Catch and effort statistics for the giant scallop (*Placopecten magellanicus*) fishery in the southern Gulf of St. Lawrence - historical review from 1923 to 1989.

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ABSTRACT

Lanteigne, M. and L.-A. Davidson, 1991. Catch and effort statistics for the giant scallop (*Placopecten magellanicus*) fishery in the southern Gulf of St. Lawrence - historical review from 1923 to 1989. Can. Tech. Rep. Fish. Aquat. Sci. 1804: 59 p.

The first giant scallop (*Placopecten magellanicus*) landings in the Gulf of St. Lawrence were officially recorded in the early 1900's. Prior to 1940, scallop landings records were sporadic but increased after the second world war. Peaks were observed in 1956 and 1957 (117 t and 115 t respectively), and were followed by a drop in 1960 (6 t). The most important landings occurred in 1970 (697 t). Since 1975, landings leveled off, varying between 161 t to 364 t annually. Landed values did not follow the same trends, mainly because of a sudden increase in price offered to fishermen by registered buyers, from early 1970's to 1986.

The giant scallop fisheries statistics were compiled by fishing area and province, for the different landing types (scallop meats, live scallops and scallop roes) and for the different sale slip (or sale transaction) types (standard, supplementary B's and supplementary A's). The landed quantities and values for the different types of landings are presented from 1968 to 1989. Most of live scallop and scallop roe landings were recorded in fishing areas having a summer fishing season.

Landings indicated on supplementary B sale slips (local sales estimates, not sold to registered buyers) are presented from 1982 to 1989. These estimated landings increased notably from 1982 to 1989. The highest proportions of landings reported on supplementary B sale slips were observed in Nova Scotia, ranging from 56.0% to 87.7% of the total scallop meat landed between 1986 and 1989.

The fishing effort was estimated by counting the number of active fishing vessels and the number of standard sale slips reported. The annual fishing effort ranged from 325 to 453 fishing vessels and from 3111 to 4815 sale slips between 1986 and 1989. The fishing effort was the highest in fishing areas 22 and 24.

Key words: giant scallop, *Placopecten magellanicus*, landings, catch, effort, Gulf of St. Lawrence, multi-year review.

RÉSUMÉ

Lanteigne, M. and L.-A. Davidson, 1991. Catch and effort statistics for the giant scallop (*Placopecten magellanicus*) fishery in the southern Gulf of St. Lawrence - historical review from 1923 to 1989. Can. Tech. Rep. Fish. Aquat. Sci. 1804: 59 p.

Les premiers débarquements officiels de pétoncle géant (*Placopecten magellanicus*) dans le Golfe du Saint Laurent ont été rapportés au début des années 1900. Avant 1940, les débarquements officiels de pétoncles étaient sporadiques mais, après la seconde guerre mondiale, ces derniers ont augmentés. Des maximums ont été observés en 1956 et 1957 (117 t et 115 t respectivement) et ont été suivis par une chute en 1960 (6 t). Les plus importants débarquements ont survenu en 1970 (697 t). Les valeurs au débarquement n'ont pas suivies les mêmes tendances, en raison d'une augmentation subite du prix offert aux pêcheurs par des acheteurs enregistrés, à partir du début des années 1970 jusqu'à 1986.

Les statistiques de pêche du pétoncle géant ont été compilées par districts de pêche et provinces ainsi que pour les différents types de débarquements (muscles de pétoncles, pétoncles vivants et gonades de pétoncles) et les différents types de récipissés d'achat (ou transactions d'achat: standards, supplémentaires B et supplémentaires A). Les quantités et valeurs au débarquement des différents types de débarquements sont présentées pour les années 1968 à 1989. La majorité des débarquements de pétoncles vivants et de gonades de pétoncles a été rapportée dans les districts de pêches ayant des saisons de pêche estivales.

Les débarquements indiqués sur récipissés supplémentaires B (estimations de ventes locales à des acheteurs non enregistrés) sont présentés pour les années 1982 à 1989. Ces débarquements estimés ont augmenté de façon appréciable de 1982 à 1989. Les plus importantes proportions de débarquements rapportés sur récipissés supplémentaires B sont observées en Nouvelle-Écosse et ont varié de 56.0% à 87.7% du total des débarquements de muscles de pétoncles entre 1986 et 1989.

