

**DIVISION OF FISH & WILDLIFE
DEPARTMENT OF PLANNING AND NATURAL RESOURCES**

FY2004 ANNUAL REPORT

BUREAU OF FISHERIES

1. INTRODUCTION

The Bureau of Fisheries (BF) is charged with the assessment and monitoring of fish and marine resources within the USVI. It is one of three bureaus within the Division of Fish & Wildlife (DFW). The Bureau of Fisheries, as is the Division of Fish and Wildlife, is 100 percent supported by Federal Funds. The format of this report closely follows that of BF (2003).

2. STAFFING

The BF is headquartered within the DFW office in Red Hook, St. Thomas. There is also an office within the DPNR office in Frederiksted, St. Croix.

St. Thomas staff include:

1. Dr. K. Roger Uwate, Chief of Fisheries
2. Jason Vasques, Fisheries Biologist III
3. Cheryl Ondeka, Fisheries Biologist III (started August 2004)
4. Ron Sjoken, Fisheries Biologist II (started January 2004)
5. Ruth Gomez, Fisheries Coordinator
6. Joseph Barbel, Environmental Specialist (retired March 2004)
7. Julian Aubain, mechanic (half time with BF)
8. Shenell Gordon, Fisheries Biologist I
9. Jennifer Messineo, Fisheries Assistant (started October 2003)

St. Croix staff include:

1. William Tobias, Fisheries Biologist III
2. Dr. Wes Toller, Fisheries Biologist III
3. Willie Ventura, Environmental Specialist I
4. David Camoyan, Fisheries Assistant (started October 2003), promoted to Fisheries Biologist I (September 2004).

In addition to these staff, up to 7 people at a time were employed on a temporary basis by the Bureau of Fisheries. Most of these individuals were part time and were hired to assist with data entry and proofing of historic commercial catch report data.

3. MEETING/TRAVEL

In FY04, Bureau of Fisheries staff participated in various technical and scientific meetings such as:

1. Caribbean Fisheries Management Council (CFMC) meetings;
2. CFMC Scientific and Statistical Committee meetings;
3. SEAMAP – Caribbean (SEAMAP-C) meetings;
4. Federal Aid Coordinator’s meeting;
5. Comprehensive Wildlife Conservation Plan Workshop;
6. East End Marine Park Local Action Strategy Workshop;
7. DCZM East End Marine Park meetings;
8. Gulf and Caribbean Fisheries Institute’s annual meeting; and
9. NOAA Fisheries Coral Reef Initiative USVI Fisher Workshop.

The Bureau of Fisheries staff continued to backstop both the St. Thomas/St. John and the St. Croix Fisheries Advisory Committees (FACs). The function of these FACs is to advise the Commissioners of the Departments of Planning and Natural Resources and Agriculture on critical fisheries issues. Bureau of Fisheries staff organize and facilitate FAC monthly meetings.

4. STAFF TRAINING - In FY04, BF staff completed the following training: (1) Dr. Uwate, Shenell Gordon, Ruth Gomez, Jason Vasques, Willy Ventura, and William Tobias attended the FIN Port Samplers Workshop in Fajardo, Puerto Rico (10/1/03 – 10/2/03); (2) Shenell Gordon, Jennifer Messineo, Jason Vasques, David Camoyan, Willy Ventura, and William Tobias attended the FIN Port Samplers Workshop in Galveston, Texas (9/28/04 – 10/29/04); (3) Jason Vasques, Shenell Gordon, and Ron Sjoken completed a Nitrox diving course at the University of the Virgin Islands (5/13/04 - 5/14/04); (4) Ron Sjoken completed a grants management course in West Virginia (5/16 – 5/21/04); (5) Jason Vasques completed DAN oxygen training with the National Park Service, St. John (6/16/04); and (6) Jason Vasques completed the first aid and CPR course (6/29/04).

5. PROJECTS/ACTIVITIES

1 **St. Thomas Habitat Assessment (F-7)** – In FY04, BF/STT staff conducted habitat surveys as part of the global Reef Check program. Surveys were completed at Grass Cay, Cocus Rock, and Great Bay, St. Thomas. Data collected will be provided to Reef Check headquarters at the University of California at Los Angeles.



