

**An Update on the Reported Landings, Expansion Factors and Expanded Landings
for the Commercial Fisheries of the United States Virgin Islands
(with Emphasis on Spiny Lobster and the Snapper Complex)**

By

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1. Summary

The information presented in SEDAR4-DW-08 (Valle-Esquivel and Díaz, 2003) was reviewed and updated in the present report.

An overview of the commercial fisheries of the Virgin Islands is presented. The data collection system is described and landings for years 1974-2003 are compiled and summarized. Landings and effort information have been reported in at least 3 different formats (and variations) over this period, and have been applied at different times in the 3 islands comprised in the USVI: St. Thomas, St. John, and St. Croix. Annual files were consolidated and summarized by format type and district (St. Thomas/St. John and St. Croix). Summaries include reported catch and effort by gear type or species category and year and the number of records (as a proxy for the number of trips) by year by district.

Expansion factors were calculated (or taken from annual reports) as the ratio of total number of registered fishermen and the number of reporting fishermen by year. A second expansion factor was calculated for years 1974-1985 as the number of completed reports divided by the possible number of reports (12 months*number of fishermen reporting). The first expansion factor was used to estimate total landings for years 1974-2003. Significant gaps and inconsistencies were encountered in the data sets, but this was a preliminary approach toward building a comprehensive database for the U.S.V.I. landings statistics, which can be useful for the analysis of various species groups in the future.

2. Description of the Commercial Fisheries and the Data

The commercial fisheries of the United States Virgin Islands are multi-gear and multi-species in nature. Five main gear types are used to harvest fish and shellfish species, particularly reef species and some pelagic fishes. These gears are: traps (or pots); nets (used as purse seines, beach seines, gillnets, castnets, and trammel nets); scuba gear; free diving; and hook and line gear. The reef fish harvest is composed of more than 12 families and 180 species, and the majority of offshore fisheries are composed of the Scombridae and Coryphaenidae families, with a total of 7 species.

The collection of adequate data for use in fisheries management from the multi-gear and multi-species fisheries in the Caribbean has been difficult. In 1974, U.S. Virgin Islands Legislative Act 3330 established a mandatory reporting system for fisheries data. At the beginning of the program, the data consisted in total landings by gear type, which had limited use for assessment and management. To improve this information, the U.S. Virgin Islands Division of Fish and Wildlife, Bureau of Fisheries (DPNR/DFW) and the National Marine Fisheries Service entered into a cooperative agreement in 1983 to obtain more detailed data.

Landings data in the U.S. Virgin Islands are collected directly by fishermen. They mail or deliver monthly reports to the DFW. All reports for the 12-month period beginning in July must be received before a commercial fishing license is renewed. DFW is responsible for entering the data and verifying it prior to submission, once a year, to the Southeast Fisheries Science Center in Miami. The Division of Fish and Wildlife maintains separate data sets for the landings made in St. Croix and the landings made in St. Thomas and St. John combined because these islands lay on different platforms and

their fisheries are not connected. Computerization of the data began in 1982 for St. Thomas/St. John and in 1983 in St. Croix.

Currently, landings statistics are available in electronic form from January 1974 through December 2003. During this period, the DFW changed the monthly reporting form three times to accommodate the level of detail necessary to assess and manage this complex fishery. Maps of the U.S. Virgin Islands and the different catch report forms are provided in Appendix A. A summary of the fields contained in each form and the years when they were applied are provided in Tables 1 and 2.

Catch records from 1974-1986 reported the landings (in pounds) per trip by category (snappers/groupers, bait fish, fin fish, lobsters, and 'other kinds', that included conch, whelk, octopus, squid, clam and oysters); gear type (hook and line, net, pot, speargun and dive), and area fished (Old Form 1 in Table 1).

From 1986 to 1994-1996 similar categories were used, but snappers/groupers were combined with the rest of the fish by gear category; conch, whelk and offshore (pelagic) fishes were given a separate field; and the distance from shore was introduced (Old Form 2 in Table 1). Many changes were incorporated to this form. Between 1986 and 1999 a "short" version was used to create the electronic database, which contained one field for the fish code, another for the gear type and a third for the total catch (Old Form 3 in Table 1). In 1993 fields for tuna, dorado, and wahoo landings were added. This form was used from 1993 to 1996 (Old Form 4 in Table 1).

In the 1994-1995 fishing year the St. Croix office introduced a New Form (Table 1) to provide better information on the composition of the commercial harvest. This Revised Form was designed to provide landings (in pounds) by family or species groups (instead of the broad categories of finfish that were used previously); the gear type used; an estimate of fishing effort (the number of gear and the estimated time in hours fished during the trip); and the distance from shore (i.e., less than 3 miles, 3 to 200 miles or greater than 200 miles). The fishing area designations and gear categories remained the same. The New, Revised or "long" form was tested by a small group of fishermen on a volunteer basis in the 1994-1995 and 1995-1996 fishing years. Its use was expanded to the entire territory in 1996.

For a long time, fishers continued to report landings data on outdated catch report forms, which resulted in the production of two or three data files per fishing year by island. Accompanying each generation of catch forms were new gear and location codes (a summary is provided in Appendix A). Because of all these changes in the reports, the data are available in separate files by fishing year (July-June), form-type and district (St. Thomas/St. John and St. Croix), resulting in multiple files for each fishing year containing different fields, gear and species categories. A summary of the information contained in each type of form is provided in Table 1. The years when each form was used are shown in Table 2.

The objectives of the State/Federal Cooperative Statistics Program for the collection of commercial fisheries landings information in the U. S. Virgin Islands are: to estimate total harvest, fishing effort, and the value of the commercial fishery; to develop an improved catch report form to record fish harvest by species group; and to maintain

the Division of Fish and Wildlife computerized commercial landings database (DFW, 2001).

The Bureau of Fisheries (Division of Fish and Wildlife) submits annual, bi-annual or three-year reports to the National Marine Fisheries Service, whereby the landings and effort for that period are summarized by gear and species categories, and by the number of fishing trips per area. A distinction is made between the 'Reported' landings and the 'Projected' landings. These are calculated by multiplying the total reported landings by the ratio of the number of licensed fishermen to the number of reporting fishermen. In some reports, 'Estimated Landings' were also calculated, based upon the number of monthly reports remitted. The total number of possible monthly reports (12 months multiplied by the number of registered commercial fishermen) is divided by the number of reports actually completed. The total reported landings are then multiplied by this ratio. This method is used to account for the fishermen who turn in only a percentage of the 12 monthly reports. Landings have thus been reported as Reported Landings, Projected Landings, and Estimated Landings.

3. Objectives

The objectives of this report are:

- i. To compile, review and summarize the information provided in the annual performance reports of the Division of Fish and Wildlife.
- ii. To consolidate the commercial landings data files by type of report, by calendar year, island, and district.
- iii. To calculate expansion factors from information provided in the performance reports.
- iv. To summarize the reported and expanded commercial landings of the U.S. Virgin Islands.
- v. To update landings to year 2003 and replace information that was re-edited by DFW in 2004.
- vi. To explore the possibility to conduct further analysis of this information.

4. Methods

4.1. Landings Statistics

The landings data were provided as separate files by fishing year from 1974-75 to 2001-2002. In some cases, landings for all islands were contained in single (annual) file; in other cases, landings from St. Thomas-St. John were included in one file for a particular year, and landings from St. Croix in a separate one. Extensive manipulation of the data sets was required to build a single database, given that the format and content of the records varied so much through time. The summaries presented here should replace those presented in Valle-Esquivel and Díaz (2003).

The SAS software version 8.0 (The SAS Institute 2000) was used to filter, edit, and organize the information. A method similar to that outlined in Valle-Esquivel (2002a, 2002b) was used to organize and analyze the information.

The aim was to assemble a single data set with one record per trip to be able to draw time-series of catch and effort by district (St. Thomas/St. John and St. Croix). The following steps summarize the process used to combine, merge, and analyze the 1974-2003 landings data of the U.S. Virgin Islands:

1) Data sets for years with similar or consistent formats were combined into a single data set, resulting in four distinct files. Data sets from all islands/ areas were combined. At this stage all the fields (columns) were maintained, even when some may have been incomplete or empty as changes in the format occurred. The 4 data sets were:

- i. Files from STT/STJ and STX with the old format (Old 1 in Table 1) from years 1974-75 to 1984-85 were combined.
- ii. Files with the formats Old 2 and 4 (Table 1), where the landings were collected by gear type were combined. This process included files labeled with the prefix LOG_, LOGB_, SHOR_.
- iii. The third format (Old 3) is similar to the previous one but the landings are given by species group. It contains the fish codes in one column, the gear codes in another and the landings in a third column. Records from this file were later split by fish code in order to have the landings of each fish type on a separate field as in (ii.) above and one record per trip. The files included were labeled VI_O, USVI_, STX_OLD. This set of data was combined with (ii).
- iv. Includes files in the New (or Long) format, with landings reported by species groups. The files included have labels with the suffix _R, _N, or _NEW.

These combined files were constructed by matching up as much information from the different forms as possible. Some fields were renamed and codes standardized for consistency; other fields were merged and others discarded if necessary. However, to the extent possible, as much information as possible from each file-type was preserved.

2) Editing of these combined data sets included cleansing errors and removing duplicates and obvious outliers. It is important to note that coding and typing errors were corrected to the extent possible, based on the lists of codes and the reports available. Some of the criteria used to edit the data were:

- An island field was assigned according to the area landed.
- Area codes were not always included, so the district was assigned based on the origin of the file.
- Duplicate records were considered those where all the fields were equal.
- Only records with no date were removed.

- Outliers were considered those observations that differed by two or more standard deviations from the annual mean by landing group (gear type or species complex). These observations were removed, while leaving the rest of the observations in multiple species records intact, unless they were outliers themselves.
- Records where all the fields but the pounds landed by species were equal were assumed to correspond to the same fishing trip. Data were grouped (merged) into a single record, by adding up the landings and keeping the rest of the fields intact.
- Records without an identification code or vessel number were assumed to correspond to one trip per record.
- To preserve as much information as possible, the summaries had to be drawn from these three separate files.
- Errors in the identification or vessel numbers could not be corrected because the fishermen lists were not available at the moment. Other coding errors (gear type, area fished, fish type, etc.) were corrected when possible.

It is evident that the criteria used in this editing and merging process may be somewhat subjective and arbitrary. However, the approach was consistent throughout the study and may be reproduced, so that any biases in the estimates may be traced. Furthermore, this study intends to provide rough approximations of fishery statistics that will be refined once the official editing of the data is completed.

The most apparent flaws in the current data sets include (but are not limited to) the following: there is an overlap in the years where different forms were used, it is unclear if data may be duplicated; fishing years 1988-89 through 1992-1993 have not been digitized entirely and some fields may be incomplete or missing; and, in general, coding errors, typos, duplicates, and other editing problems persist throughout the time-series. DFW and SEFSC personnel are leading the editing process.

4.3. Reported Landings

Reported landings are summarized in three formats, based on the combined data sets discussed in the previous section:

1. Data from Old Report Form 1 (1974-1986).
2. Data from Old Report Forms 2,3, and 4 (1986-1999).
3. Data from New Report Form (1994-2002).

4.3. Expansion Factors and Expanded Landings.

No modifications were made too the expansion factors presented in Valle-Esquivel and Díaz (2003) except that EF for the latest years (2000-2003) were calculated here. The method used in the cited report is outlined below.

Two expansion factors were drawn or re-calculated from information provided in the annual performance reports from the Virgin Islands (DFW, 1990-2001). In particular, the number of fishermen and the number reports submitted were applied as follows:

The first expansion factor (EF1) is a ratio of the number of licensed fishermen to the number of fishermen that turned in catch reports (any number of reports) for that year:

$$EF1 = \text{No. of Licensed Fishermen} / \text{Number of Reporting Fishermen} \quad (1)$$

The expanded (or projected) landings are estimated as:

$$\text{Expanded Landings} = EF1 * \text{Reported Landings} \quad (2)$$

The second expansion factor (EF2) relates to licensed commercial fishers who submitted reports. A ratio can be made based on the total number of possible monthly reports (12 reports per year * the number of fishers that submitted reports = A) divided by the number of reports actually completed (B):

$$EF2 = A / B \quad (3)$$

This could then be applied to the expanded estimate from above to adjust total landings for fishers that did not turn in catch reports:

$$\text{Estimated Landings} = EF2 * \text{Expanded Landings} \quad (4)$$

Annual reports contained the first expansion information for years 1981 onward. Ratios for previous years were assumed equal to that of 1981, since estimates from available compliance data (1974-1986) gave disproportionate values for some years. Landings expanded in this way may be underestimated because fishermen are treated equally (as reporting fishermen) whether they submitted one or more reports per year.

Information to calculate the second ratio was sparse and therefore the total landings were not estimated, as in equation (4). Furthermore, the implicit assumption that reporting fishermen fish every month and catch the same amount every month may overestimate landings.

4.4. Catch Composition by Gear (from New Forms).

The new catch report forms include gear type and better defined species groups than previously. In an effort to understand what species were comprised in the former gear categories (from old forms), new records (years 1994-2003) were classified by gear type of gear combination. This information may be useful to understand the transition in catch report forms and to try to apply a uniform approach across years for catch-composition analyses.

5. Results

5.1. Expansion Factors.

The number of licensed and reporting fishermen by year and estimates of Expansion Factor 1 (EF1) from annual reports (DFW, 1981-2001) are given in Table 3. Data for years 1974-1979 was not available in annual reports, and calculated values (from data files) may be overestimated, so EF1 was assumed constant and equal to the first year of reported data (1979-80). This information is represented in Figure 1.

Expansion factor 2 was calculated from compliance reports for years 1974-1986 and taken from annual reports for years 1993-2003 (DFW, 1997-2001). Neither estimates nor data for years 87-92 were available. The number of reporting fishermen and reports submitted by year and values of EF2 are provided in Table 4.

5.2. Estimated Landings.

Reported and expanded (projected) total landings taken from annual performance reports of the Division of Fish and Wildlife to the National Marine Fisheries Service (DFW 1981-2001) are provided in Tables 5 and 6 and depicted in Figure 2. In those reports, landings were summarized by fishing year (that runs from July through June) and by District. Throughout this report, STT/STJ will correspond to the district of St. Thomas/St. John and STX to the district of St. Croix.

The landings and number of records estimated from the data files are summarized by calendar year, district, and the catch categories included in each type of catch report form. For each type (Old Form 1974-86, Old Form 1986-1999, New Form 1994-2003), reported and expanded landings are presented. Expanded landings were calculated from the estimated (reported) landings and the Expansion Factor 1 (EF1) shown in Table 3 for each district.

One record corresponds to a fisherman or and/or vessel id by date that fished in one district/area with one or multiple gears. One record may or may not be equivalent to a fishing trip, as identification numbers contain multiple errors or are often missing and individual fishermen could not be traced precisely. Also, records with identical information except for the number of pounds landed or the area fished could not be classified as the same or separate trips. Therefore, the number of records is a proxy of the number of trips, but these may never be known precisely unless extensive error-proofing is conducted.

The tables and figures summarizing the information from each report format include the reported and expanded total landings by district and year; the landings by catch category and district for all years combined; and the landings by year, district and category.

Landings summaries estimated from Old Forms (1974-1986) are provided in Tables 7-10 and are illustrated in Figures 3 and 4. The expanded landings of snappers and groupers by gear-type for this period are depicted in Figure 5.

Summaries from the Old Forms (1985-1999) are given in Tables 11-14 and Figures 6 and 7. Note that during this period snappers/groupers groups were not

identified and the catch categories were mostly gear-categories, except for lobster, whelk and conch that had separate fields in the forms.

Summaries from the New Forms (1994-2003) are given in Tables 15-18 and Figures 8 and 9. The expanded snapper and grouper landings are illustrated in Figure 10. The proportion of landings by species category and gear type for this period is provided in Tables 19 and 20 and depicted in Figure 11. Figures 12, 13, and 14 represent the proportion of snapper, grouper, and spiny lobster landings by gear category for the whole period (1994-2002) and by year.

The summary from all forms combined, showing the reported and expanded total landings by year and district is given in Table 21 and illustrated in Figure 15. A comparison of the expanded landings estimated in this study and the “Projected Landings” from the annual DFW reports (DFW, 1980-2001) is represented in Figure 16 with information drawn from Tables 6 and 21. The total reported and expanded spiny lobster landings (1974-2003) by district are provided in Table 22 and Figure 17.

