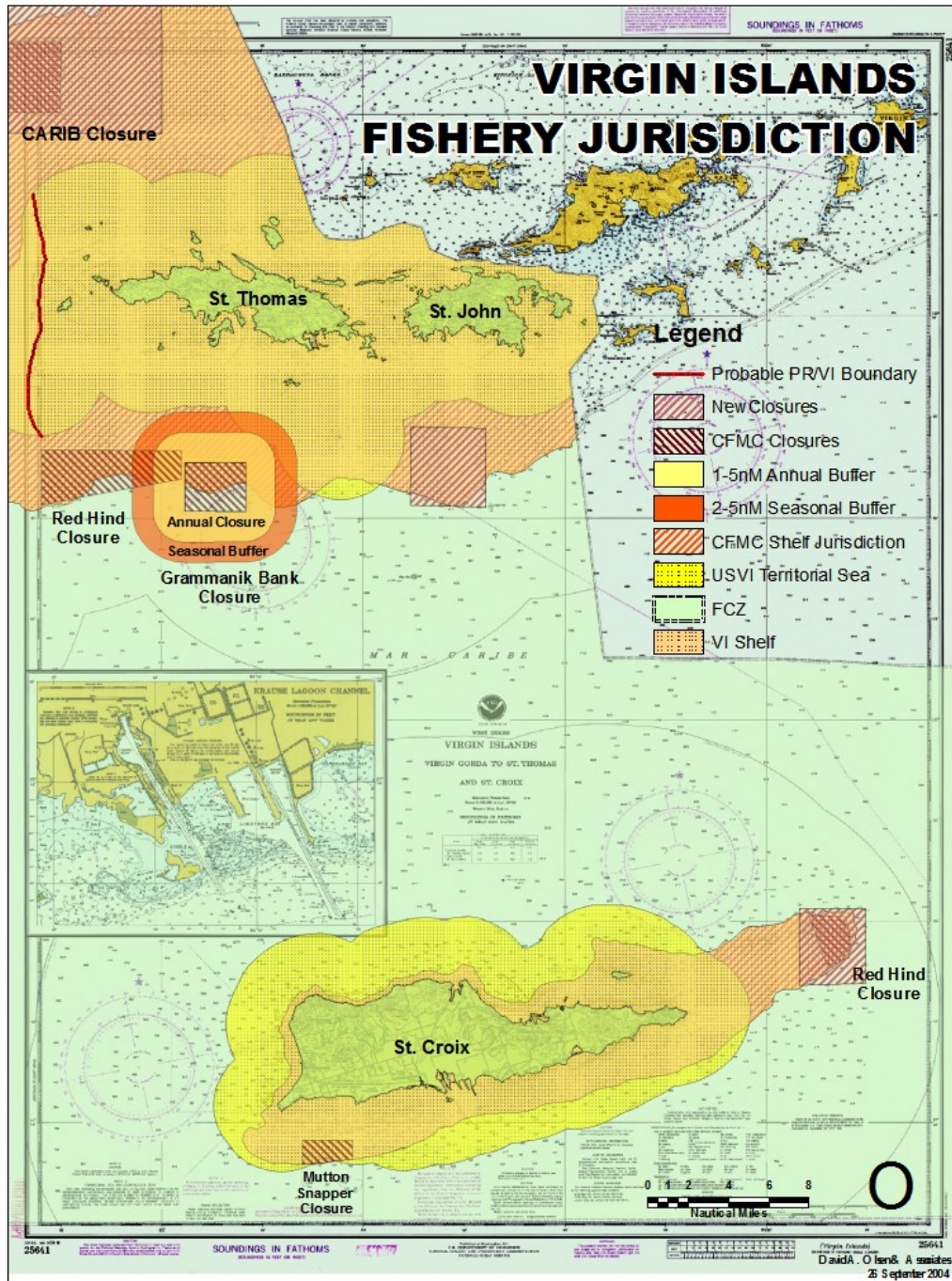


Figure 2. Map showing areas proposed for closure by the CFMC in 2005.