BF diver surveying a reef

2.



Benthic habitat damage on the west side of St. Croix.

St. Croix Habitat Assessment (F-7) – BF/STX staff conducted various scouting trips to the survey area at the west end of St. Croix. Damaged and undamaged anchor sites were identified. After analysis of data collected, detailed plans were formulated to survey these areas in more detail. This will be completed in FY05.

5

Side Scan Sonar Survey (F-7) – In FY04, an additional 3/4 square miles of side scan sonar data was obtained. Ground truthing was completed. Work continued on making mosaics of side scan sonar data. Numerous problems were encountered with side scan sonar equipment. Despite having multiple backup systems, many side scan sonar data collection trips had to be aborted.



Benthic habitat south of St. John

BF staff participated in bathymetric and habitat surveys south of St. John with the NOAA Fisheries vessel, *R/V Foster*. Much of the area surveyed coincided with the area designated for the side scan sonar project (F-7) here. BF staff also got USNPS diving certification and was able to participate in habitat ground truthing with a team of NOAA Fisheries scientists.



The *R/V Foster*

6



BF staff measuring catch at a fishing tournament

Fishing Tournaments (F-8) – BF staff continued to act as weigh masters at all recreational fishing tournaments in both St. Thomas and St. Croix, except catch and release marlin tournaments. Catch and effort data were collected on each vessel in the fishing tournaments. These were entered into a computer database and will be provided to the U.S. Fish and Wildlife Service.

7

Frederiksted Pier Construction (F-9) – Numerous meetings, memos and letters were initiated, received, and responded to regarding this project from the contractor, the architect, various USVI government agencies, and USFWS. To-date, three concrete pours have been completed at the site. None have been successful.



USFWS conduct site inspection

By the end of FY04, alternative ways to complete this project were being considered by the government of the USVI. A 90 day extension to this grant has been approved by USFWS to review remedial work plans and to develop a project completion timeline.



View of ramp

8



Altona Lagoon Facility



Gallows Bay Facility

Boat Access Repairs (F-9) – At the Altona Lagoon, St. Croix, facility the following were completed: (1) guard rails were installed, (2) vegetation was trimmed, (3) a drainage swale installed, and (4) rub strakes replaced.

At the Gallows Bay facility, boulders were installed to limit erosion, decking was replaced and new dock cleats were installed.

9 **Molasses Dock (F-9)** – Various meetings were held regarding the proposed public easement to this site as well as land ownership issues.

In FY04, a property boundary survey and title search was requested.



Molasses Dock ramp

10



Site of proposed public boat ramp on Water Island

Water Island (F-9) – Price quotations were obtained for core samples. By the time the purchase order was completed, the coring rig was off-island and was not available on St. Thomas (as of the end of FY04).

BF/STT staff completed substrate composition and water depth surveys at the proposed boat ramp site. Findings here will be part of a future permit application.

11 **St. Thomas East End Boat Ramp** – BF/STT staff investigated a variety of potential sites for a boat ramp on the east end of St. Thomas. After much consideration, the existing undeveloped public boat ramp at Estate Frydenhoj was selected. Most of the ramp is on public land, however a small portion may be on private land. Land surveys and investigations of DCZM files were completed and a legal opinion was sought from the Attorney General's office.



The undeveloped public boat ramp on Benner Bay

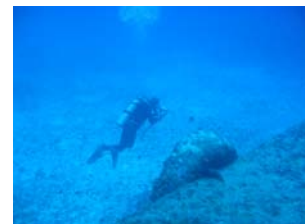
In FY04, BF staff conducted the land portion of a habitat survey in preparations for development of a DCZM permit application.

- 12 **Artificial Reef Construction and Monitoring (F-10)** – The U.S. Army Corps of Engineers indicated support of the permit request for artificial reef sites on St. Thomas and St. John, subject to approval of a DCZM permit and Water Quality Certificate. Despite written requests and various follow-ups, to-date, DEP has not issued a Water Quality Certificate for this project. Work also began on a permit application for a new artificial reef site on St. Croix for a donated fuel barge.



Tomtate grunt aggregating on artificial reef

In FY04, BF/STT staff completed annual monitoring surveys of 8 artificial reef sites south of Charlotte Amalie, St. Thomas.