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5. References

- Bolden, S.K. 2001. Status of the U.S. Caribbean spiny lobster fishery 1980-1999. NOAA/SEFSC Lab. Contrib. No. PRD-99/00-17.
- Cummings, N.J., Parrack, M.L., and J. W. Zweifel. 1997. The Status of Ted Hind and Coney in the U.S. Virgin Islands between 1974 and 1992. Proc. Gulf Caribb. Fish. Inst. 49:354-397.
- DFW. Beets, J., and A. Friedlander, A 1989. Virgin Islands Commercial Fisheries Research and Development Project Final Report 1984-1988. Department of Planning and Natural Resources. Division of Fish and Wildlife, U.S. Virgin Islands. Report to the National Marine Fisheries Service.
- DFW. 1990. U.S.V.I. State/Federal Commercial Fishery Statistics Project. Annual Summary Report 1989-1990. Department of Planning and Natural Resources. Division of Fish and Wildlife, U.S. Virgin Islands. Report to the National Marine Fisheries Service.
- DFW. (Barshinger, C. W.) 1991. State/Federal Commercial Fishery Statistics Project. Annual Summary Report U.S. Virgin Islands 1990-1991. Department of Planning and Natural Resources. Division of Fish and Wildlife, U.S. Virgin Islands. Report to the National Marine Fisheries Service.
- DFW. (Barshinger, C. W.) 1992. State/Federal Commercial Fishery Statistics Project. Annual Summary Report U.S. Virgin Islands 1991-1992. Department of Planning and Natural Resources. Division of Fish and Wildlife, U.S. Virgin Islands. Report to the National Marine Fisheries Service.
- DFW. (Tobias, W., Gomez, R., and B. Kojis.) 1993. Cooperative Fishery Statistics Program. Annual Summary Report 1992-1993. Department of Planning and Natural Resources. Division of Fish and Wildlife, U.S. Virgin Islands. Report to the National Marine Fisheries Service.
- DFW. (Meyers, S.) 1994. Cooperative Fishery Statistics Program. Annual Summary Report 1993-1994. Department of Planning and Natural Resources. Division of Fish and Wildlife, U.S. Virgin Islands. Report to the National Marine Fisheries Service.
- DFW. (Tobias, W.) 1997. Cooperative Fishery Statistics Program. Three Year Summary Report 1994-1997. Department of Planning and Natural Resources. Division of Fish and Wildlife, U.S. Virgin Islands. Report to the National Marine Fisheries Service.
- DFW. (Tobias, T. Gomez, R., and B. Kojis.) 2000. Cooperative Fisheries Statistics Program. Three Year Summary Report 1997-1999. Department of Planning and Natural Resources, Division of Fish and Wildlife, United States Virgin Islands. Report to the National Marine Fisheries Service.

- DFW. (Tobias, T. Gomez, R., and Mateo, I., and B. Kojis.) 2001. Cooperative Fisheries Statistics Program. Performance Report 1 April 1997-30 November 2001. Department of Planning and Natural Resources, Division of Fish and Wildlife, United States Virgin Islands. Report to the National Marine Fisheries Service.
- Poffenberger J. 2000a. U.S. Virgin Islands Landings Statistics (Prepared 6/2/2000). Unpubl. doc. SEFSC/NMFS. 6p.
- Poffenberger, J. 2000b. Inventory of the Landings Statistics for the U.S. Virgin Islands (Prepared 11/07/2000). Unpubl. doc. SEFSC/NMFS. 56 p.
- Valle-Esquivel, M. 2002a. U. S. Caribbean Queen Conch Data Update with Emphasis on the Commercial Landings Statistics. NOAA/NMFS/SEFSC Miami Laboratory SFD-01/02-169. 118p.
- Valle-Esquivel, M. 2002b. Standardized Catch Rates and Preliminary Assessment Scenarios for Queen Conch (*Strombus gigas*) in the Caribbean. NOAA/NMFS/SEFSC Miami Laboratory SFD-02/03-184. 63p.
- Valle-Esquivel, M. and Díaz, G. 2003. Preliminary Estimation of Reported Landings, Expansion Factors and Expanded Landings for the Commercial Fisheries of the United States Virgin Islands. NOAA/NMFS/SEFSC Miami Laboratory SFD-2003-0027 (SEDAR-4-DW-08). 50p.

Table 1. Fields contained in the different catch report forms used in the U.S. Virgin Islands between years 1974-2003.

1	2	3	4	5
OLD FORM (1) (1974-1985)	OLD FORM (2) (1986-1999)	OLD FORM (3) (Short) (1988-1992)	OLD FORM (4) (1992-1999)	NEW FORM (Revised) (1994-2003)
1. ID#	1. LOCATION	1. ID CODE	1. ID CODE	1. GEAR TYPE
2. LAST NAME	2. FISHERMEN #	2. CLASS	2. FISHED (yes/no)	2. GEAR NO.
3. FIRST NAME	3. VESSEL #	3. ISLE: St. Croix St. Thomas/ St. John	3. TRIP DATE	3. AREA FISHED
4. BOAT LICENSE	4. DATE	4. TRIP DATE	4. POT FISH	4. HOURS FISHED
5. FISHING LICENSE	5. POTFISH	5. FISH CODE: Bait (B), Conch (C)	5. POTS	5. GROUPED
6. DATE	6. NETFISH		6. HOOK FISH	6. SNAPPER
7. # OF HELPERS	7. HOOKFISH		7. NET FISH	7. GRUNT
8. POT FISH SNAPPER GROUPE	8. SPEAR GUN	Finfish (S), Lobster (L), Whelk (W), Other(Z)	8. SPEARGUN	8. JACK
9. POT FISH ALL OTHERS	9. POT LOBSTER		9. POT LOBSTER	9. SURGEON
10. NET FISH SNAPPER GROUPE	10. DIVED LOBSTER	6. GEAR CODE: Diving (D), Hook& Line (H) Net (N), Pot or trap (P).	10. DIVED LOBSTER	10. PARROT
11. NET FISH ALL OTHERS	11. CONCH		11. CONCH	11. SHELLFISH
12. HOOK FISH SNAPPER GROUPE	12. WHELK		12. WHELK	12. TRIGGER
13. HOOK FISH ALL OTHERS		7.NO. POTS	13. BAITFISH	13. BARRA
14. SPEAR/GUN FISH SNAPPER GROUPE		8. NO. SPEAR GUNS (S_G)	14. FISH AREA	14. GOAT
15. SPEAR/GUN FISH ALL OTHERS		9. NO. OTHER GEAR	15. DISTANCE FROM SHORE (> 3 miles)	15. MACKEREL
16. LOBSTER BY POT		10. FISH AREA	16. TUNA	16. OFFSHORE (D/T/W)
17. LOBSTER BY HAND			17. DORADO	17. FAD
18. OTHER KINDS CONCH, WHELK, OCTOPUS, SQUID, CLAM, OYSTERS				
19. AREA			18. WAHOO	18. BAITFISH
20. NOTES				19. LOBSTER
				20. CONCH MEAT
				21. WHELK MEAT
				22. DISTANCE FR LAND

Table 2. Catch report form used by fishing year in the U.S. Virgin Islands. Please refer to Table 1 and Appendix A to see the fields contained in each type of form.

FISHING YEAR	CATCH REPORT FORM USED	
	St.Thomas/St. John	St. Croix
1974-1975	Old(1)	Old(1)
1975-1976	Old(1)	Old(1)
1976-1977	Old(1)	Old(1)
1977-1978	Old(1)	Old(1)
1978-1979	Old(1)	Old(1)
1979-1980	Old(1)	Old(1)
1980-1981	Old(1)	Old(1)
1981-1982	Old(1)	Old(1)
1982-1983	Old(1)	Old(1)
1983-1984	Old(1)	Old(1)
1984-1985	Old(1)	Old(1)
1985-1986	Old(1)	Old(1)
1986-1987	Old(2)	Old(2)
1987-1988	Old(2,3)	Old(2,3)
1988-1989	Old(2,3)	Old(2,3)
1989-1990	Old(2,3)	Old(2,3)
1990-1991	Old(2,3)	Old(2,3)
1991-1992	Old(2,3)	Old(2,3)
1992-1993	Old(2,3)	Old(2,3,4)
1993-1994	Old(4)	Old(4), New
1994-1995	Old(4)	Old(4), New
1995-1996	Old(4)	Old(4), New
1996-1997	Old(4)	Old(4), New
1997-1998	Old(4), New	Old(4), New
1999-2000	Old(4), New	New
2000-2001	New	New
2001-2002	New	New

Table 3. U.S. Virgin Islands. Number of licensed and reporting fishermen by year, percent reporting and estimates of Expansion Factor 1 from annual reports (DFW, 1981-2001). Data for years 1974-1979 (shaded) was assumed constant and equal to the first year of reported information (1979-80). Shaded areas correspond to raw data from annual files. EF1 for FY 1999-00 to 2002-03 were not available, and were calculated as the average of the previous 3 FY (1996-97 to 1998-99).

FISHING YEAR	No.Licensed Fishers			No.Fishers Reporting			% Fishers Reporting			Expansion Factor1 (EF1=Licensed/Reporting Fishers)		
	STT/STJ	STX	TOTAL	STT/STJ	STX	TOTAL	STT/STJ	STX	TOTAL	STT/STJ	STX	TOTAL
1974-75	230	227	457	72		72	31%		31%	2.35	3.13	2.60
1975-76	312	197	509	30	41	71	10%	21%	14%	2.35	3.13	2.60
1976-77	621	225	846	74	48	122	12%	21%	14%	2.35	3.13	2.60
1977-78	162	103	265	111	19	130	69%	18%	49%	2.35	3.13	2.60
1978-79	161	121	282	131	48	179	81%	40%	63%	2.35	3.13	2.60
1979-80	212	143	355	143	20	163	67%	14%	46%	2.35	3.13	2.60
1980-81	258	163	421	110	52	162	43%	32%	37%	2.35	3.13	2.60
1981-82	256	322	578	122	94	216	48%	29%	38%	2.10	3.43	2.68
1982-83	259	195	454	132	91	223	51%	47%	49%	1.96	2.14	2.04
1983-84	255	182	437	149	139	288	58%	76%	67%	1.71	1.31	1.52
1984-85	255	182	437	159	160	319	62%	88%	75%	1.60	1.14	1.37
1985-86	330	206	536	137	139	276	42%	67%	54%	2.41	1.48	1.94
1986-87	329	200	529	135	88	223	41%	44%	43%	2.44	2.27	2.37
1987-88	306	217	523	131	113	244	43%	52%	47%	2.34	1.92	2.14
1988-89	237	188	425	165	123	288	70%	65%	68%	1.44	1.53	1.48
1989-90	198	206	404	106	84	190	54%	41%	47%	1.87	2.45	2.13
1990-91	182	188	370	131	93	224	72%	49%	61%	1.39	2.02	1.65
1991-92	231	197	428	160	116	276	69%	59%	65%	1.44	1.70	1.55
1992-93	212	197	409	186	170	356	88%	86%	87%	1.14	1.16	1.15
1993-94	233	241	474	149	188	337	64%	78%	71%	1.56	1.28	1.41
1994-95	204	193	397	163	188	351	80%	97%	89%	1.25	1.03	1.13
1995-96	182	180	362	149	174.6	323.6	82%	97%	89%	1.22	1.03	1.12
1996-97	131	212	343	124	210	334	95%	99%	97%	1.06	1.01	1.03
1997-98	153	216	369	138	208	346	90%	96%	93%	1.11	1.04	1.07
1998-99	143	206	349	136	200	336	95%	97%	96%	1.05	1.03	1.04
1999-00										1.07	1.03	1.04
2000-01										1.07	1.03	1.04
2001-02										1.07	1.03	1.04
2002-03										1.07	1.03	1.04

Table 4. U.S. Virgin Islands. Expansion Factor2 estimated from compliance reports for years 1974-1986 and taken from annual reports for years 1993-99 (DFW, 1997-2001). Estimates for FY 87-92 were not available. ExpReports = expected number of reports (Nreports) from reporting fishermen (Nfishers) (ExpReports= 12 months* Nfishers per fishing year).

Expansion Factor 2						
District	Year	Nfishers	Nreports	Expected Reports (12*Nfishers)	% of Exp Reports	EF2
STT/STJ	1974-75	72	463	864	53.6%	1.87
	1975-76	30	146	360	40.6%	2.47
	1976-77	74	666	888	75.0%	1.33
	1977-78	111	953	1332	71.5%	1.40
	1978-79	131	1065	1572	67.7%	1.48
	1979-80	143	1284	1716	74.8%	1.34
	1980-81	118	1059	1416	74.8%	1.34
	1981-82	122	1078	1464	73.6%	1.36
	1982-83	161	1455	1932	75.3%	1.33
	1983-84	138	1445	1656	87.3%	1.15
	1984-85	157	1568	1884	83.2%	1.20
	1985-86	189	1994	2268	87.9%	1.14
	1992-93	169	1701	2028	83.9%	1.19
	1993-94					1.17
	1994-95					1.22
	1995-96					1.10
	1996-97					1.03
	1997-98					1.20
	1998-99					1.20
	1999-00	138	1553	1656	93.8%	1.07
2000-01	151	1681	1812	92.8%	1.08	
2001-02	167	1937	2004	96.7%	1.03	
2002-03	152	1732	1824	95.0%	1.05	
STX	1974-75					
	1975-76	41	393	492	79.9%	1.25
	1976-77	48	558	576	96.9%	1.03
	1977-78	19	168	228	73.7%	1.36
	1978-79	48	462	576	80.2%	1.25
	1979-80	20	131	240	54.6%	1.83
	1980-81	31	314	372	84.4%	1.18
	1981-82	64	626	768	81.5%	1.23
	1982-83	98	930	1176	79.1%	1.26
	1983-84	104	1118	1248	89.6%	1.12
	1984-85	124	1266	1488	85.1%	1.18
	1985-86	23	38	276	13.8%	7.26
	1992-93	146	1376	1752	78.5%	1.27
	1993-94	193	1814	2316	78.3%	1.28
	1994-95					1.37
	1995-96					1.59
	1996-97					1.37
	1997-98					1.23
	1998-99					1.80
	1999-00	161	1768	1932	91.5%	1.09
2000-01	161	1842	1932	95.3%	1.05	
2001-02	201	2314	2412	95.9%	1.04	
2002-03	196	2172	2352	92.3%	1.08	

Table 5. Reported total landings from annual performance reports (DFW,1981-2001). STT/STJ= St. Thomas/St. John, STX= St. Croix. Fishing years run from July one year through June the following year. Statistics for recent years are no longer provided in the corresponding reports (2001-2003).

Reported Total Landings			
Fishing Year	STT/STJ	STX	TOTAL
1980-81	410,008	101,618	511,626
1981-82	506,178	262,118	768,296
1982-83	482,388	182,580	664,968
1983-84	564,454	364,587	929,041
1984-85	543,634	364,162	907,796
1985-86	593,044	392,969	986,013
1986-87	538,824	272,980	811,804
1987-88	492,997	175,547	668,544
1988-89	766,027	398,957	1,164,984
1989-90	466,550	236,366	702,916
1990-91	641,356	481,871	1,123,227
1991-92	728,089	502,657	1,230,746
1992-93	778,386	322,642	1,101,028
1993-94	743,179	666,009	1,409,188
1994-95	775,734	585,808	1,361,542
1995-96	561,073	399,121	960,194
1996-97	823,964	433,915	1,257,879
1997-98	728,699	714,608	1,443,307
1998-99	583,788	607,665	1,191,453

Table 6. Projected total landings taken from annual performance reports (DFW, 1981-2001). Statistics for recent years are no longer provided in the corresponding reports (2001-2003).

Projected Total Landings			
(Projected=Reported*EF1)			
Fishing Year	STT/STJ	STX	TOTAL
1980-81	961656	318533	1280189
1981-82	1062144	897893	1960037
1982-83	946504	391243	1337747
1983-84	966012	477373	1443385
1984-85	871866	414234	1286100
1985-86	1428499	582386	2010885
1986-87	1313134	620409	1933543
1987-88	1151581	337113	1488694
1988-89	1100293	609788	1710081
1989-90	871480	579659	1451139
1990-91	891045	974105	1865150
1991-92	1051179	853650	1904829
1992-93	886220	373942	1261078
1993-94	1169033	853767	2015919
1994-95	966098	601388	1571056
1995-96	685337	410524	1096802
1996-97	870478	438047	1308525
1997-98	807905	742092	1549997
1998-99	613835	625894	1239729

Table 7. U.S. Virgin Islands, Old Form (1974-1986). **a)** Reported and **b)** Expanded Landings by district and calendar year.

(a)

Reported Landings from OLD Form (1974-1986)

	STT/STJ		STX		ALL USVI	
	No. Records	RepLandings (lb)	No. Records	Rep Landings	No. Records	Rep Landings
1974	838	57,656			838	57,656
1975	4,267	264,787	570	38,208	4,837	302,995
1976	3,753	224,631	754	59,850	4,507	284,481
1977	3,984	266,236	724	66,511	4,708	332,747
1978	5,468	478,023	989	77,859	6,457	555,883
1979	5,547	500,965	628	78,047	6,175	579,012
1980	5,168	506,347	790	53,040	5,958	559,387
1981	5,157	518,385	1,899	110,360	7,056	628,744
1982	5,630	499,814	3,367	170,358	8,997	670,171
1983	6,827	606,387	5,290	245,296	12,117	851,682
1984	7,133	606,540	6,729	317,770	13,862	924,311
1985	7,986	616,324	3,966	175,621	11,952	791,945
1986	4,128	280,208			4,128	280,208
Totals	65,886	5,426,301	25,706	1,392,919	91,592	6,819,220

(b)

Expanded Landings from OLD Form (1974-1986)

	STT/STJ		STX		ALL USVI	
	No. Records	RepLandings (lb)	No. Records	Rep Landings	No. Records	Rep Landings
1974	838	135,492			838	135,492
1975	4,267	622,248	570	119,591	4,837	741,839
1976	3,753	527,883	754	187,329	4,507	715,212
1977	3,984	625,653	724	208,180	4,708	833,834
1978	5,468	1,123,355	989	243,700	6,457	1,367,055
1979	5,548	1,177,267	628	244,287	6,176	1,421,554
1980	5,168	1,189,916	790	166,015	5,958	1,355,931
1981	5,157	1,163,691	1,899	367,105	7,056	1,530,796
1982	5,631	1,013,348	3,367	471,329	8,998	1,484,677
1983	6,829	1,111,520	5,290	403,117	12,119	1,514,637
1984	7,133	1,005,335	6,729	389,577	13,862	1,394,912
1985	7,986	1,246,974	3,966	200,208	11,952	1,447,182
1986	4,128	675,301			4,128	675,301
Total	65,890	11,617,984	25,706	3,000,438	91,596	14,618,422

Table 8. U.S. Virgin Islands, Old Form (1974-1986). **a)** Landings categories, **b)** Reported and **c)** Expanded Landings by district and category.