L'effort de pêche a été estimé en comptant le nombre de bateaux de pêche actifs et le nombre de récipissés d'achat standards rapportés. L'effort annuel a varié de 325 à 453 bateaux de pêche et de 3111 à 4815 récipissés d'achat, entre 1986 et 1989. L'effort de pêche a été le plus élevé dans les districts de pêche 22 et 24.

Mots clés: pétoncle géant, *Placopecten magellanicus*, débarquements, captures, effort, golfe du Saint Laurent, revue pluriannuelle.

INTRODUCTION

The giant scallop (*Placopecten magellanicus*) fishery in the southern Gulf of St. Lawrence has always been a complementary fishery to the lobster and herring fisheries, which are often considered as the major coastal fisheries. Scallop fishermen usually hold more than one fishing licence, allowing them to harvest different species. The scallop fishery is presently an important component of the overall coastal fishing activities in the southern Gulf and is an important contributor to the economy of coastal areas. Since 1980, giant scallop landings have ranged from 175 to 250 t annually (meat or adductor muscle weight), contributing two to three million dollars to the local economy.

There is little historical information on the giant scallop fishery for the Gulf of St. Lawrence. The first giant scallop official landing statistics in the southern Gulf can be found in the early 1900's. At that time, the fishery was characterized by notable annual landing fluctuations. During those years, the fluctuations were probably the result of an irregular fishing fleet, coming mainly from outside the Gulf region, and the difficulty of collecting and recording landing statistics. In the early 1960's, the landing statistics data acquisition program expanded, resulting in improved quality and quantity of data collected. Since 1984, landing statistics have been compiled for each sale transaction conducted. The quantity fished (catch) and the number of vessels involved in the fishery (effort) can now be estimated.

An historical overview of the giant scallop landing statistics in the southern Gulf of St. Lawrence, is presented for the years 1923 to 1989, with a detailed analysis for the years 1968 to 1989. The catch and effort data were classified and grouped to provide detail information for each province and fishing area. The information presented will be useful for fishery biologists, economists, fishery managers and the industry.

MATERIALS AND METHODS

Fisheries statistics are obtained by compiling the data recorded on special sale transaction receipt forms (or "sale slips"), when a fish product (fish, molluscan, crustacean) is sold by a fisherman to a registered buyer. The scallop landings statistics from 1923 to 1967 were gathered from the Fisheries Statistics of Canada - Annual Reports. For 1968 to 1989, the original computerized data files were used.

Geographic categories

The giant scallop landing statistics presented are for the southern gulf of St. Lawrence (NAFO area 4T), which is bordered by the provinces of Nova Scotia, New Brunswick and Prince Edward Island (Figure 1). The region is divided into four (4) scallop fishing areas, which are managed individially, and further sub-divided into statistical districts. The smallest geographical unit used in the present report is the statistical district. Sale slip data were compiled and sorted by statistical district, as indicated by the landing site. The statistical districts were grouped into fishing area and province categories (Table 1). The landings recorded in district 88, which are shared between fishing areas 23 and 24, were included in district 24 only.

Product types and sales slip types

Prior to 1967, scallop landings were reported as scallop meat (adductor muscle). Since 1967, the fisheries statistics identify three (3) types of scallop landings (products): meat, roe and live (Tables 2 and 3).

Landings for the years 1923 to 1946 were compiled for each province and the landings reported in units of "gallon of scallop meat" were converted to kilograms of meat by using a multiplicative factor of 4.6721 (1 gallon of scallop meat = 10.3 pounds, 1 pound = 0.4536 kg). From 1947 to 1989, the fisheries statistics were compiled for each statistical district, fishing area and province, and landings reported in pounds were converted to kg using a multiplicative factor of 0.4536

Since 1968, the Program Coordination and Economics Branch (section of Statistics and Electronic Data Processing Systems) had compiled landings by landing type (Tables 2 and 3) and converts landings into a common landing type which is equivalent to the live type. Meat weight is converted to live weight using a multiplier of 8.3. The scallop roe landings are considered as live weight landings and the conversion factor is not applied. In this review, the detailed analysis of the scallop landing statistics from 1968 to 1989 was conducted on the landed quantities in their original landing types rather than the converted live weight type.

In 1982, the fisheries statistics data acquisition program was further modified. Sale transactions were classified in three (3) types; "standard", "supplementary B" and "supplementary A" (Table 4). The Commercial Fishing Vessel (CFV) number for each vessel was also recorded on each sale transaction form. Therefore, it was possible to estimate the number of vessels involved in the fishery. This last modification was not fully implemented until 1985.