Diver surveying an artificial reef

In FY04, BF/STX staff completed semi-annual monitoring surveys of the Butler Bay artificial reef site off of St. Croix.

- 13 **Fish Aggregation Device (FAD) Deployment, Maintenance, and Monitoring (F-10)** – In FY04, BF staff conducted maintenance and monitoring of FADs around St. Thomas. Problems with floating lines on two St. Croix FADs were resolved.

Most FAD supplies stored at DFW/STX were transferred to DFW/STT. BF/STT staff prepared 4 surface FADs and 2 submerged FADs for deployment as replacement FADs around St. Thomas and St. Croix.

In FY04, FAD I (north of Outer Brass, St. Thomas) and submerged FAD E (south of St. Thomas) were lost. In addition, FAD D (southeast of St. Croix) was lost.



Diver inspection



FAD maintenance



FADs ready for deployment

- 14 **Coordination (FW14)** – In FY04, a variety of activities were completed under the Coordination grant. These included, but were not limited to: (1) writing monthly reports; (2) soliciting, compiling, and reviewing application packages for various staff vacancies; (3) interviewing and selecting candidates for vacant positions; (4) participating in weekly staff meetings; and (4) inspection and organization of materials in old storage boxes.

- 15 **CZM Permit Application Reviews (Technical Guidance FW-15)** – BF staff completed review of various CZM permit applications including: Saga Haven Marina, St. Thomas; Renaissance Beach Resort dock, St. Thomas; small dock on St. John; Palace Resorts; St. Thomas; dredging at Sapphire Beach Marina, St. Thomas; Public Work’s Department’s proposed dock facility on Water Island; maintenance dredging of a shoreline property in St. Thomas; Christiansted Boardwalk development Phase IIA, St. Croix; Innovative Telephone fiber optic cables, St. Croix; Golden Resorts Development, St. Croix; Red Point Wastewater Treatment Facility, St. Thomas; and Jones Maritime Company’s proposed development on St. Croix.

- 16 **Other Technical Guidance (FW-15)** – Technical advice and guidance were provided to other government agencies on a variety of topics such as: investigated vessel groundings; attended various CZM pre-application meeting; investigate fish kills; compiled information on tarpon and bonefish fishing requested by Commissioner Plaskett; investigated Johnson and Sanders Bays in St. John as mooring sites; attended DCZM’s Local Action Strategy meetings; prepared appropriate presentations for a variety of workshops (see Tobias 2004a); investigated anchor damage on St. Croix; reviewed the draft regulations for the St. Croix East End Marine Park; reviewed draft changes to the permitting process for private docks and piers; and conducted a damage assessment of boat access facilities after Tropical Storm Jeanne.



Dead yellowfin mojarra at the Sapphire Beach Resort pond



Vessel grounding at Sapphire Beach Resort

Technical advice and guidance were also provided to the private sector on such topics as: reviewed various coral, marine resource, and fisheries related documents; provided information regarding fisheries subsidies and incentives for an on-going study; investigated stream blockage at Nadir, St. Tomas, in response to a public inquiry; responded to a report that marlin was for sale on St. Croix; investigated the overgrowth of the access to the fishermen’s plot on St. Croix; provided information on fish poisoning to a private citizen; and identified unusual marine life for the public.

- 17 **Strategic Plan (FW16)** – A third opinion survey (on recreational fishing club members) was completed (see Messineo and Uwate 2004). An opinion survey of marine researchers in the USVI was also completed (see Messineo et al 2004).



BF staff working on the strategic plan

Based on reports collected, work began on a marine and fisheries strategic plan. By the end of FY04, about 40 percent of the first draft of the plan had been completed.

18



BF/STT technical report library

Library Organization (FW-16) – BF staff visited all relevant agencies within the USVI and collected reports and documents related to USVI marine resources and fisheries.

In addition, more than half of the general marine and fisheries articles available have been entered into an Access database.

19 **St. Croix Building (FW-17)** – Various properties were investigated. One was identified as suitable. A market appraisal was conducted and the owner was queried as to his willingness to sell the property. The owners wanted significantly more than the appraised value, therefore no further efforts could be made on this property. Other properties were investigated. This effort was terminated after an evaluation of FY05 budgets and reserve fund levels.