(a)

Landings Categories in Old Form (1974-1986)	
CODE	NAME
POT_SP_GP	POT FISH SNAPPER GROUPE
POT_OTH	POT FISH ALL OTHERS
NET_SP_GP	NET FISH SNAPPER GROUPE
NET_OTH	NET FISH ALL OTHERS
HK_SP_GP	HOOK FISH SNAPPER GROUPE
HK_OTH	HOOK FISH ALL OTHERS
SPR_SP_GP	SPEAR/GUN FISH SNAPPER GROUPE
SPR_OTH	SPEAR/GUN FISH ALL OTHERS
LOBST_POT	LOBSTER BY POT
LOBST_HAND	LOBSTER BY HAND
OTHERS	OTHER KINDS CONCH, WHELK, OCTOPUS, SQUID, CLAM, OYSTERS

(b) Reported Landings by District
Old Form (1974-1986)

CATEGORY	STT/STJ N=65890	STX N=25706	TOTAL N=91596
POT_SP_GP	671447	111164	782611
POT_OTH	3255264	643965	3899229
NET_SP_GP	75803	12049	87851
NET_OTH	499269	44149	543417
HK_SP_GP	104877	52636	157513
HK_OTH	364448	313770	678218
SPR_SP_GP	7797	11905	19702
SPR_OTH	46730	21032	67761
LOBST_POT	310120	26504	336624
LOBST_HAND	47397	21109	68506
OTHERS	43280	134638	177917
TOTAL	5426430	1392919	6819349

(c) Expanded Landings by District
Old Form (1974-1986)

CATEGORY	STT/STJ N=56241	STX N=46350	TOTAL N=102591
POT_SP_GP	1498985	299277	1798262
POT_OTH	6869132	1306754	8175886
NET_SP_GP	171463	31918	203382
NET_OTH	1097429	82546	1179975
HK_SP_GP	239205	144602	383808
HK_OTH	766954	611108	1378061
SPR_SP_GP	17733	36962	54695
SPR_OTH	95732	42769	138501
LOBST_POT	666077	73545	739622
LOBST_HAND	104391	45871	150262
OTHERS	90882	325085	415967
TOTAL	11617984	3000438	14618422

Table 9. U.S. Virgin Islands, Old Form (1974-1986). Reported Landings by year, district and category .

Reported Landings by District and Category (Old Reports 1974-1986)

ST. THOMAS/ ST. JOHN (STT/STJ)

YR	Nrecords	POT_SP_GP	POT_OTH	NET_SP_GP	NET_OTH	HK_SP_GP	HK_OTH	SPR_SP_Gf	SPR_OTH	LOBST_POT	LOBST_HAND	OTHERS	TOTAL
1974	838	13,352	31,951	4,694	1,530	539	2,619		90	1,584	1,159	138	57,656
1975	4,267	56,035	165,490	6,614	12,781	2,136	12,061	953	360	4,909	1,887	1,561	264,787
1976	3,753	39,191	147,746	2,708	3,604	11,738	12,468	210	80	5,405	1,337	145	224,631
1977	3,984	41,852	146,752	3,936	19,584	13,123	20,026	70	176	15,178	4,779	761	266,236
1978	5,468	66,288	238,356	2,716	77,627	8,605	20,827	1,256	1,356	50,513	8,168	2,314	478,023
1979	5,547	65,996	255,986	8,615	92,578	13,923	26,517	809	5,238	22,904	2,858	5,541	500,965
1980	5,168	89,660	245,834	8,908	62,187	18,885	29,209	2,565	4,976	34,054	5,742	4,328	506,347
1981	5,157	125,648	244,288	12,139	50,063	16,911	23,673	300	4,576	34,919	3,140	2,728	518,385
1982	5,630	119,664	260,743	10,352	33,010	10,142	15,077	1,038	5,711	35,581	3,045	5,452	499,814
1983	6,827	32,556	426,613	5,470	42,181	2,710	38,316	277	10,586	37,298	3,527	6,853	606,387
1984	7,133	16,153	435,868	665	40,501	1,603	61,190	33	9,009	30,892	5,088	5,540	606,540
1985	7,986	2,102	468,786	3,528	38,390	3,564	63,495	287	2,836	25,846	3,468	4,023	616,324
1986	4,128	2,950	186,853	5,430	25,163	998	38,942		1,736	11,039	3,200	3,898	280,208
Total	65,886	671,447	3,255,264	75,775	499,199	104,877	364,417	7,797	46,730	310,120	47,397	43,280	5,426,301

ST. CROIX (STX)

YR	N Records	POT_SP_GP	POT_OTH	NET_SP_GP	NET_OTH	HK_SP_GP	HK_OTH	SPR_SP_Gf	SPR_OTH	LOBST_POT	LOBST_HAND	OTHERS	TOTAL
1975	570	6,267	21,174	2,328	741	323	1,670	80	150	4,958	255	262	38,208
1976	754	6,458	32,816	50	520	972	14,409	20	241	3,302	321	741	59,850
1977	724	6,061	22,756		90	1,355	18,963	919	465	6,108	2,058	7,737	66,511
1978	989	12,501	21,459	169	611	1,811	10,923	5,494	2,609	1,435	3,546	17,302	77,859
1979	628	30,644	21,960	1,473	5,132	771	7,011	2,742	259	2,724	354	4,978	78,047
1980	790	5,358	20,068	1,503	2,129	2,601	5,349	592	2,185	408	868	11,979	53,040
1981	1,899	6,344	38,979	1,445	3,885	14,434	18,862	817	1,837	703	1,413	21,642	110,360
1982	3,367	10,529	83,373	1,938	2,001	14,913	36,033	999	1,003	1,256	1,436	16,878	170,358
1983	5,290	14,466	136,526	2,568	4,517	6,707	58,818	157	4,359	3,249	1,231	12,699	245,296
1984	6,729	8,111	157,193	505	14,205	6,680	94,140	73	5,076	1,591	5,974	24,224	317,770
1985	3,966	4,426	87,663	70	10,318	2,070	47,594	12	2,848	771	3,655	16,196	175,621
Total	25,706	111,164	643,965	12,049	44,149	52,636	313,770	11,905	21,032	26,504	21,109	134,638	1,392,919

Table 10. U.S. Virgin Islands, Old Form (1974-1986). Expanded Landings by year, district and category .

Expanded Landings by District and Category (Old Reports 1974-1986)

STT/STJ

YR	NRecords	POT	SP	GP	POT	OTH	NET	SP	GP	NET	OTH	HK	SP	GP	HK	OTH	SPR	SP	GP	SPR	OTH	LOBST	POT	LOBST	HAND	OTHERS	TOTAL
1974	838		31,378		75,084		11,031	3,596		1,267	6,155					212					212	3,722		2,724		324	135,492
1975	4,267		131,683		388,902		15,543	30,035		5,020	28,343					2,240					846	11,535		4,434		3,667	622,248
1976	3,753		92,099		347,203		6,364	8,469		27,584	29,299					494					188	12,701		3,142		341	527,883
1977	3,984		98,352		344,866		9,250	46,022		30,839	47,060					165					414	35,667		11,231		1,788	625,653
1978	5,468		155,776		560,136		6,383	182,424		20,222	48,943					2,950					3,185	118,704		19,195		5,437	1,123,355
1979	5,548		155,091		601,567		20,245	217,558		32,719	62,314					1,900					12,310	53,825		6,716		13,021	1,177,267
1980	5,168		210,701		577,711		20,934	146,140		44,380	68,641					6,027					11,693	80,026		13,494		10,170	1,189,916
1981	5,157		276,489		552,300		26,971	115,546		38,688	52,860					660					10,519	76,806		6,971		5,882	1,163,691
1982	5,631		247,629		523,118		21,378	66,583		20,910	30,602					2,167					11,281	72,450		6,304		10,927	1,013,348
1983	6,829		61,098		781,223		10,714	76,450		5,258	69,234					535					19,085	69,171		6,060		12,692	1,111,520
1984	7,133		27,606		720,441		1,064	66,800		2,590	101,583					56					15,361	51,911		8,593		9,330	1,005,335
1985	7,986		3,974		946,268		8,501	77,162		7,325	128,072					540					6,454	52,954		7,815		7,909	1,246,974
1986	4,128		7,110		450,315		13,086	60,643		2,405	93,849										4,184	26,605		7,712		9,394	675,301
Total	65,890		1,498,985		6,869,132		171,463	1,097,429		239,205	766,954					17,733					95,732	666,077		104,391		90,882	11,617,984

STX

YR	N Records	POT	SP	GP	POT	OTH	NET	SP	GP	NET	OTH	HK	SP	GP	HK	OTH	SPR	SP	GP	SPR	OTH	LOBST	POT	LOBST	HAND	OTHERS	TOTAL
1975	570		6,267		21,174		2,328	741		323	1,670					80					150	4,958		255		262	38,208
1976	754		6,458		32,816		50	520		972	14,409					20					241	3,302		321		741	59,850
1977	724		6,061		22,756			90		1,355	18,963					919					465	6,108		2,058		7,737	66,511
1978	989		12,501		21,459		169	611		1,811	10,923					5,494					2,609	1,435		3,546		17,302	77,859
1979	628		30,644		21,960		1,473	5,132		771	7,011					2,742					259	2,724		354		4,978	78,047
1980	790		5,358		20,068		1,503	2,129		2,601	5,349					592					2,185	408		868		11,979	53,040
1981	1,899		6,344		38,979		1,445	3,885		14,434	18,862					817					1,837	703		1,413		21,642	110,360
1982	3,367		10,529		83,373		1,938	2,001		14,913	36,033					999					1,003	1,256		1,436		16,878	170,358
1983	5,290		14,466		136,526		2,568	4,517		6,707	58,818					157					4,359	3,249		1,231		12,699	245,296
1984	6,729		8,111		157,193		505	14,205		6,680	94,140					73					5,076	1,591		5,974		24,224	317,770
1985	3,966		4,426		87,663		70	10,318		2,070	47,594					12					2,848	771		3,655		16,196	175,621
Total	25,706		111,164		643,965		12,049	44,149		52,636	313,770					11,905					21,032	26,504		21,109		134,638	1,392,919

Table 11. U.S. Virgin Islands, Old Form (1985-1999). **a)** Reported and **b)** Expanded Landings by district and calendar year.

(a) Reported Landings in OLD Form (1986-1999)

	STT/STJ		STX		ALL USVI	
	No. Records	Reported Landings (Lb)	No. Records	Reported Landings (Lb)	No. Records	Reported Landings (Lb)
1986	3,733	233,348	2,140	115,654	5,873	349,002
1987	3,333	199,833	2,059	105,676	5,392	305,509
1988	30	6,237	223	51,708	253	57,945
1989	1,188	64,675	3,055	202,256	4,243	266,931
1990	2,919	434,857	4,158	346,061	7,077	780,917
1991	6,367	1,788,133	7,392	1,308,703	13,759	3,096,836
1992	7,147	997,031	7,738	954,964	14,885	1,951,995
1993	7,025	606,918	9,074	503,474	16,099	1,110,391
1994	6,278	544,124	8,387	459,933	14,665	1,004,057
1995	6,633	705,718	6,877	352,064	13,510	1,057,782
1996	6,241	718,405	3,824	215,537	10,065	933,942
1997	4,681	536,636	704	66,320	5,385	602,956
1998	2,236	235,528			2,236	235,528
1999	165	14,535			165	14,535
Total	57,976	7,085,978	55,631	4,682,348	113,607	11,768,326

(b) Expanded Landings from OLD Form (1986-1999)

	STT/STJ		STX		ALL USVI	
	No. Records	Expanded Landings (Lb)	No. Records	Expanded Landings (Lb)	No. Records	Expanded Landings (Lb)
1986	3,733	569,239	2,140	261,839	5,873	831,079
1987	3,333	485,452	2,059	238,099	5,392	723,551
1988	30	14,494	223	85,372	253	99,866
1989	1,188	93,295	3,055	365,309	4,243	458,604
1990	2,919	642,035	4,158	741,819	7,077	1,383,854
1991	6,367	2,510,782	7,392	2,370,346	13,759	4,881,128
1992	7,147	1,339,125	7,738	1,510,968	14,885	2,850,093
1993	7,025	819,999	9,074	618,048	16,099	1,438,048
1994	6,278	764,931	8,387	538,639	14,665	1,303,570
1995	6,633	870,341	6,877	362,626	13,510	1,232,966
1996	6,241	835,634	3,824	220,564	10,065	1,056,198
1997	4,681	581,819	704	66,983	5,385	648,802
1998	2,236	260,563	-	-	2,236	260,563
1999	165	15,262	-	-	165	15,262
Total	57,976	9,802,971	55,631	7,380,612	113,607	17,183,584

Table 12. U.S. Virgin Islands, Old Form (1986-1999). **a)** Reported and **b)** Expanded Landings by district and category.

**(a) Reported Landings by District
Old Form (1986-1999)**

CATEGORY	STT/STJ	STX	TOTAL
	N=57,976	N=55,634	N=113,610
POTFISH	2,121,436	839,423	2,960,859
SG	86,423	25,962	112,385
HOOKFISH	934,336	466,095	1,400,430
NETFISH	446,721	344,830	791,550
SPEARF	35,475	96,986	132,461
BAITFISH	70,951	3,793	74,744
FINFISH	908,689	604,768	1,513,457
REEFFISH	774,373	1,136,568	1,910,941
CONCH	25,709	207,865	233,574
WHELK	12,611	337	12,948
LOBSTER	732,569	177,740	910,309
PELAGIC	379,340	191,950	571,290
TUNA	1,865	15,649	17,514
DORADO	1,360	13,082	14,442
WAHOO	633	8,035	8,668
OTHER	553,490	549,410	1,102,900
TOTAL	7,085,978	4,682,491	11,768,469

**(b) Expanded Landings by District
Old Form (1986-1999)**

CATEGORY	STT/STJ	STX	TOTAL
	N=57,976	N=55,634	N=113,610
POTFISH	2,941,882	1,112,526	4,054,408
SG	120,866	43,631	164,497
HOOKFISH	1,232,332	595,128	1,827,460
NETFISH	589,628	394,445	984,074
SPEARF	45,982	109,155	155,137
BAITFISH	85,692	4,332	90,024
FINFISH	1,286,405	1,045,337	2,331,742
REEFFISH	1,141,696	2,152,124	3,293,820
CONCH	44,156	303,752	347,908
WHELK	23,084	499	23,583
LOBSTER	964,236	250,545	1,214,781
PELAGIC	533,547	332,884	866,432
TUNA	2,909	20,031	22,939
DORADO	2,121	16,745	18,866
WAHOO	987	10,285	11,272
OTHER	787,449	989,192	1,776,641
TOTAL	9,802,971	7,380,613	17,183,583

Table 13. U.S. Virgin Islands, Old Form (1986-1999). Reported Landings by year, district and category.

Reported Landings by Category (Old Form 1986-1999)

STT/STJ		TOTAL															TOTAL			
YR	nrecords	POTFISH	SG	HOOKFISH	NETFISH	SPEARF	BAITFISH	FINFISH	REEFFISH	CONCH	WHELK	POTLOBSTI	DIVELOBS	LOBSTER	PELAGIC	TUNA	DORADO	WAHOO	OTHER	TOTAL
1986	3733	170095		33816	15271	1132				1422	1748	6307	3478	9864						233348
1987	3333	120966		31170	13323	1380		2478	4063	6553	4116	7331	1670	12102	2078				1604	199833
1988	30			112				2135	416	1420				561	941				652	6237
1989	1188							105	64342	100				18	110					64675
1990	2919							124207	175253					70038	65359					434857
1991	6367		51177					520425	337894					204533	310852					363252
1992	7147	164455	35246	83653	30487	2178	8290	259339	192405	15	794	31287	902	32189						187982
1993	7025	282681		142080	92800	5362	10000			5387	1753	59656	5033	64689		1138	831	198		606918
1994	6278	257922		150181	66893	4213	10160			1689	3482	44516	3378	47894		727	529	435		544124
1995	6633	342078		181948	80439	6902	14587			2377	447	71185	5757	76941						705718
1996	6241	343974		170310	71709	8005	13358			4601	45	99884	6521	106405						718405
1997	4681	300495		98315	44892	4825	11304			1606	226	71151	3823	74974						536636
1998	2236	132745		40460	24786	1479	3157			539		31024	1339	32363						235528
1999	165	6027		2292	6121		95													14535

STX		TOTAL															TOTAL			
YEAR	nrecords	POTFISH	SG	HOOKFISH	NETFISH	SPEARF	BAITFISH	FINFISH	REEFFISH	CONCH	WHELK	POTLOBSTI	DIVELOBS	LOBSTER	PELAGIC	TUNA	DORADO	WAHOO	OTHER	TOTAL
1986	2140	74238		28941	5694	273				4935		373	1200	1573						115654
1987	2059	62583		27208	6440	147		274	393	5475		198	933	1546	1096				514	105676
1988	223							13200	7087	17153				7083	6501				684	51708
1989	3055							11499	165888	12118				6480	6271					202256
1990	4158							20634	300412	8417				11893	4705					346061
1991	7392			315			32	306211	423778	31688	221			15348	161224				369886	1308703
1992	7738	96570	25257	65994	25633	6206	135	252951	239011	18875		2652	7145	34399	12153				177781	954964
1993	9074	201502	705	134155	69419	22133	465			22221		8803	24530	33333		10089	3996	4911	545	503474
1994	8387	182665		103153	73989	23460	1489			30994	96	5342	20977	26319		5560	9086	3124		459933
1995	6877	124823		65670	88048	21340	1113			29821	20	4744	16486	21230						352064
1996	3824	74276		32753	56563	19980	556			17530		2173	11707	13879						215537
1997	704	22732		7845	19044	3448				8593		1888	2770	4658						66320

Table 14. U.S. Virgin Islands, Old Form (1986-1999). Expanded Landings by year, district and category.