All landing statistics are presented in kilograms, in their landed forms (Table 3), as recorded on the sale transaction. To reduce rounding errors, conversion from pounds to kg were expressed to the nearest 0.1 kg. The landings compiled by district and province were rounded to the nearest kg.

Landed value and average price.

From 1968 to 1983, the average price/kg offered to the fishermen was calculated for each statistical district by using the data compiled on a monthly basis. From 1984 to 1989, the average price/kg was calculated by using the information available on each sale slip. The information compiled for each statistical district was used to calculate the landed value and average price/kg by fishing area and province. The type of landings and the type of sale slips were analysed separately.

Estimates of fishing effort.

The number of vessels involved in fishing activities and the number of sale transactions for each vessel were estimated for the years 1985 to 1989, by sorting the fisheries statistics by CFV numbers. The results were grouped for each fishing area and province where scallop products were landed. The information was compiled and used to construct sale transactions frequency tables.

RESULTS AND DISCUSSION

From 1923 to the early 1980's, the scallops sold in one particular fishing area did not imply that they were caught in the same fishing area. Fishermen were allowed to fish in the entire Gulf of St. Lawrence. Therefore, it is impossible to locate the source of the catches. In the early 1980's, new legislations were put in place to confine fishing activities of each fisherman to one particular fishing area. For the present analysis, it was assumed that the scallops sold in one fishing area were caught in the same fishing area. It is known that fishermen are still allowed to sell scallops in any district they choose, but it is not a common practice.

The historical fisheries statistics are compiled and summarized for three geographical entities:

- Entire southern Gulf
- By fishing area
- By province.

The landed quantities, landed values, prices per unit of weight and number of sale slips by statistical district, are presented in Appendix I.

Scallop meat landings - 1923 to 1989.

The fisheries statistics from 1923 to 1989, for the entire southern Gulf, are presented in the Figures 2 and 3. Prior to 1940, the giant scallop landings in the southern Gulf of St. Lawrence were sporadic, but increased after the second world war (1945). It is assumed that the southern Gulf scallop fishery and the fleet were getting more structured.

Landings reached a first peak in 1956 and 1957, with 117 t and 115 t of scallop meat per year respectively. The peak was followed by a dramatic drop to 6 t in 1960. The decrease could have been the result of a decrease in fishing effort. Similar decreases in the Gulf of St. Lawrence, but with less amplitude, have also been described by Dickie and Medcof (1963) as the result of mass mortalities of scallops caused by lethally high water temperatures. Mass mortalities observed by these authors were mainly in the Northumberland Strait, in the area including the present fishing area 22 and 24. Following the low landings from 1960 to 1963, scallop meat landings increased in areas 22 and 24 and started to be recorded in districts 21 and 23 (Figures 4 and 5). By 1970, the landings for the entire southern Gulf of St. Lawrence had reached 697 t. Afterward, landings decreased steadily and since 1975, landings have varied between 161 to 364 t.

The landed values did not follow the same trends as the landings of scallop meat (Figure 3). From 1968 to 1980, landed values fluctuated from 0.6 to 1.8 million dollars but jumped to 3.5 million dollars in 1981. This sudden increase was mainly due to the increasing price/kg offered to the fishermen, which began to increase in 1978. Substancial decreases in landed values in 1988 and 1989 were due to a combination of decreased catches and lower price/kg.

The landed quantities and values for each fishing area are presented in Figures 4 and 5 respectively. The general trends of the variation of scallop meat landed quantities and values

for district 21, 22 and 24 are similar to the trends observed for the entire southern Gulf. The landed quantities in district 23 (Figure 4) do not follow the general trends mainly due to sporadic fishing effort. A notable quantity of scallop meat was landed in 1965, 1981 and 1985 from district 23. In the 1980's, the higher price offered for the product probably motivated the fishermen.

The general trends of scallop meat landed quantities and values by province are similar to those for the entire southern Gulf of St. Lawrence (Figures 6 and 7). Most of the scallop meat was landed, almost equally, in the province of New Brunswick and Prince Edward Island (Figure 7). Since 1970, landings in Nova Scotia have been notably lower than the other provinces.

Live scallop and scallop roe landings - 1968 to 1989.