20 **Boat Infrastructure Grant (BIG) Y-1 Mooring Buoys** – In FY04, 20 moorings were installed on St. Croix by the Island Conservation Effort. In FY04, neither the Reef Ecology Foundation nor Island Conservation Effort (the two local non-governmental organizations that have day-use mooring buoy permits in the USVI) requested any additional financial support. Island Conservation, with assistance from BF staff, requested and obtained a U.S. Army Corps of Engineers permit for day-use mooring buoys on St. Croix.



Blowout of seagrass bed



Boat anchor caused blowout



Vessel on mooring buoy

21 **Boat Infrastructure Grant (BIG) Y-2 St. Croix East End Marine Park Mooring Buoys** – A request was submitted to amend existing DCZM and U.S. Army Corps of Engineers permits to allow for 100 additional day-use mooring buoys within the new St. Croix East End Marine Park. These requests were still pending at the end of FY04.

22 **State/Federal Commercial Catch Reports (current)** – Bureau of Fisheries staff collected and reviewed commercial catch reports. 2002/03 commercial catch reports were entered into a database and proofed. These data files were forwarded to NOAA Fisheries.



Commercial catch report

In August 2003, commercial fishers began submitting commercial catch reports for 2003/04 fishing year. These are being entered into a computer database.

- 23 **NOAA Historical (1974-1986)** – In FY04, data entry and proofing of all available 1974 to 1986 commercial catch reports was completed. Data files were finalized and forwarded to NOAA-Fisheries.



BF staff entering historic catch data

24



BF staff entering commercial catch data

Commercial Catch Reports (1986 to 1992) –

Commercial catch report data files for the 1986 to 1992 period are incomplete. Much of the data on commercial catch forms were not on the existing databases. Additional funding from NOAA-Fisheries was requested in early FY04. Funds were approved in late FY04.

- 25 **Commercial Catch Reports (1992 to 2002)** – All available commercial catch reports for this period have been entered and proofed. Data files were finalized and forwarded to NOAA-Fisheries.

As part of this work, the number of registered commercial fishers was compiled from old reports, data files, notes, and various fisher lists. These were documented in a report by Holt and Uwate (2004a). In addition, historic changes in fish prices were also compiled from old reports, data files, notes, and various memos. These were documented in a report by Holt and Uwate (2004b).

All available maps of fishing areas used from 1974 to present were identified and collected. The fishing area used for commercial catch reports appears to have changed between years. Changes in fishing area designations have been documented in a table.

All available commercial catch report forms used from 1974 to present were identified and collected. These forms have changed significantly between years. Changes in forms have been documented in a table.

- 26 **Fishermen Booklet** – In early FY04, NOAA Fisheries Coral Reef Initiative funds provided support for printing an additional 300 copies of the 2003 “Recreational and Commercial Fishermen’s Information Booklet”. Printing was completed and copies were provided to fishing supply stores, dive shops and other marine recreation businesses.

Under the State/Federal Cooperative Statistics Grant, Bureau of Fisheries staff completed an update of the “Recreational and Commercial Fisherman’s Information Booklet” (see DFW and DEP 2004). The catch report information sheets were also revised. These booklets and blank catch report sheets were provided to all commercial fishers during commercial fisher registration in July 2004.

During printing of the 2004 booklet (DFW and DEP 2004), the printer made a mistake and

printed 600 copies of the 2003 booklet. These “spares” were distributed to related marine recreation businesses.

- 27 **Commercial Fishermen Registration** – Bureau of Fisheries staff conducted annual registration of commercial fishers in July 2004 for the 2004/05 fishing year (July 2004 to June 2005).
- 28 **NOAA Spawning Aggregations** - NOAA funding was received to study grouper spawning aggregations on the Gramanik Banks south of St. Thomas. This was contracted to the University of the Virgin Islands Marine Center through a MOA. A one-year extension was requested and approved.

- 29 **Interjurisdictional Fisheries Program** – For this small grant, efforts were focused on St. Croix. In this project, commercial fishers volunteer to have their total catches weighed and measured by BF staff. This grant supports 1 survey per month. Data collected were entered into the new TIPONLINE web based program.