Expanded Landings by Category (Old Form 1986-1999)

STT/STJ														TOTAL	TOTAL			
YR	Nrecords	POTFISH	SG	HOOKFISH	NETFISH	SPEARF	BAITFISH-FINFISH	REEFFISH-CONCH	WHELK	POTLOBST	DIVELOBS	LOBSTER	PELAGIC	TUNA	DORADO	WAHOO	OTHER	TOTAL
1986	3733	414951	.	82507	37242	2762	.	.	3467	4249	15386	8483	24061	.	.	.	.	569239
1987	3333	295038	.	76015	32500	3367	.	5815	9604	15503	9762	17868	4075	29181	4879	.	3788	485452
1988	30	.	.	161	.	.	.	4996	973	3323	.	.	1313	2202	.	.	1526	14494
1989	1188	.	.	.	.	.	.	196	92673	187	.	.	34	206	.	.	.	93295
1990	2919	.	.	.	.	.	.	170164	286378	.	.	.	95952	89542	.	.	.	642035
1991	6367	.	70112	.	.	.	.	731786	475005	.	.	.	285717	436719	.	.	511442	2510782
1992	7147	187497	50754	95364	34755	2482	9451	373448	277063	17	905	35667	1028	36695	.	.	270694	1339125
1993	7025	381647	.	191159	126002	6700	13106	.	.	8257	2705	80325	6720	87045	1775	1296	308	819999
1994	6278	361660	.	211438	94036	5919	13874	.	.	2633	4609	63290	4837	68127	1133	824	679	764931
1995	6633	421761	.	224671	99258	8450	17987	.	.	2917	559	87678	7060	94738	.	.	.	870341
1996	6241	399783	.	197703	83615	9442	15458	.	.	5517	48	116418	7650	124068	.	.	.	835634
1997	4681	326236	.	106163	48613	5216	12217	.	.	1736	248	77213	4177	81389	.	.	.	581819
1998	2236	146982	.	44746	27180	1642	3500	.	.	598	.	34429	1486	35915	.	.	.	260563
1999	165	6328	.	2407	6427	.	100	.	.	.	.	.	.	.	.	.	.	15262

STX														TOTAL	TOTAL				
YEAR	N Rows	POTFISH	SG	HOOKFISH	NETFISH	SPEARF	BAITFISH-FINFISH	REEFFISH-CONCH	WHELK	POTLOBST	DIVELOBS	LOBSTER	PELAGIC	TUNA	DORADO	WAHOO	OTHER	TOTAL	
1986	2140	167995	.	65526	12925	620	.	.	11202	.	847	2724	3571	.	.	.	.	261839
1987	2059	141788	.	61703	14594	334	.	537	772	11851	.	449	2118	3373	2146	.	999	238099	
1988	223	.	.	.	.	.	.	21894	11246	28483	.	.	11570	10866	.	.	1313	85372
1989	3055	.	.	.	.	.	.	19080	303061	21402	.	.	11378	10388	.	.	.	365309
1990	4158	.	.	.	.	.	.	43944	644650	17888	.	.	25282	10055	.	.	.	741819
1991	7392	.	.	536	.	.	54	529865	786077	61103	376	.	29444	278770	.	.	684122	2370346	
1992	7738	112070	42813	76553	29734	7221	157	430016	406318	30113	.	3076	8288	53188	20660	.	302126	1510968	
1993	9074	248062	818	162028	84864	28018	573	.	27394	.	10770	30574	41344	.	12914	5115	6286	632	618048
1994	8387	215071	.	119585	84573	27095	1830	.	36978	103	6122	24536	30658	.	7117	11630	3999	538639	
1995	6877	128568	.	67640	90689	21980	1146	.	30716	21	4886	16981	21867	.	.	.	.	362626
1996	3824	76013	.	33633	57831	20406	573	.	17942	.	2218	11948	14166	.	.	.	.	220564
1997	704	22959	.	7923	19234	3482	.	.	8679	.	1907	2798	4705	.	.	.	.	66983

Table 15. U.S. Virgin Islands, New Form (1994-2003). **a)** Reported and **b)** Expanded Landings by district and calendar year.

(a) Reported Landings in NEW Form (1994-2003)

Year	STT/STJ		STX		ALL USVI	
	Nrecords	Reported Landings	Nrecords	Reported Landings	Nrecords	Reported Landings
1994			228	6,196	228	6,196
1995			517	20,975	517	20,975
1996			3,590	174,850	3,590	174,850
1997	467	35,174	8,226	456,361	8,693	491,536
1998	2,177	214,299	8,623	521,902	10,800	736,201
1999	4,216	422,767	8,507	543,270	12,723	966,037
2000	4,947	457,195	9,822	636,076	14,769	1,093,270
2001	5,623	556,771	12,243	817,513	17,866	1,374,283
2002	5,398	569,813	13,703	945,292	19,101	1,515,105
2003	2,726	300,683	6,486	452,881	9,212	753,564
Total	25,554	2,556,701	71,945	4,575,316	88,287	6,378,453

(b) Expanded Landings in NEW Form (1994-2003)

Year	STT/STJ		STX		ALL USVI	
	Nrecords	Expanded Landings	Nrecords	Expanded Landings	Nrecords	RepLandings
1994			228	6,382	517	21,604
1995			517	21,604	3,590	176,986
1996			3,590	176,986	8,693	508,858
1997	467	39,043	8,226	469,814	10,800	767,686
1998	2,177	227,053	8,623	540,633	12,723	1,007,570
1999	4,216	448,002	8,507	559,568	14,769	1,144,356
2000	4,947	489,198	9,822	655,158	17,866	1,437,783
2001	5,623	595,745	12,243	842,038	19,101	1,583,351
2002	5,398	609,700	13,703	973,651	97,499	7,442,774
2003	2,726	321,731	6,486	466,468		
Total	25,554	2,730,472	71,945	4,712,302	185,558	14,090,967

Table 16. U.S. Virgin Islands, New Form (1994-2003). **a)** Reported and **b)** Expanded Landings by district and category.

**(a) Reported Landings by District
New Form (1994-2003)**

**(b) Expanded Landings by District
New Form (1994-2003)**

CATEGORY	STT/STJ (N=25554)	STX (N=71945)	TOTAL N=(97499)	CATEGORY	STT/STJ (N=25554)	STX (N=71945)	TOTAL N=(97499)
Parrot	215,618	1,116,469	1,332,087	Parrot	230,228	1,149,708	1,379,936
Snapper	510,993	622,290	1,133,283	Snapper	545,824	640,784	1,186,608
Lobster	268,540	497,745	766,285	Lobster	286,550	512,718	799,268
Conch	8,793	467,071	475,864	Conch	9,383	481,250	490,633
Trigger	280,165	170,442	450,607	Trigger	299,027	175,536	474,563
Surgeon	156,821	221,077	377,898	Surgeon	167,402	227,730	395,133
Grunt	148,053	229,017	377,070	Grunt	158,123	235,847	393,970
Grouper	179,486	165,090	344,576	Grouper	191,484	170,125	361,608
Jack	207,699	120,328	328,027	Jack	222,158	123,719	345,877
Dolphin	31,729	293,880	325,609	Dolphin	33,955	302,760	336,715
Tuna	73,426	218,927	292,352	Tuna	78,584	225,588	304,172
Baitfish	94,693	71,757	166,450	Baitfish	101,202	73,904	175,106
Shellfish	116,007	49,596	165,603	Shellfish	123,873	51,073	174,946
Porgy	85,618	20,610	106,227	Porgy	91,549	21,228	112,777
Wahoo	15,517	72,870	88,387	Wahoo	16,606	75,039	91,645
Barra	9,269	74,503	83,772	Barra	9,917	76,705	86,623
Mackerel	26,673	44,730	71,403	Mackerel	28,484	46,078	74,562
Angel	45,733	17,443	63,176	Angel	48,666	17,963	66,629
Offshore	5,243	51,828	57,071	Offshore	5,597	53,465	59,062
Goat	3,680	27,842	31,522	Goat	3,925	28,644	32,569
Finfish	20,123	1	20,124	Finfish	21,482	1	21,483
Whelk	13,001	6,342	19,343	Whelk	13,958	6,538	20,496
Squirrel	17,259	161	17,420	Squirrel	18,389	166	18,555
Shark	8,929	1,200	10,129	Shark	9,531	1,227	10,759
Marlin	829	7,201	8,030	Marlin	887	7,426	8,313
Hogfish	6,119	8	6,127	Hogfish	6,535	8	6,544
Gar	1,690	2,609	4,299	Gar	1,808	2,704	4,512
Redman	3,625		3,625	Redman	3,879		3,879
FAD	160	2,047	2,207	FAD	171	2,067	2,239
Kingfish	403	145	548	Kingfish	431	149	581
Octopus	149		149	Octopus	159		159
Silver		9	9	Silver		9	9
BlueMarlin	3		3	BlueMarlin	3		3
WhtMarlin			-	WhtMarlin			-
Pampano			-	Pampano			-
Sponge	620		620	Sponge	663		663
Art Reef			-	Art Reef			-
Other	36	1,850	1,886	Other	39	1,902	1,941
TOTAL	2,556,701	4,575,316	7,132,017	TOTAL	2,730,472	4,712,302	7,442,774

Table 17. U.S. Virgin Islands, New Form (1994-2003). Reported Landings by year, district and category.

Reported Landings by Category (New Form 1994-2003)

STT/STJ																
Year	Nrows	Grouper	Snapper	Grunt	Jack	Surgeon	Parrot	Shellfish	Trigger	Angel	Barra	Goat	Mackerel	Porgy	Offshore	
1997	467	689	5,783	2,445	4,142	1,561	3,327	908	2,391	1,120	76	139	621	251	575	
1998	2,177	14,704	35,570	14,023	8,044	15,287	20,671	9,828	27,599	10,513	997	747	2,732	2,427	939	
1999	4,216	32,206	81,446	25,076	25,708	26,033	37,639	18,276	49,499	9,722	1,336	931	5,035	10,539	1,322	
2000	4,947	34,799	98,292	23,793	44,130	26,656	34,622	21,590	52,109	4,032	1,247	798	3,938	17,538	2,208	
2001	5,623	38,209	121,156	31,823	52,048	32,846	47,838	25,193	56,691	7,508	1,912	731	4,800	21,642	199	
2002	5,398	37,634	112,142	33,289	49,263	35,715	45,855	25,940	56,306	9,207	3,113	295	6,629	21,690		
2003	2,726	21,245	56,604	17,604	24,365	18,723	25,667	14,274	35,572	3,633	588	40	2,920	11,531		
Year	Lobster	Conch	Whelk	Hogfish	Shark	Squirrel	Gar	Marlin	WhtMarlin	BlueMarlin	Pampano	Silver	Kingfish	Redman	Finfish	
1997	2,113	66	1,263	14	77	.	.	.	.	.	.	.	.	.	704	
1998	21,395	176	173	317	228	1,522	.	.	.	.	.	.	.	.	13,899	
1999	49,975	1,620	1,117	2,333	1,096	2,931	.	.	.	.	.	.	.	721	4,895	
2000	46,208	1,083	1,475	3,235	38	3,020	.	375	.	.	.	.	403	655	55	
2001	50,592	1,647	6,153	147	15	5,736	80	.	.	3	.	.	.	.	.
2002	61,504	2,172	1,961	50	7,407	3,541	1,132	164	.	.	.	.	.	1,366	570	
2003	36,754	2,029	859	23	69	509	478	290	.	.	.	.	.	883	.	

STX

Year	Nrows	Grouper	Snapper	Grunt	Jack	Surgeon	Parrot	Shellfish	Trigger	Angel	Barra	Goat	Mackerel	Porgy	Offshore	
1994	228	509	5,319	.	.	.	.	138	.	.	.	.	.	.	.
1995	517	437	5,040	1,791	723	547	3,891	155	1,121	31	423	55	49	.	3,550	
1996	3,590	4,897	23,919	11,119	12,275	8,347	44,820	1,810	6,867	2,314	3,273	1,786	965	.	7,259	
1997	8,226	12,181	53,071	29,735	20,706	23,839	123,015	5,393	16,270	5,207	6,775	5,289	3,017	.	8,328	
1998	8,623	17,550	59,044	31,417	12,275	33,129	134,408	6,009	24,900	6,631	6,319	3,723	3,313	.	6,874	
1999	8,507	19,850	62,877	29,221	15,003	25,880	154,705	6,495	23,379	3,167	8,285	3,632	4,282	1,410	15,387	
2000	9,822	21,205	79,127	27,687	13,270	29,992	160,399	5,938	21,736	42	11,037	2,617	7,846	2,016	1,399	
2001	12,243	27,552	115,582	37,242	23,442	35,810	186,575	8,255	29,513	.	11,860	2,838	7,117	4,815	5,759	
2002	13,703	40,837	150,492	42,626	17,112	46,135	220,595	9,705	35,032	52	18,984	5,877	13,868	9,144	3,272	
2003	6,486	20,075	67,821	18,181	5,523	17,398	88,062	5,700	11,625	.	7,547	2,025	4,273	3,226	.	
Year	Lobster	Conch	Whelk	Hogfish	Shark	Squirrel	Gar	Marlin	WhtMarlin	BlueMarlin	Pampano	Silver	Kingfish	Redman	Finfish	
1994	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1995	370	1,068	.	.	113	.	.	.	.	.	.	.	.	.	.
1996	12,608	13,677	.	.	548	.	.	.	.	.	.	.	.	.	.
1997	29,184	34,520	106	.	59	7	588	.	.	.	.	.	.	.	.	1
1998	41,919	57,544	652	.	74	6	1,173	856	.	.	.	.	.	.	.
1999	50,884	42,721	1,209	.	80	26	100	.	.	.	.	.	.	.	.
2000	84,496	66,418	871	.	32	104	303	4,970	.	.	.	.	9	.	.	
2001	112,297	93,317	403	8	.	6	26	1,375	.	.	.	.	.	.	.
2002	115,370	98,022	2,892	.	190	12	.	.	.	.	.	.	.	145	.	
2003	50,617	59,785	210	.	104	.	419	.	.	.	.	.	.	.	.

Table 18. U.S. Virgin Islands, New Form (1994-2003). Expanded Landings by year, district and category.

Expanded Landings by Category (New Form 1994-2003)

STT/STJ

Year	Nrows	Grouper	Snapper	Grunt	Jack	Surgeon	Parrot	Shellfish	Trigger	Angel	Barra	Goat	Mackerel	Porgy	Offshore	
1994																
1995																
1996																
1997		467	765	6,419	2,713	4,597	1,733	3,693	1,007	2,654	1,243	84	154	689	279	638
1998		2,177	15,469	37,668	14,863	8,569	16,156	21,891	10,401	29,170	11,129	1,078	792	2,912	2,574	986
1999		4,216	34,131	86,368	26,582	27,300	27,598	39,884	19,379	52,478	10,208	1,414	985	5,316	11,228	1,398
2000		4,947	37,235	105,172	25,458	47,220	28,522	37,046	23,101	55,756	4,314	1,334	854	4,214	18,765	2,362
2001		5,623	40,884	129,637	34,051	55,691	35,145	51,187	26,956	60,659	8,033	2,046	782	5,136	23,157	213
2002		5,398	40,269	119,992	35,619	52,711	38,215	49,065	27,756	60,248	9,851	3,331	316	7,093	23,208	
2003		2,726	22,732	60,566	18,836	26,071	20,033	27,463	15,273	38,062	3,887	629	43	3,124	12,338	

Year	Lobster	Conch	Whelk	Hogfish	Shark	Squirrel	Gar	Marlin	WhtMarlin	BlueMarlin	Pampano Silver	Kingfish	Redman	Finfish
1994														
1995														
1996														
1997		2,345	73	1,402	16	85								781
1998		22,572	186	182	334	239	1,598							14,892
1999		52,921	1,708	1,195	2,489	1,151	3,089						771	5,140
2000		49,442	1,159	1,578	3,461	40	3,231	401				431	701	59
2001		54,134	1,762	6,584	157	16	6,137	86		3				
2002		65,809	2,324	2,098	54	7,925	3,789	1,211	175				1,462	610
2003		39,327	2,171	919	25	74	545	511	310				945	

STX

Year	Nrows	Grouper	Snapper	Grunt	Jack	Surgeon	Parrot	Shellfish	Trigger	Angel	Barra	Goat	Mackerel	Porgy	Offshore
1994		228	524	5,479				142							
1995		517	450	5,191	1,845	745	563	4,008	160	1,155	32	436	57	50	3,657
1996		3,590	4,948	24,209	11,252	12,440	8,439	45,349	1,828	6,945	2,339	3,311	1,805	977	7,454
1997		8,230	12,608	54,569	30,602	21,249	24,557	126,552	5,546	16,737	5,375	6,969	5,429	3,108	8,644
1998		8,623	18,192	61,162	32,545	12,705	34,301	139,155	6,224	25,776	6,860	6,545	3,855	3,436	7,119
1999		8,507	20,445	64,763	30,097	15,453	26,656	159,346	6,690	24,080	3,261	8,533	3,741	4,410	15,849
2000		9,822	21,841	81,500	28,517	13,668	30,892	165,211	6,116	22,388	43	11,368	2,696	8,081	1,441
2001		12,243	28,378	119,049	38,359	24,145	36,884	192,172	8,502	30,398		12,216	2,923	7,331	5,932
2002		13,703	42,062	155,007	43,905	17,625	47,519	227,212	9,996	36,083	54	19,554	6,053	14,284	9,418
2003		6,486	20,677	69,856	18,726	5,689	17,919	90,704	5,870	11,973		7,773	2,086	4,401	3,322

Year	Lobster	Conch	Whelk	Hogfish	Shark	Squirrel	Gar	Marlin	WhtMarlin	BlueMarlin	Pampano Silver	Kingfish	Redman	Finfish
1994														
1995		381	1,100			116								
1996		12,746	13,833			555								
1997		30,138	35,576	110		61	7	611						1
1998		43,381	59,670	676		77	6	1,220	890					
1999		52,411	44,003	1,245		82	27	103						
2000		87,031	68,410	897		33	107	312	5,119			9		
2001		115,666	96,116	415	8		6	27	1,416					
2002		118,831	100,963	2,979		196	12						149	
2003		52,136	61,579	216		107		432						

Table 19. Proportion (percent) of Reported (same as Expanded) landings by species category and gear type from NEW Form (1994-2003).