Starting in 1967, live scallops and scallop roe landings have been recorded. However, due to technical difficulties with the data for 1967, the information analyses started in 1968.

Landings of live scallop and scallop roe have been sporadic for the southern Gulf. Prior to 1970, notable amounts of live scallops were landed in every fishing area and province (Tables 5 and 6). From 1971 to 1989, small quantities of live scallops were recorded and scallop roe landings were recorded in 1979 (Table 6). The scallop roe landings have been recorded almost exclusively in district 21, in the province of New Brunswick.

Most of the scallop roe and live scallop landings are recorded in fishing areas having a summer fishing season. From early spring to summer (July - August), the scallops are developing their gonad (or roe) in preparation for spawning in August - September (Bourne, 1964). The market demand is for a plump and firm roe, which coincides with peak development.

Scallop meat supplementary B's and A's landings - 1982 to 1989.

Since 1982, the Department of Fisheries and Oceans field staff have provided estimates of the quantity and value of scallop products sold outside the network of registered buyers (i.e. local sales). These estimates of scallop meat landed are called supplementary B's. The detailed information for each district and landing type is presented in Appendix II.

The proportion of scallop meat supplementary B landings has increased since 1982. Estimates of the quantity of scallop meat landed by fishing area represent from 28.2% to 46.9% of the total scallop meat landed in 1989 (Figure 8). For the provinces, supplementary B landings follow the same trend as observed for the fishing areas (Figure 9). Nova Scotia shows the highest proportions of supplementary B landings, ranging from 56.0% to 87.7% between 1986 to 1989 (Figure 9).

The high proportions of Supplementary B's for Nova Scotia are certainly the result of socio-economic factors. Following discussions with DFO representatives and fishermen in Nova Scotia, it was mentionned that most of the Supplementary B's were reported during the fall fishery in district 24. Catches are sold locally, usually at a higher price than what registered buyers offer, and official records of transactions are not kept.

Supplementary A's sale slips are sporadic from year to year (Appendix II) and the total Supplementary A landings represent a negligible portion of the overall scallop landings.

Fishing effort - 1986 to 1989.

Since 1984, the CFV number has been recorded on each sale transaction form. However, the information was not recorded consistently until 1985-1986. Assuming that the landed quantity recorded on one sale slip is the catch of one fishing day and that each CFV number represents one fishing vessel, the number of sale slips and different CFV numbers can provide a rough estimate of the number of fishing days, and of the number of active fishing vessels. The calculations were conducted for the years 1986 to 1989. The number of vessels and sale transactions for the entire southern Gulf are illustrated in the Figure 10. The information by fishing area and province is presented in Appendices III and IV.

The annual number of active vessels (showing one or more sale transactions) within the southern Gulf, has ranged between 325 and 453, from 1986 to 1989 (Figure 10). The fishing effort is the most important in the fishing areas 22 and 24, where the number of active vessel fluctuates between 108 and 224 (Appendix III).

The frequency distributions of the number of active fishing vessels in relation to the number of sale transactions, show similar patterns from 1986 to 1989 (Figure 10). During 1986 to 1988, 35% to 42% of the vessels conducted 6 to 10 sale transactions per year. All reported vessels and sale transactions conducted outside the Gulf Region jurisdiction, were not considered in Figure 10 but, are presented in Appendices III and IV.

CONCLUSION

When using the scallop fishery statistics to assess the health of the fishery or to conduct a biological assessement of the scallop populations, care should be given to the quality of the information used. The historical and more recent landing data available from official reports, have presented landings without considering the different types of sale slips. As discussed earlier, since 1984, a portion of the landings reported in the official statistics, are estimates (supplementary B's). It is presently impossible to validate these estimates and the use of landing values, without considering the estimated portion, may lead to erronous interpretations.

Not knowing or considering the different types of landings is another source of error when using the scallop fishery statistics. The majority of the official fishery statistics reports have presented landings in scallop meat weights or scallop live weights. The 8.3 conversion factor used to transform meat weights into live weights can be considered as a good biological approximation of the total animal weight-meat weight ratio. However, using the same factor to convert scallop roe landings into meat weights is probably not reliable.

Users of fisheries statistics should be aware of their needs and options. If an overview of the landings is required, the information generally provided by the Program Coordination and Economics Branch would be adequate. If detailed information on the catch is required, than the information can be obtained by sorting landing types and sales slip type. The effort information is presently estimated in terms of number of active fishing vessels and number of sale transactions. However, the effort information must be used with caution. These estimates do not include the estimated portion of the landings (supplementary B's) and may not be representative of the fishing areas and provinces where there are high estimated landings.