BF staff collection bio-stat data



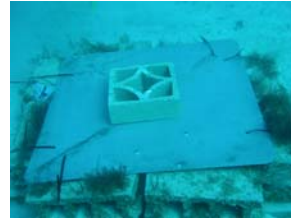
BF staff measuring fish and lobster from commercial fisher catches

Bio-Statistical Sampling – BF staff conducted bio-statistical sampling of total landings of volunteer fishers on both St. Thomas and St. Croix. During these surveys, all catches are weighed and measured by BF staff. This grant supports 2 to 4 surveys per island per month. Data collected were entered into the new TIPONLINE web based program.

- 30
- 31 **Bio-Statistical Sampling Historic Data** – In late FY04, BF staff completed an inventory of hard copies of all available bio-statistical survey data sheets at both DFW/STT and DFW/STX offices. Lists of dates of bio-statistical data sheets were completed. These lists are being combined with a letter to NOAA Fisheries requesting a comparison of bio-statistical data available in the NOAA Fisheries TIP database. This comparison should provide insight into the completeness of the TIP database. If significant discrepancies exist, funding can be sought to remedy the situation.
- 32 **NOAA Fisheries Cooperative Statistics Database** – NOAA Fisheries provided additional funding for a database manager. A job description was drafted and advertised. Applicants were screened. Candidates were interviewed and a database manager was selected and hired. Cheryl Ondeka was hired and came on board in August 2004.
- 33 **CZM Fish Census** – BF staff assisted University of the Virgin Islands and Division of Coastal Zone Management in the completion of fish censuses around St. Thomas and St.

Croix. A USVI coral reef monitoring 2004 final report for the St. Croix fish census was completed (see Toller 2004).

- 34 **SEAMAP – Lobster Survey** – The pueruli and juvenile lobster study was completed on St. Thomas in FY03. In FY04, the report was finalized (see Gordon and Vasques 2004).



Juvenile lobster covered shelter

- 35  

BF staff conducting whelk population survey

SEAMAP – Whelk Survey – A USVI-wide whelk population and density field survey was completed in FY04. A draft report was completed and is being reviewed. This report should be finalized in early FY05.

- 36 **SEAMAP – St. Thomas Trap and Line Survey** – This grant did not open until late FY04. Most of the initial efforts went to repair of the *R/V Sarima*.

- 37 **SEAMAP – Historic Trap and Line Data** – In FY03 and FY04, SEAMAP-C contracted the University of Puerto Rico to review USVI SEAMAP-C trap and line data. When results were presented at a SEAMAP-C meeting, it became apparent that the SEAMAP database was not complete. BF staff inventoried hard copies of data sheets and compared them with the SEAMAP database. About 60 percent of data were not in the database. A proposal was written for additional funds to enter and proof these missing data. By the end of FY04, tentative approval of this proposal had been received.

- 38 **NOAA Fisher Census** – BF staff completed fielding of this census in FY04. A draft report was written and finalized (see Kojis 2004).



Various fishing methods used in the USVI

- 39 **Fisheries Advisory Committees (CFMC Grant)** – BF staff attended and prepared background materials for both the St. Thomas/St. John and St. Croix Fisheries Advisory Committee monthly meetings. Based on recommendations from both FACs, tarpon and bonefish are now limited to catch and release in the USVI. Recommendations were made on gill and trammel nets.

- 40 **CFMC Meetings (CFMC Grant)** – BF staff attended various CFMC meetings. BF staff reviewed numerous extremely large draft documents and provided advice to CFMC as requested. Quarterly progress reports were completed and submitted to CFMC.
- 41 **NOAA Signage** – NOAA Fisheries Coral Reef Initiative funds provided a grant to educate the public regarding marine reserve areas of St. Thomas. All relevant permits were obtained for installation of signs. The design of the sign was approved by NOAA Fisheries. Twenty marine reserve signs were constructed and deployed within the St. Thomas east end marine reserve areas. Many were installed at hotels, condominiums, and marine businesses around the marine reserve area. In addition 3 special signs were deployed in the Inner Mangrove Lagoon Marine Reserve area, St. Thomas.