Proportion of Landings By Gear Type from New Form (1994-2003)

GEAR TYPE	% of Total byGear	Species Category														
		Grouper	Snapper	Grunt	Jack	Surgeon	Parrot	Shellfish	Trigger	Angel	Barra	Goat	Mackerel	Porgy	Offshore	
Unknown1,2	0.69%	0.17%	0.53%	0.35%	0.11%	0.26%	0.82%	0.10%	0.10%	0.71%	0.28%	0.69%	0.25%		0.18%	
Castnets	0.60%	0.10%	0.06%	0.02%	0.97%		0.00%		0.00%		0.18%	0.02%	1.57%	0.01%		
Free Diving	2.43%	1.62%	0.74%	0.91%	0.16%	0.62%	2.05%	0.42%	0.63%	3.48%	2.65%	0.27%	0.95%	0.37%		
Gillnets	3.88%	1.39%	1.43%	5.54%	3.83%	9.16%	22.08%	3.71%	3.17%	2.41%	6.29%	1.77%	0.35%	3.04%		
Gillnets/SeineNets	0.07%	0.10%	0.04%	0.15%	0.16%	0.26%	0.45%	0.22%	0.08%	0.18%	0.26%	0.02%		0.21%		
Gillnets/Traps	0.10%		0.02%	0.08%	0.01%	0.17%	0.37%		0.08%		0.00%			0.02%		
Line Fishing	37.20%	26.51%	57.58%	6.09%	47.20%	1.22%	1.16%	1.72%	6.04%	1.53%	66.04%	11.26%	86.60%	2.50%	83.90%	
Lines/Castnets	0.16%	0.33%	0.44%	0.07%	0.29%			0.00%			0.15%		0.22%			
Lines/SeineNets	0.03%	0.00%	0.02%	0.04%	0.09%	0.02%	0.01%	0.01%	0.01%		0.07%		0.01%	0.01%		
SFDiving/Lines	0.12%	0.08%	0.12%	0.04%		0.01%	0.01%	0.01%	0.02%	0.25%	0.15%		0.07%		0.07%	
SFDiving/SeineNets	0.20%	0.13%	0.10%	0.81%		1.49%	0.45%	0.39%	0.41%		0.58%			0.65%		
Scuba	20.98%	14.16%	6.62%	7.12%	0.90%	4.74%	24.12%	2.23%	9.33%	8.15%	11.42%	4.30%	1.23%	6.97%	8.02%	
Scuba/FreeDiving	0.16%	0.10%	0.01%	0.16%		0.00%	0.02%	0.04%	0.07%	0.94%	0.04%	0.02%	0.10%	0.02%		
Scuba/Gillnets	0.16%	0.12%	0.05%	0.16%	0.06%	0.47%	0.66%	0.17%	0.04%	0.01%	0.13%	0.14%	0.02%	0.06%		
Scuba/Traps	0.13%	0.07%	0.07%	0.17%	0.01%	0.13%	0.10%	0.06%	0.13%	0.13%	0.03%	0.04%		0.04%		
Seine Nets	3.20%	0.53%	2.91%	1.76%	41.85%	3.20%	3.03%	0.76%	1.01%	0.26%	1.31%	0.59%	4.06%	1.15%	0.78%	
Traps/Lines	29.87%	54.63%	29.48%	76.01%	4.34%	77.35%	44.59%	90.05%	78.52%	80.89%	10.39%	80.88%	4.58%	84.95%	7.04%	
Traps/Nets/Lines	0.11%	0.00%	0.04%	0.51%	0.01%	0.91%	0.08%	0.11%	0.35%	1.08%	0.01%	0.01%				

GEAR TYPE	Species Category															
	Lobster	Conch	Whelk	Hogfish	Shark	Squirrel	Gar	Marlin	WhtMarlin	BlueMarlin	Pampano	Silver	Kingfish	Redman	Finfish	
Unknown1,2	0.29%	0.85%													0.55%	
Castnets	0.02%	0.02%	0.02%		7.32%										7.93%	
Free Diving	2.24%	8.83%	59.29%													
Gillnets	1.16%	1.50%	0.52%				1.05%									
Gillnets/SeineNets	0.02%	0.01%														
Gillnets/Traps	0.01%	0.03%														
Line Fishing	0.24%	0.38%	0.56%		87.79%	2.24%	72.60%	100.00%		100.00%		44.44%	85.40%		33.11%	
Lines/Castnets	0.00%	0.01%														
Lines/SeineNets																
SFDiving/Lines	0.05%	0.06%														
SFDiving/SeineNets	0.19%	0.09%														
Scuba	61.51%	85.96%	31.48%		0.15%	0.05%										
Scuba/FreeDiving	0.31%	0.01%		4.06%												
Scuba/Gillnets	0.06%	0.04%														
Scuba/Traps	0.11%	0.64%	0.47%													
Seine Nets	0.46%	0.43%	6.51%		2.76%		24.75%								28.20%	
Traps/Lines	33.23%	1.12%	1.16%	95.94%	1.98%	97.70%	1.61%					55.56%	14.60%	100.00%	30.21%	
Traps/Nets/Lines	0.097%	0.02%														

Table 20. Proportion (percent) of Snapper, Grouper, and Spiny Lobster landings by gear type from NEW Form (1994-2003) for the whole U.S. Virgin Islands.

New Form (1994-2003)		
GEARTYPE2	Grouper	Snapper
Traps/Lines	54.6%	29.5%
Line Fishing	26.5%	57.6%
Scuba	14.2%	6.6%
Gillnets	1.4%	1.4%
Seine Nets	0.5%	2.9%
Free Diving	1.6%	0.7%
Lines/Castnets	0.3%	0.4%

GEARTYPE2	Lobster
Scuba	61.51%
Traps/Lines	33.23%
Free Diving	2.24%
Gillnets	1.16%
Seine Nets	0.46%
Scuba/FreeDiving	0.31%
Unknown	0.29%
Line Fishing	0.24%
SFDiving/SeineNets	0.19%
Scuba/Traps	0.11%
Traps/Nets/Lines	0.10%
Scuba/Gillnets	0.06%
SFDiving/Lines	0.05%

Table 21. Estimated reported and expanded total landings for St. Thomas/St. John and St. Croix, U.S. Virgin Islands years 1974-2003.

Reported Total Landings				Expanded Total Landings			
Year	STT/STJ	STX	TOTAL	Year	STT/STJ	STX	TOTAL
1974	57,656	0	57,656	1974	135,492	0	135,492
1975	264,787	38,208	302,995	1975	622,248	119,591	741,839
1976	224,631	59,850	284,481	1976	527,883	187,329	715,212
1977	266,236	66,511	332,747	1977	625,653	208,180	833,834
1978	478,023	77,859	555,883	1978	1,123,355	243,700	1,367,055
1979	500,965	78,047	579,012	1979	1,177,267	244,287	1,421,554
1980	506,347	53,040	559,387	1980	1,189,916	166,015	1,355,931
1981	518,385	110,360	628,744	1981	1,163,691	367,105	1,530,796
1982	499,814	170,358	670,171	1982	1,013,348	471,329	1,484,677
1983	606,387	245,296	851,682	1983	1,111,520	403,117	1,514,637
1984	606,540	317,770	924,311	1984	1,005,335	389,577	1,394,912
1985	616,324	175,621	791,945	1985	1,246,974	200,208	1,447,182
1986	513,556	115,654	629,210	1986	1,244,541	261,839	1,506,380
1987	199,833	105,676	305,509	1987	485,452	238,099	723,551
1988	6,237	51,708	57,945	1988	14,494	85,372	99,866
1989	64,675	202,256	266,931	1989	93,295	365,309	458,604
1990	434,857	346,061	780,917	1990	642,035	741,819	1,383,854
1991	1,788,133	1,308,703	3,096,836	1991	2,510,782	2,370,346	4,881,128
1992	997,031	954,964	1,951,995	1992	1,339,125	1,510,968	2,850,093
1993	606,918	503,474	1,110,391	1993	819,999	618,048	1,438,048
1994	544,124	466,129	1,010,253	1994	764,931	545,021	1,309,952
1995	705,718	373,039	1,078,757	1995	870,341	384,230	1,254,571
1996	718,405	390,387	1,108,792	1996	835,634	397,550	1,233,184
1997	571,810	522,681	1,094,491	1997	620,863	536,798	1,157,660
1998	449,827	521,902	971,729	1998	487,615	540,633	1,028,249
1999	437,302	543,270	980,572	1999	463,263	559,568	1,022,832
2000	457,195	636,076	1,093,270	2000	489,198	655,158	1,144,356
2001	556,771	817,513	1,374,283	2001	595,745	842,038	1,437,783
2002	569,813	945,292	1,515,105	2002	609,700	973,651	1,583,351
2003	300,683	452,881	753,564	2003	321,731	466,468	788,199

Table 22. Estimated reported and expanded **Spiny Lobster** landings for St. Thomas/St. John and St. Croix, U.S. Virgin Islands years 1974-2003.

Number of Landing Records Reporting Spiny Lobster				Reported Spiny Lobster Landings (1974-2003)				Expanded Spiny Lobster Landings (1974-2003)			
Year	STT/STJ	STX	TOTAL	Year	STT/STJ	STX	TOTAL	Year	STT/STJ	STX	TOTAL
1974	85	0	85	1974	2,743	0	2,743	1974	6,446	0	6,446
1975	268	154	422	1975	6,796	5,213	12,009	1975	15,969	16,317	32,286
1976	201	152	353	1976	6,742	3,623	10,364	1976	15,843	11,338	27,181
1977	491	157	648	1977	19,957	8,166	28,123	1977	46,898	25,560	72,457
1978	753	170	923	1978	58,681	4,981	63,661	1978	137,899	15,590	153,489
1979	568	87	655	1979	25,762	3,078	28,840	1979	60,541	9,634	70,176
1980	601	65	666	1980	39,796	1,276	41,072	1980	93,520	3,994	97,514
1981	637	91	728	1981	38,059	2,116	40,175	1981	83,777	6,916	90,693
1982	647	148	795	1982	38,626	2,692	41,317	1982	78,754	8,462	87,216
1983	702	248	950	1983	40,825	4,480	45,305	1983	75,231	7,188	82,419
1984	621	347	968	1984	35,979	7,564	43,543	1984	60,504	9,372	69,876
1985	720	195	915	1985	29,314	4,426	33,739	1985	60,769	5,045	65,814
1986	676	65	741	1986	24,103	1,573	25,676	1986	58,378	3,571	61,948
1987	288	74	362	1987	12,102	1,546	13,648	1987	29,181	3,373	32,554
1988	26	214	240	1988	561	7,083	7,644	1988	1,313	11,570	12,883
1989	2	176	178	1989	18	6,480	6,498	1989	34	11,378	11,412
1990	1,452	126	1,578	1990	70,038	11,893	81,931	1990	95,952	25,282	121,233
1991	5,083	491	5,574	1991	204,533	15,348	219,881	1991	285,717	29,444	315,162
1992	706	663	1,369	1992	32,189	34,399	66,588	1992	36,695	53,188	89,883
1993	1,228	1,140	2,368	1993	64,689	33,333	98,021	1993	87,045	41,344	128,389
1994	1,073	882	1,955	1994	47,894	26,319	74,212	1994	68,127	30,658	98,785
1995	1,408	1,434	2,842	1995	76,941	21,600	98,541	1995	94,738	22,248	116,986
1996	1,646	4,125	5,771	1996	106,405	26,487	132,892	1996	124,068	26,912	150,980
1997	1,635	8,371	10,006	1997	77,086	33,842	110,928	1997	83,734	34,842	118,576
1998	2,650	8,623	11,273	1998	53,758	41,919	95,677	1998	58,488	43,381	101,868
1999	4,216	8,507	12,723	1999	49,975	50,884	100,859	1999	52,921	52,411	105,332
2000	4,947	9,822	14,769	2000	46,208	84,496	130,704	2000	49,442	87,031	136,473
2001	5,623	12,243	17,866	2001	50,592	112,297	162,889	2001	54,134	115,666	169,799
2002	5,398	13,703	19,101	2002	61,504	115,370	176,873	2002	65,809	118,831	184,640
2003	2,726	6,486	9,212	2003	36,754	50,617	87,371	2003	39,327	52,136	91,462

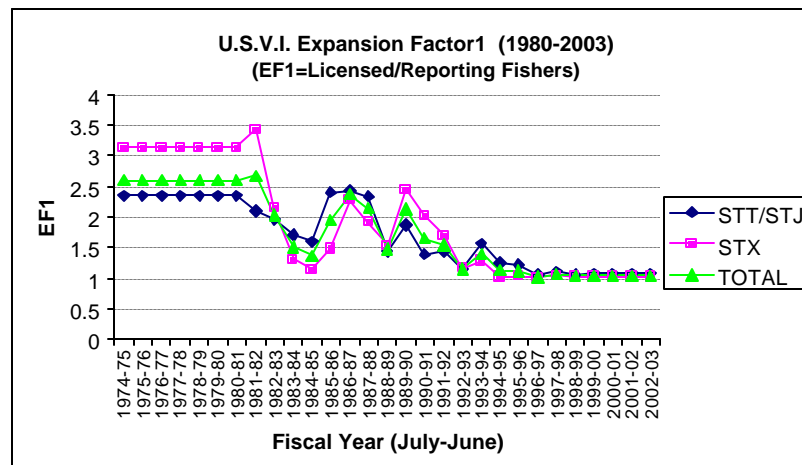
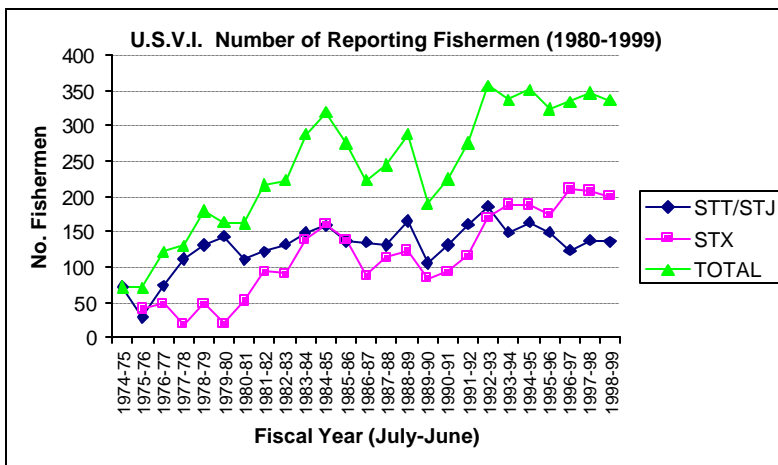
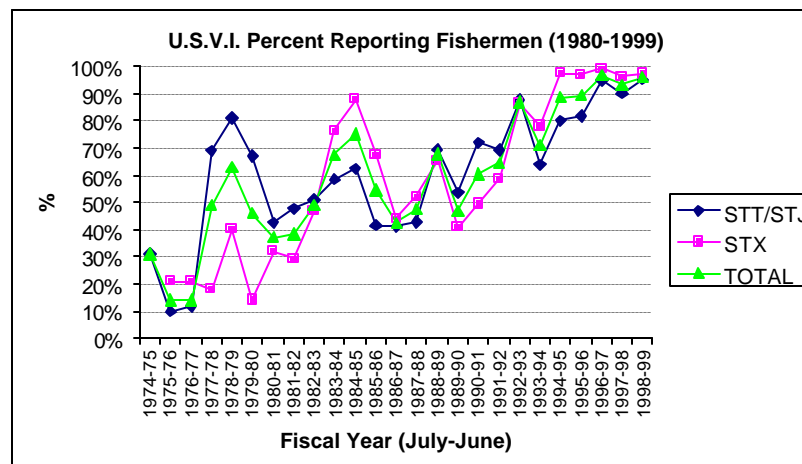
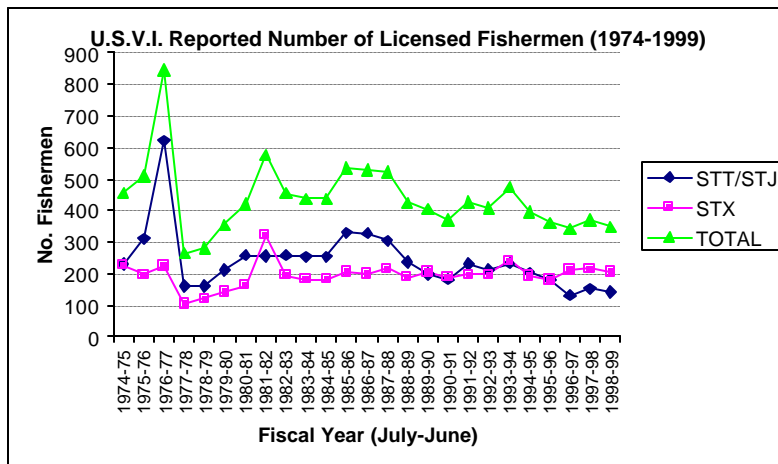


Figure 1. U.S. Virgin Islands. Number of licensed and reporting fishermen by year, percent reporting and estimates of Expansion Factor 1 from annual reports (DFW, 1981-2001). Data for years 1974-1979 and 1999-2003 was not available in annual reports; EF1 for 74-79 years was assumed constant and equal EF1 for 1980-81; EF1 for FY 99-03 were calculated as the average of the previous 3 FY (1996-97 to 1998-99).

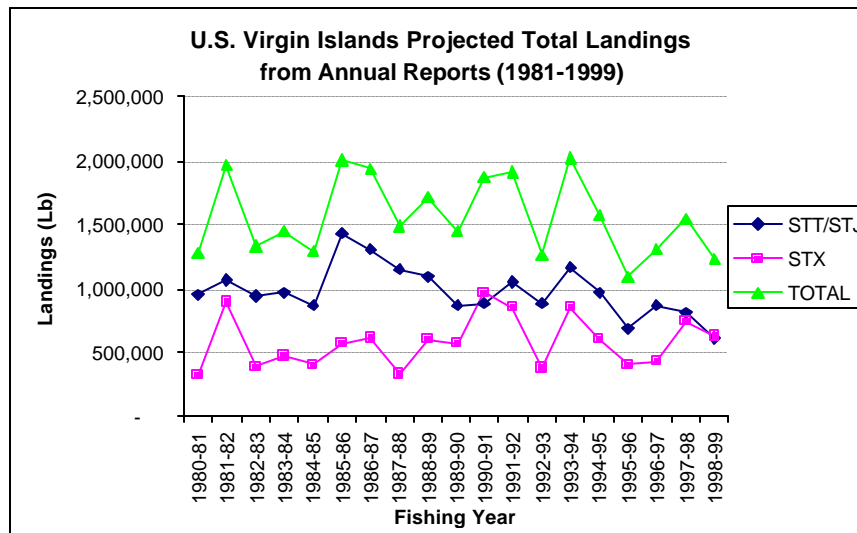
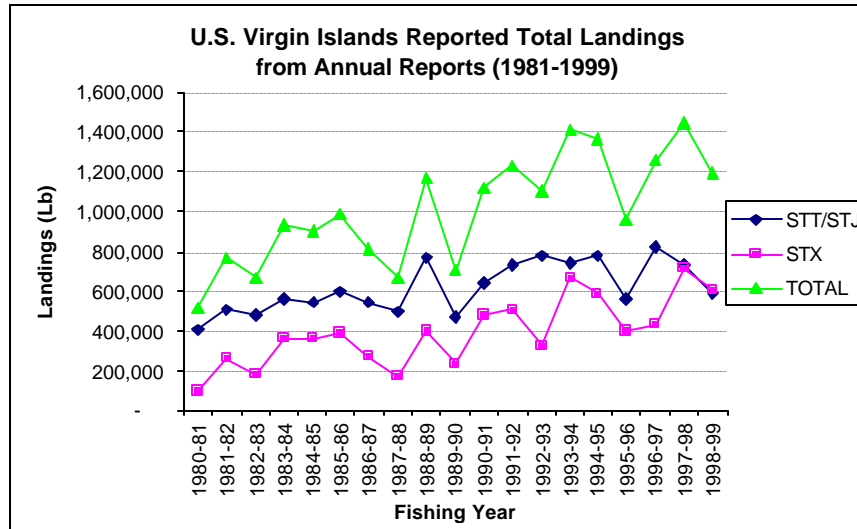


Figure 2. Reported and projected total landings by district and fishing year taken from annual performance reports (DFW, 1981-2001). STT/STJ= St. Thomas/St. John, STX= St. Croix. Fishing year= July-June. Values for years 1999-00 to 2002-03 are not provided any longer in the corresponding reports.

Reported Landings in OLD Form (1974-1986)

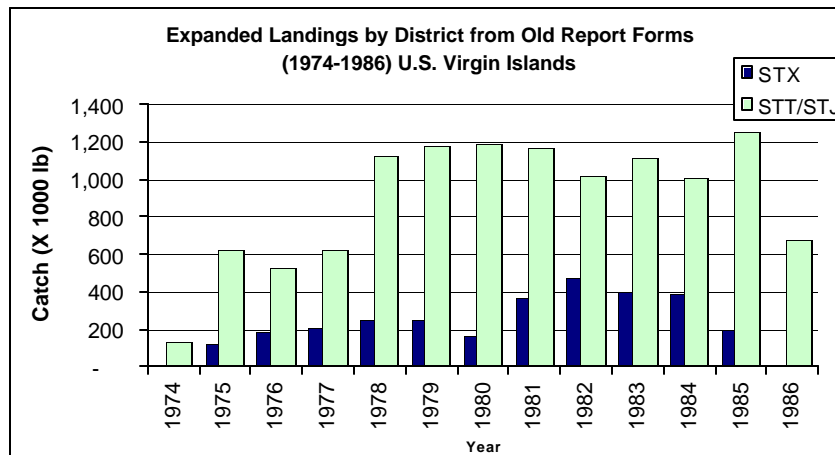
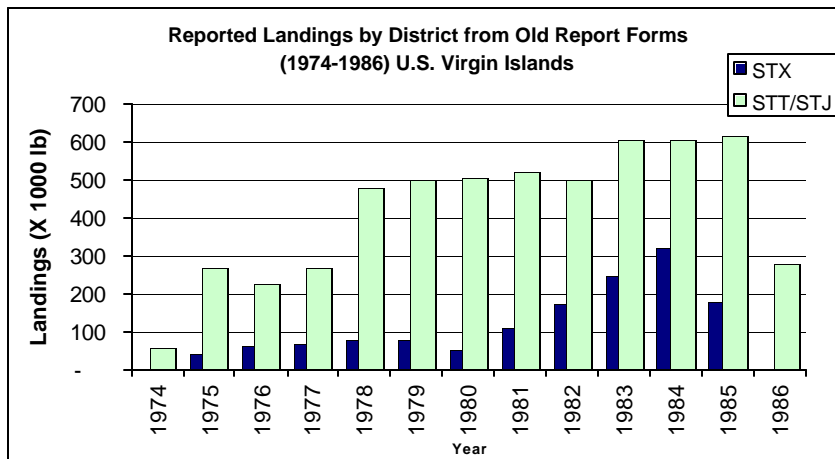
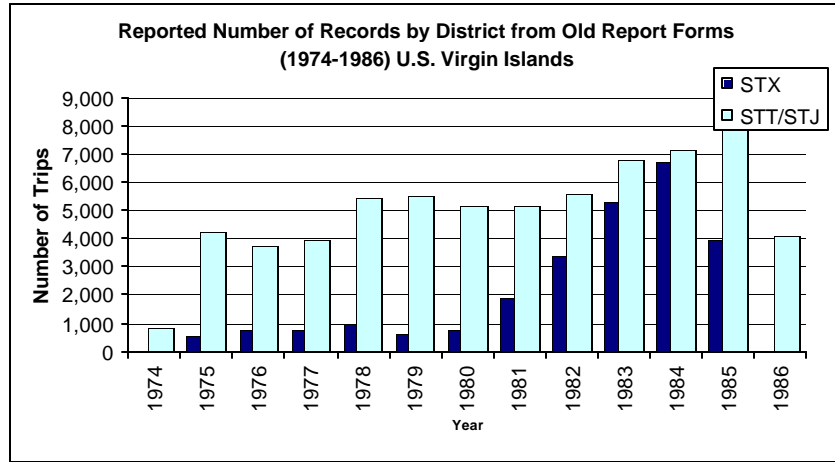


Figure 3. U.S. Virgin Islands. Old Form (1974-1986). Reported number of records, reported landings and expanded landings by year and district.

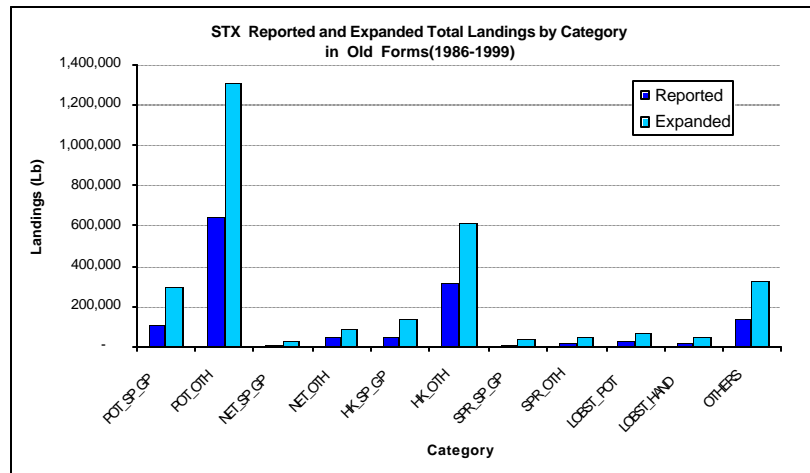
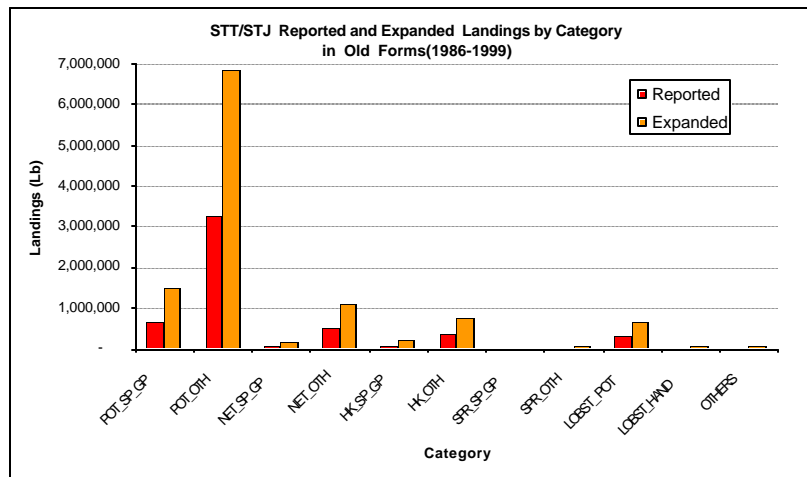
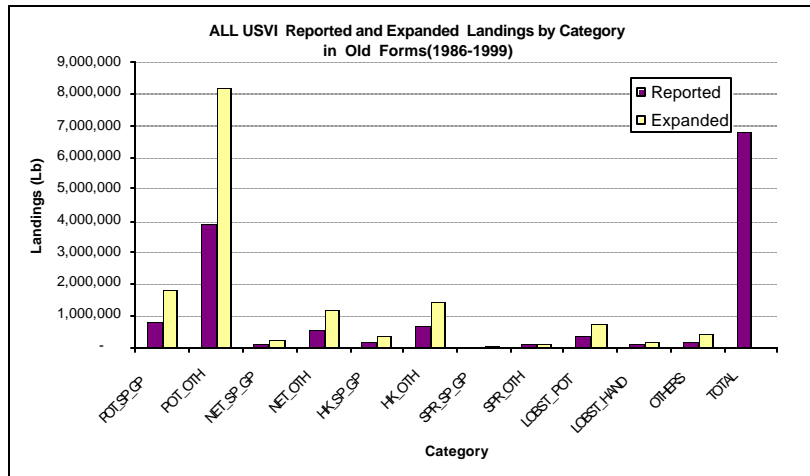


Figure 4. U.S. Virgin Islands, Old Form (1974-1986). Reported and Expanded Landings by district and category.

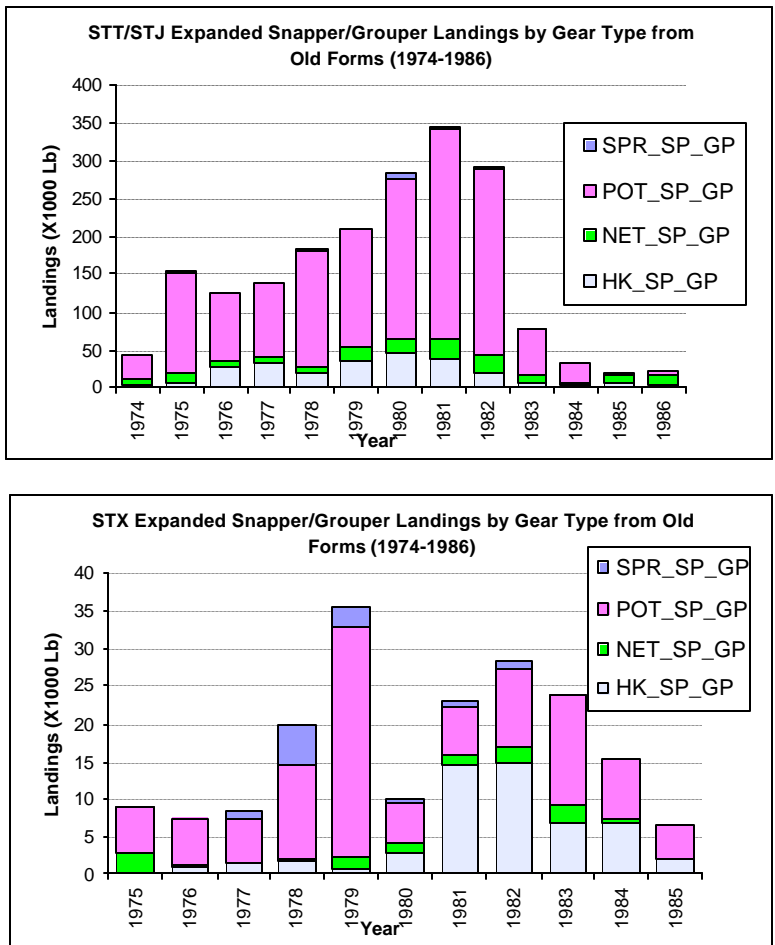


Figure 5. U.S. Virgin Islands, Old Form (1974-1986). **Snapper/Grouper** expanded landings by year and district.

OLD Report Form (1985-1999)

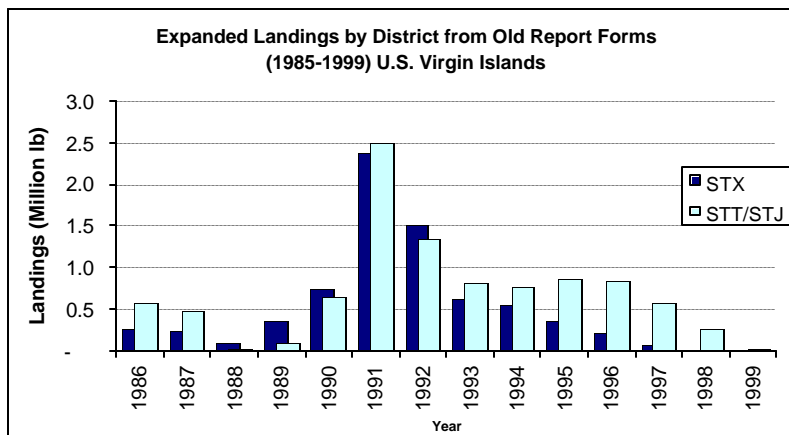
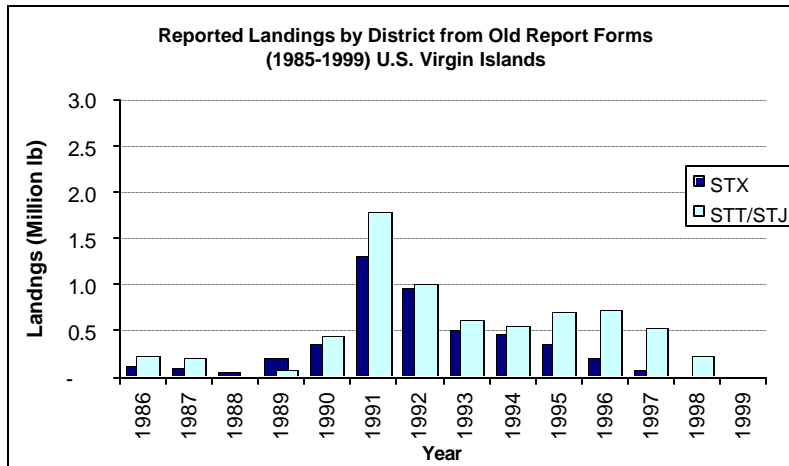
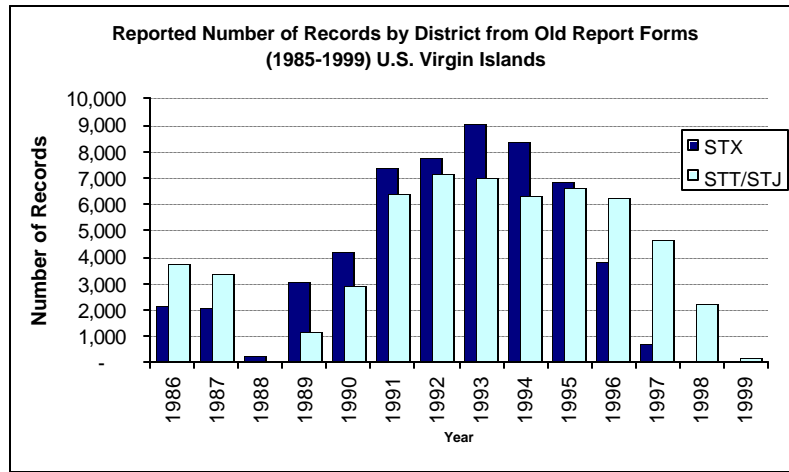


Figure 6. U.S. Virgin Islands. Old Form (1985-1999). Reported number of records, reported landings and expanded landings by year and district.