Marine reserve sign
at Anchorage Condo



Inner Mangrove Lagoon
marine reserve sign



Sign installation
by BF staff

- 42 **NOAA Trammel Net Buyback** – NOAA Fisheries Coral Reef Initiative funded a grant to support a buy-back of trammel nets. After many long and heated discussions and various background papers (including Tobias 2004b), the Fisheries Advisory Committees on both St. Thomas/St. John and St. Croix made specific recommendations to Commissioner Plaskett regarding proposed regulations of these nets. By the end of FY04, regulations had been drafted and were being reviewed.
- 43 **MRAG Effort Reduction Workshop (NOAA Fisheries)** – NOAA Fisheries provided funding to MRAG, a Florida-based consulting company, to hold commercial fisher effort reduction workshops on St. Thomas and St. Croix. Two series of workshops were held on both islands in April and June 2004. Fishers were briefed on various mechanisms available to reduce fishing efforts. They also discussed which might be most suitable in the USVI.
- 44 **MRAG St. Croix By-Catch Preliminary Survey (NOAA Fisheries)** – In late FY04, NOAA Fisheries approved funding for a preliminary survey of by-catch in the commercial fishery of St. Croix. Organizational meetings were held in preparation for later field work.
- 45 **Hurricane Preparedness** – In FY04, both Hurricane Francis (August 2004), and Tropical Storm Jeanne (September 2004) approached the USVI. For both of these storms, DFW vessels were secured, the grounds were cleared, and office equipment was protected. After each passed, the office were made operational again.
- 46 **Special Projects** – BF staff were involved in various activities related to special projects such as: (1) the retrieval of dead turtles and marine mammals; and (2) preparation and

review of numerous proposals and requests for funds that were not related to USFWS Sport Fish Restoration funding.

- 47 **DFW/STT Boat Dock Dredging** – In FY04, bid documents were prepared and a request for bid was advertised by Property and Procurement. In the first bid request, no bids were received. In the second bid request, two bids were received. These were rated. Further discussions are planned with the selected bidder.



DFW/STT boat dock that needs maintenance dredging

- 48 **DFW/STT Boat Ramp** – A CZM permit was requested. However, it was rejected by the CZM Committee.

- 49 **Opening of False Entrance, St. Thomas** - DCZM and U.S. Army Corps of Engineers permits were received for this work. Two channels were cut to facilitate water flow into the Inner Mangrove Lagoon area, St. Thomas.



Opening False Entrance



New channel opening at False Entrance

- 50 **Computer Network and DSL** – DSL was installed at the DFW/STX office. For the DFW/STT office, bids for the network were received and reviewed. The network was wired up and DSL was installed.

- 51 **Conch Shell Piles on St. Croix** – BF/STX staff investigated conch shell piles on St. Croix. Estimates were made regarding the size of piles and quotations were received regarding the costs for their removal.



Conch shell pile at Molasses Dock

6. CRITICAL FISHERIES AND MARINE RESOURCE ISSUES

In FY04, additional opinion surveys targeting recreational fishing club members and marine researchers were completed (see Messineo and Uwate 2004 and Messineo et al 2004). Results of these surveys were very similar to those summarized in BF (2003) for commercial fishers and

marine recreation industry. In general, overfishing, pollution, lack of enforcement, habitat degradation, and gillnet fishing (on St. Croix) were major issues.

In FY04, major steps have been made to address the overfishing and gillnet fishing issues. For overfishing, there is a moratorium on the issuance of new fishing licenses in the USVI. This moratorium has been in place for 3 years now. For gillnets (trammel nets), both Fisheries Advisory Committees have reviewed the matter and have made specific recommendations to the Commissioner of DPNR on this issue. Draft regulations have been formulated and are now being reviewed.

Also in FY04, the planning process for the new sewage plants on both St. Thomas and St. Croix continued. Permit applications were submitted and reviewed. When these plants come on line, there should be a significant decrease in sewage effluent into the marine environment that should result in decreased marine habitat degradation.

The lack of enforcement is an issue for the Division of Environmental Enforcement. They require significant additional support as their current budgets are limited and their staffing is extremely small (2 officers for all of St. Thomas/St. John). They are also overextended into numerous public safety, hazmat and permit issues.

7. FY04 STAFF REPORTS

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