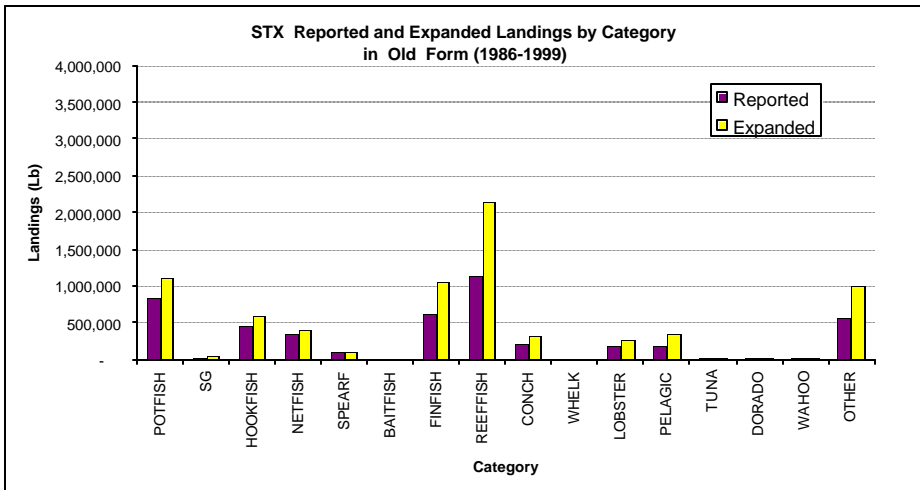
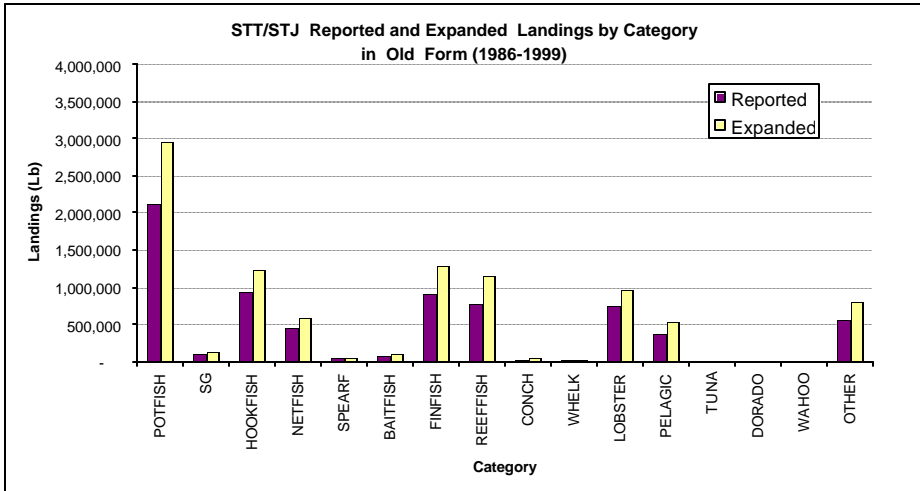
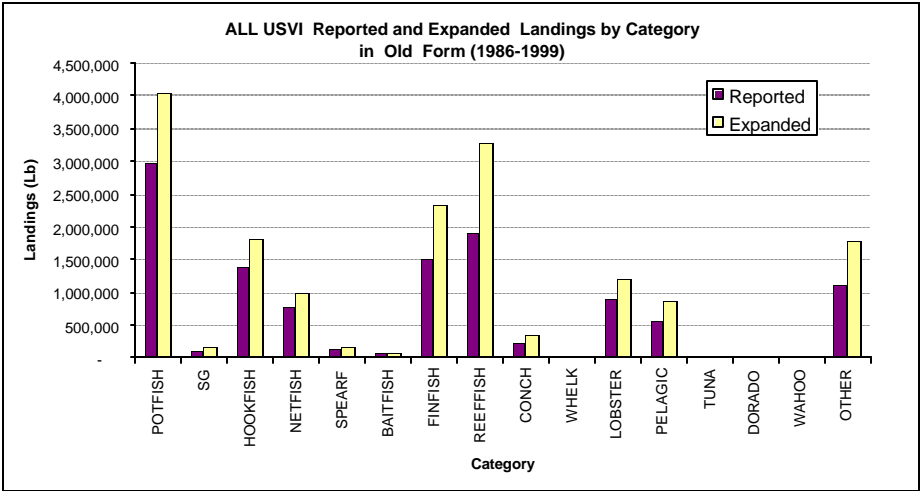


Figure 7. U.S. Virgin Islands, Old Form (1985-1999). Reported and Expanded Landings by district and category.

Reported and Expanded Landings NEW Form (1994-2003)

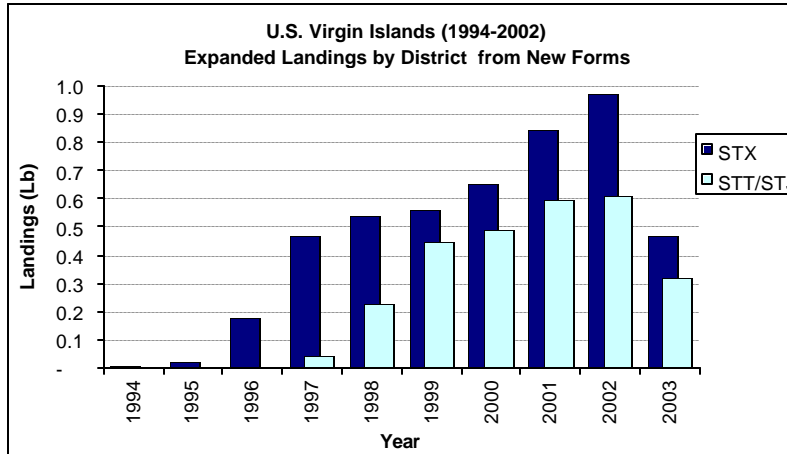
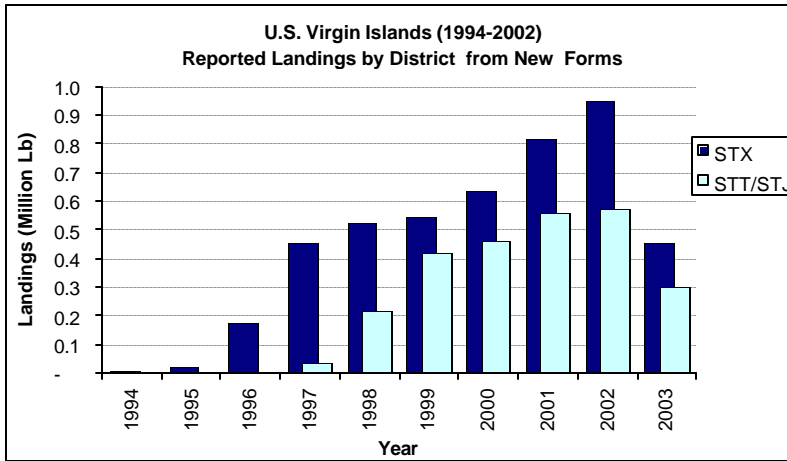
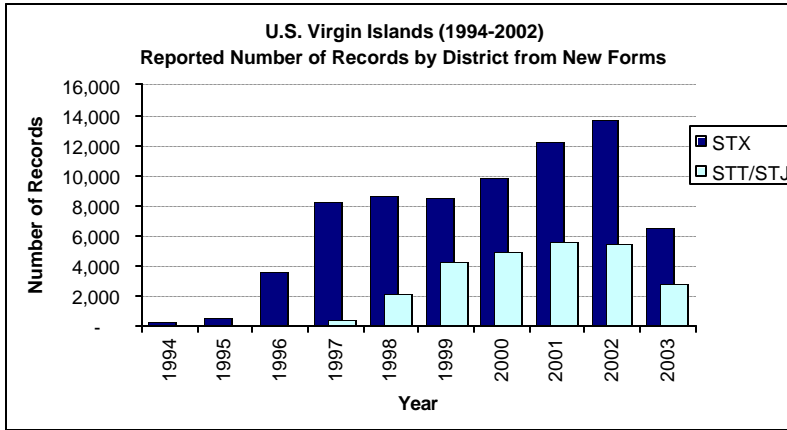


Figure 8. U.S.Virgin Islands. New Form (1994-2003). Reported number of records, reported landings and expanded landings by year and district.

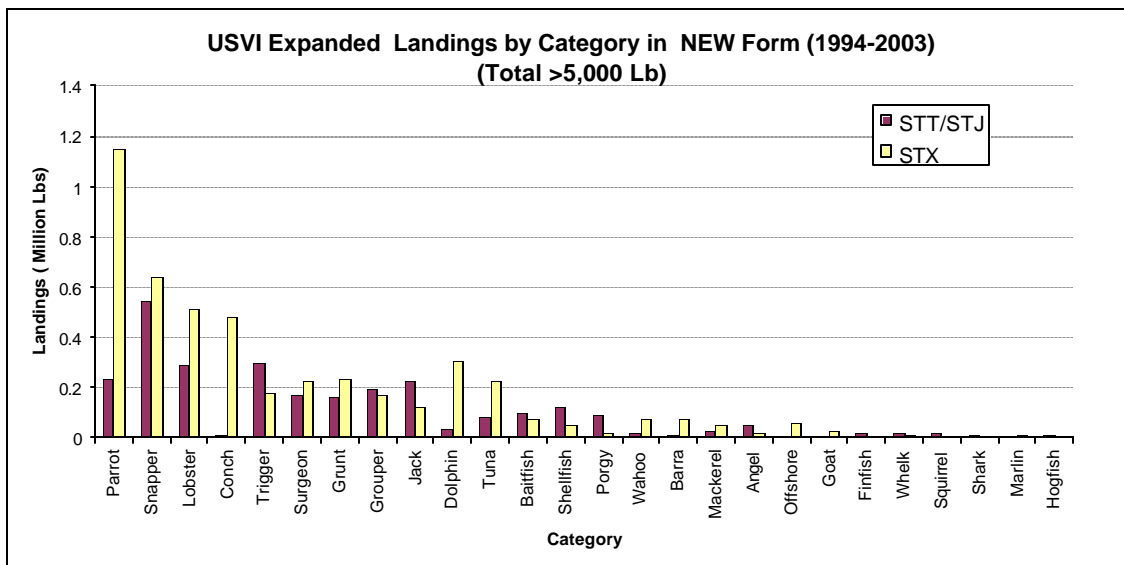
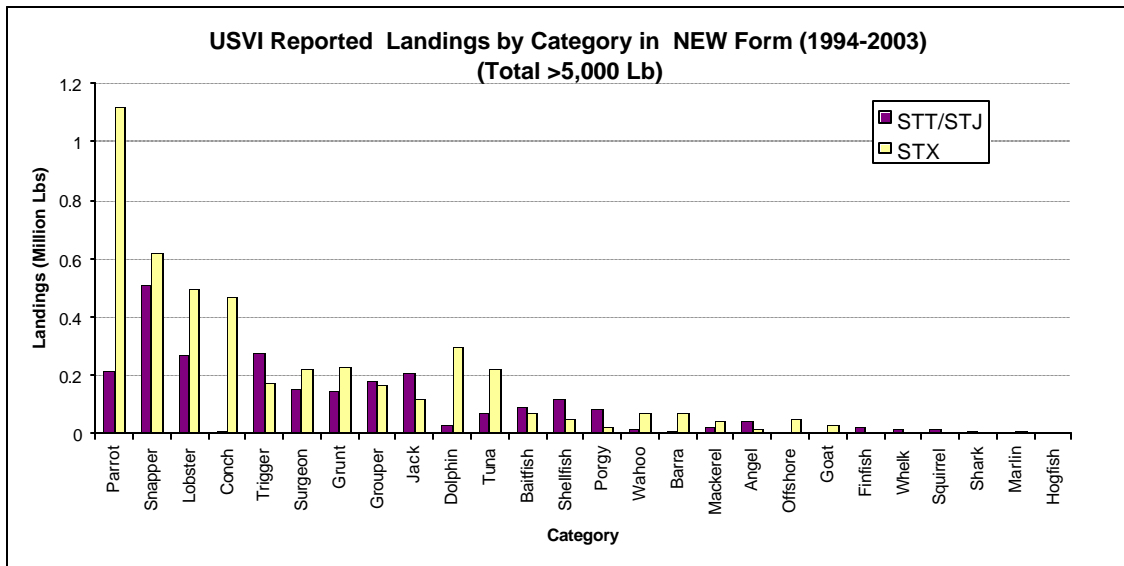


Figure 9. U.S. Virgin Islands, New Form (1994-2003). Reported and Expanded Landings by district and category.

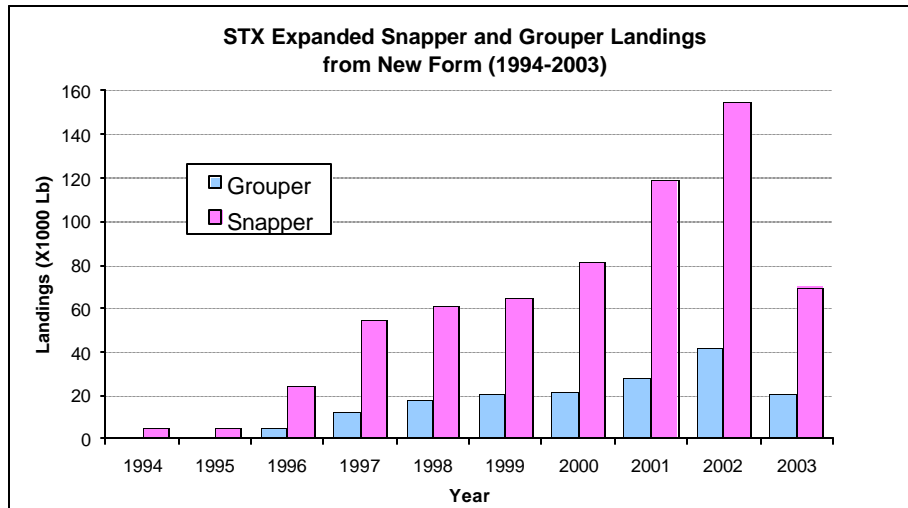
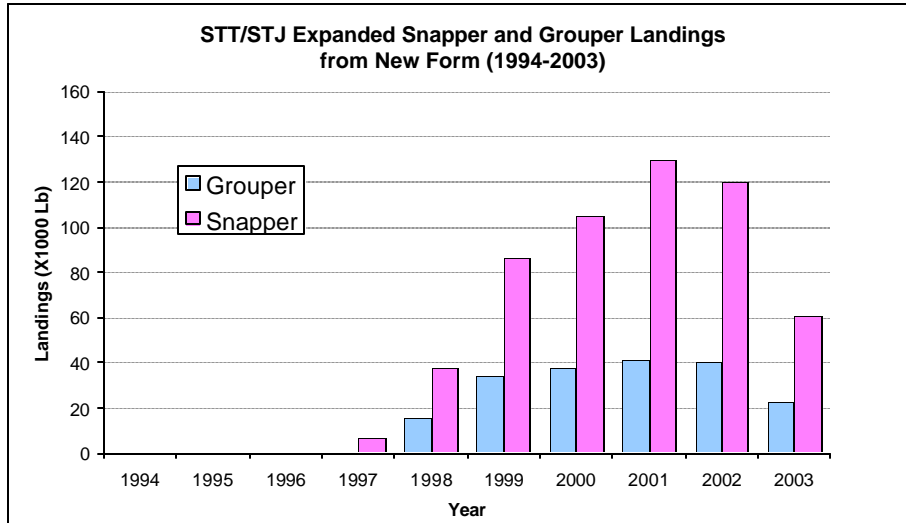


Figure 10. U.S. Virgin Islands, New Form (1994-2003). Expanded **Snapper and Grouper** landings by year and district..

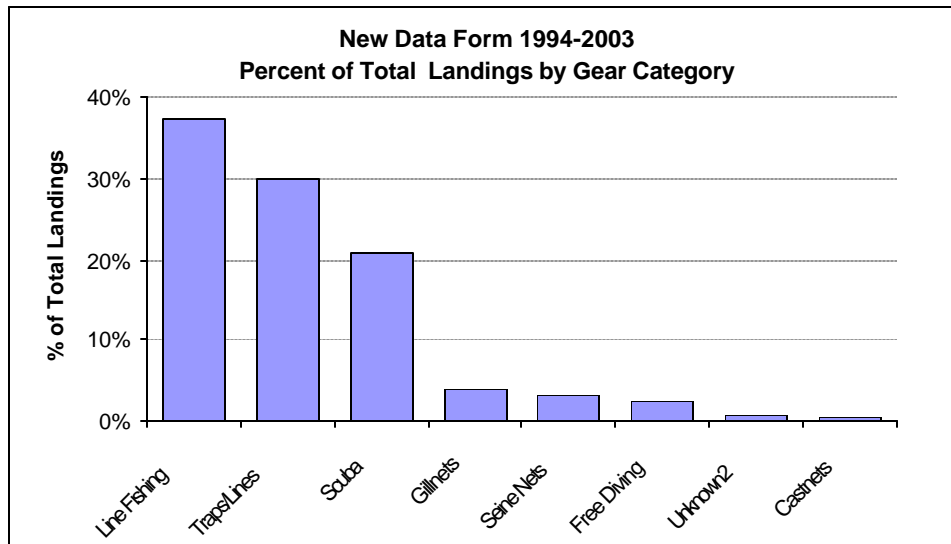


Figure 11. Percent of total landings by gear category from NEW Form (1994-2003) for the whole U.S. Virgin Islands.

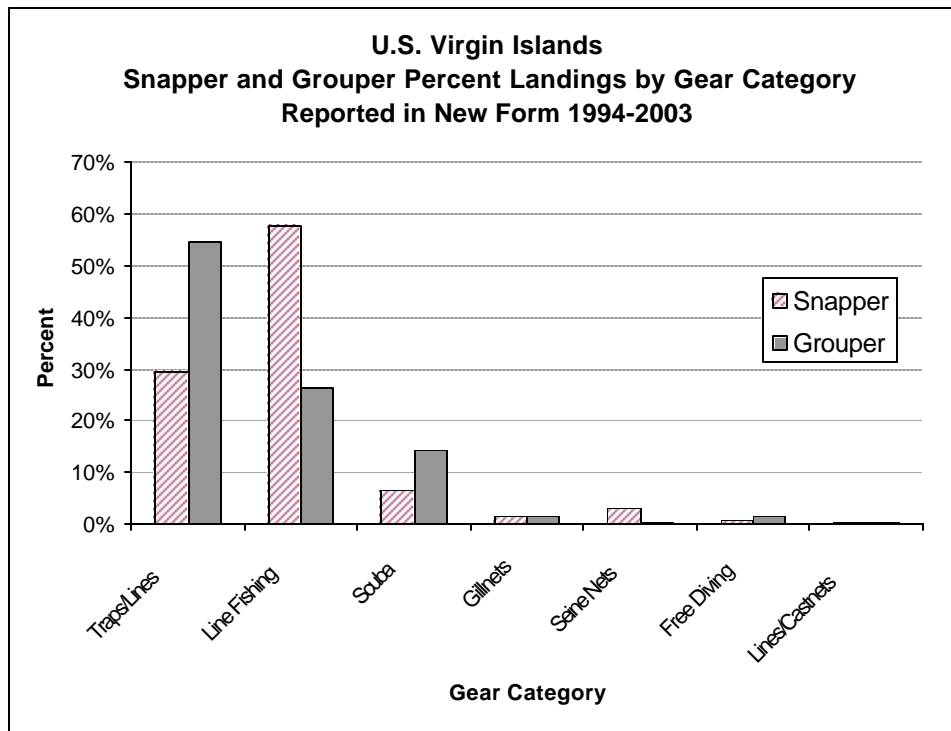


Figure 12. Percent of (a) Snapper, Grouper, and (b) Lobster landings by gear category from NEW Form (1994-2003) for the whole U.S. Virgin Islands.

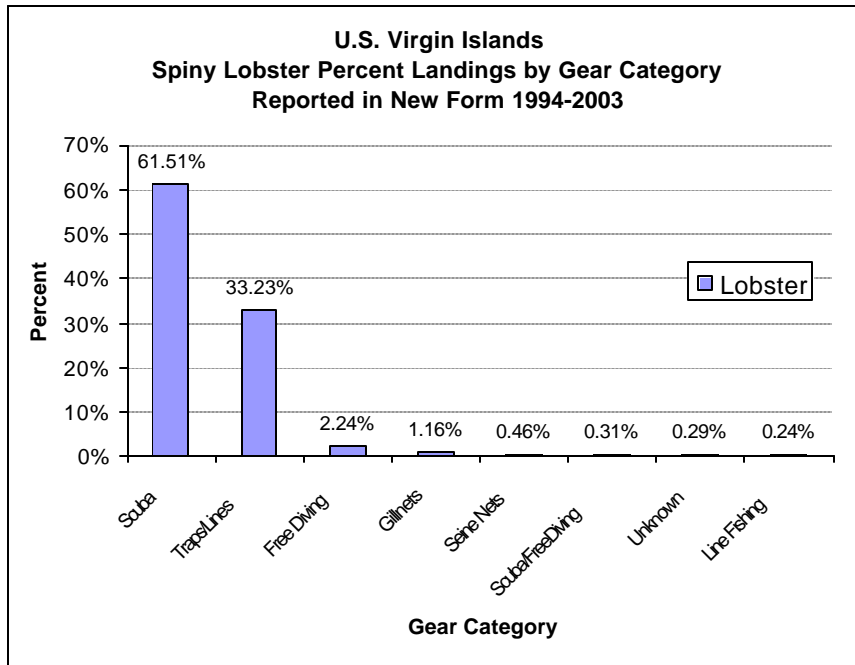


Figure 12 (b) (Cont). USVI Lobster landings by gear category from NEW Form (1994-2003).

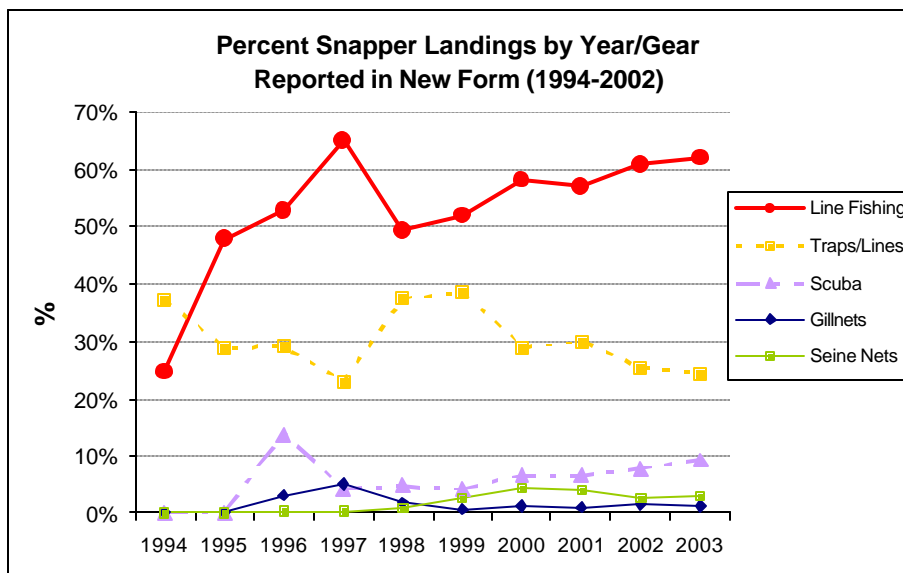


Figure 13. Proportion of snapper landings by gear type and year reported in New Form (1994-2003).

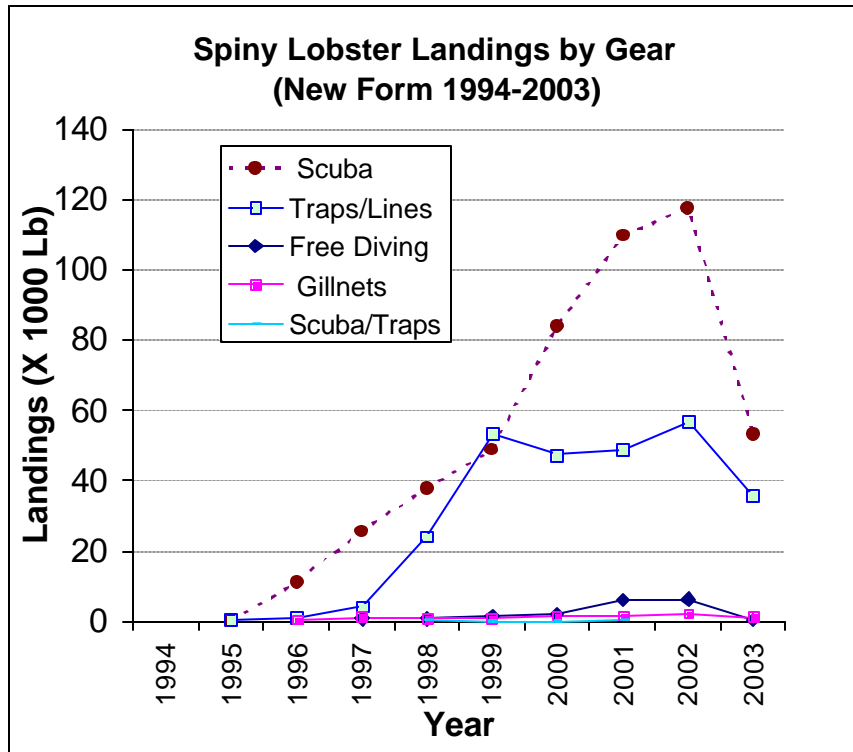


Figure 14. Spiny Lobster landings by gear from the New Form (1994-2003).

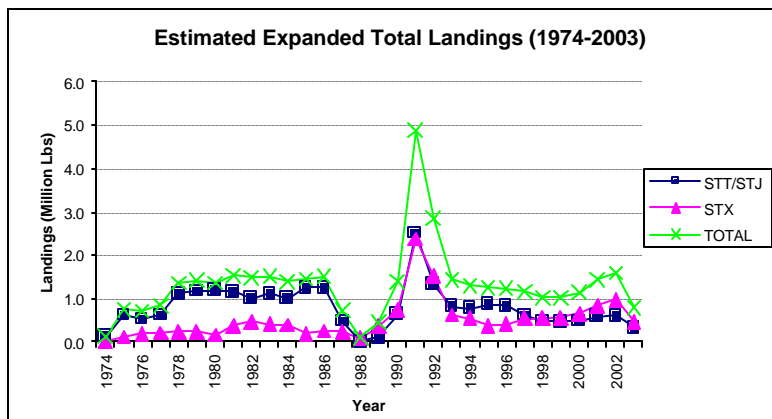
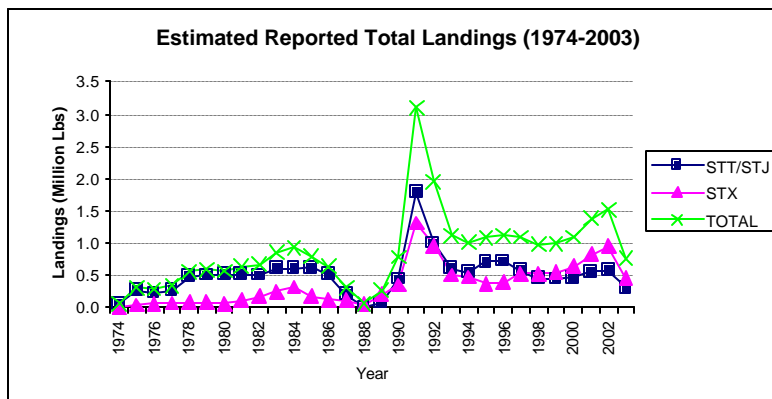
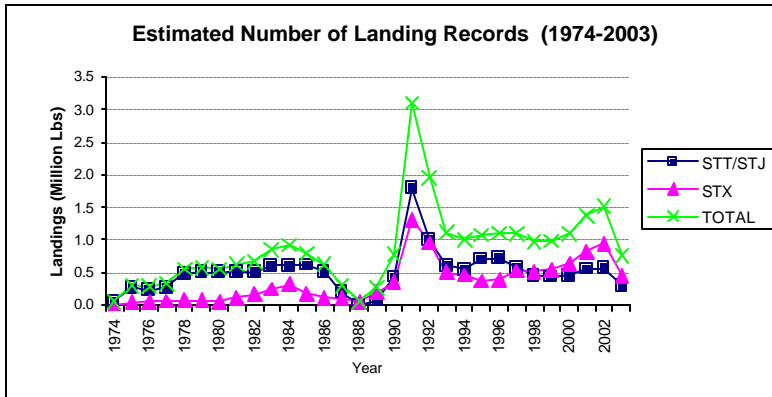


Figure 15. Estimated number of landing records, reported and expanded total landings for St. Thomas/St. John and St. Croix, years 1974-2003.

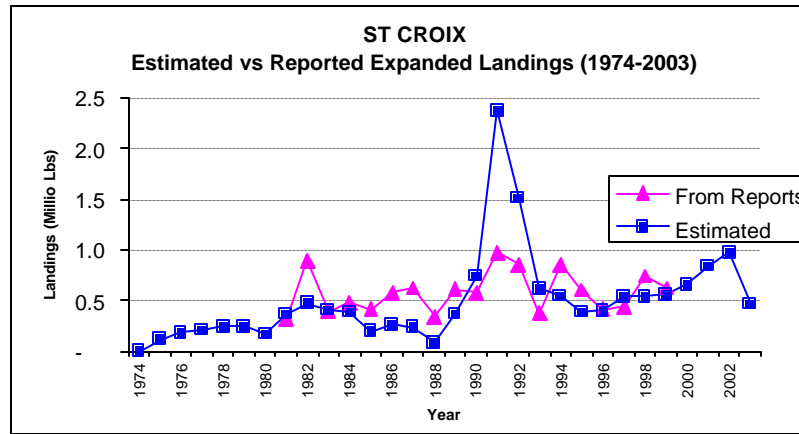
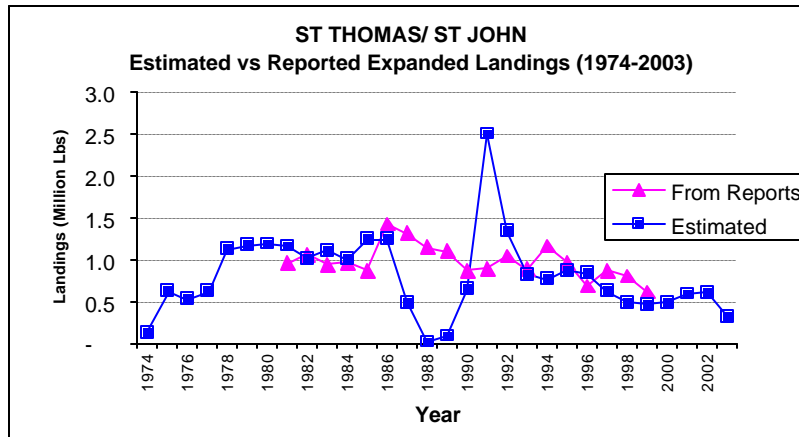


Figure 16. Comparison of estimated total landings and total landings taken from annual reports (DFW,1980-2001).

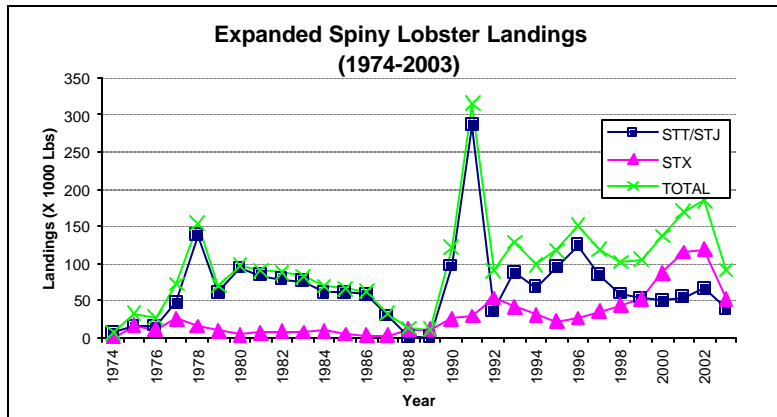
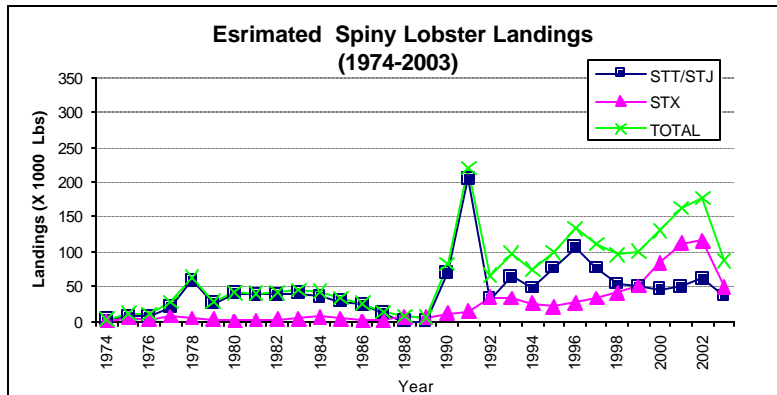
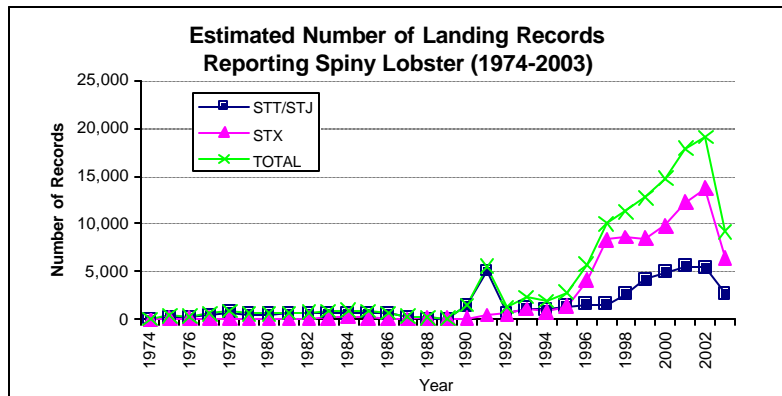


Figure 17. Estimated number of landing records reporting **Spiny Lobster**, estimated and expanded landings from 1974-2003.