ACKNOWLEDGEMENTS

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TABLE 1. Statistical districts used to calculate quantities and values for each fishing area and province.

	Statis	stical		Statistical Districts		
Fishing areas 21 22 23	Distri	cts	Provinces			
21	63	68	New Brunswick	63	73	
	64	70		64	75	
	65	71		65	76	
	66	72		66	77	
	67	73		67	78	
				68	80	
22	45	80		70		
	7 5	82		71		
	76	83				
	77		Prince Edward	82	88	
	78		Island	83	92	
				85	93	
23	92	95		86	95	
	93	96		87	96	
24	1*	14*	Nova Scotia	1*	12	
	2	46		2	13	
	3	85		3	14*	
	10	86		10	45	
	11	87		11	46	
	12	88				
	13					

^{*} Districts which are not in the Gulf Region jurisdiction, but in which some fishermen have a scallop fishing licence allowing them to fish and to sell scallop in the Gulf Region.

TABLE 2. General description of the data and of the changes introduced to the fisheries statistics data acquisition program, from 1923 to 1989.

Years	Descriptions
1923 - 1946	The data are compiled annually by county and province. Landings are reported in "gallon of scallop meats".
1947 - 1966	The data are compiled annually by statistical district and province. Landings are reported in "pounds of scallop meats".
1967 - 1976	The data are compiled monthly by landing port, statistical district and province. Landings are reported in pounds and kilograms in computerized data bases, and the different landing types (see definition in Table 3) are identified (meat, roe or live).
1977 - 1981	The information from each sale transaction (sale slip) is compiled. Landings are reported in pounds and kilograms in computerized data bases, and the different landing types (see definitions in Table 3) are identified (meat, roe or live).
1982 - 1983	The information from each sale transaction (sale slip) is compiled. Landings are reported in pounds and kilograms in computerized data bases, by landing type (see definitions in Table 3) and sale slip type (standard, supplementary B's or supplementary A's, see definitions in Table 4).
1984 - 1989	The information from each sale transaction (sale slips) is compiled. Landings are reported in pounds and kilograms in computerized data bases, by landing type (see definitions in Table 3) and by sale slip type (see definitions in Table 4). The Commercial Fishing Vessel (CFV) number is recorded for each sale slip.

TABLE 3. Types of landings reported and recorded in the fisheries statistics data bases, since 1967.

Landing types	Descriptions
Meat	Landings consisting of scallop adductor muscles only. It implies that the scallops are shucked at sea (viscera and shells removed at sea).
Roe	Landings consisting mainly of female gonads. The product is usually sold attached to the adductor muscle.
Live	Landings consisting of scallops sold live, not shucked (often refered as "live weight or shell weight").

TABLE 4. Types of sale slips used to record sale transaction information in the fisheries statistics data bases, since 1984.

Sale transactions	Descriptions
Standard	Standard purchase slips are official records of all regular transactions between fishermen and registered buyers. A standard purchase slip is filled-in by the registered buyer with the following information: fisherman's name, fisherman's address, CFV number, place landed, date landed, buyer's identity, quantity landed, species, form landed, price and purchase value.
Supplementary B	These are landing estimations of product not sold to a registered buyer and not reported on standard sale transactions. Supplementary B's forms are used to estimate scallop products sold locally. These estimations are provided by Fisheries and Oceans representatives working in the field, mainly fishery officers.
Supplementary A	These sale transactions are conducted with a registered buyer, but not on a regular basis. The buyer will request special permission to conduct one or multiple transactions. A supplementary A transaction can include the catch of more than one fisherman and CFV numbers are often not indicated.

TABLE 5. Live scallop (A) and scallop roe (B) landings, and landed values compiled from standard sale slips, in fishing areas 21, 22, 23 and 24, from 1968 to 1989.

	FISHING 21		FISHING A	REA	FISHING AI	REA	FISHING AF	REA	FIS	HING A	AREA	FISHII	NG ARE	A	FISHI	NG AI	REA	FISH	ING AF	₹EΑ	
Years	t	\$ x 1000	t _\$:	x 1000		1000		x 1000	t	\$>	1000	t	\$ x 100	00	t		1000	t	\$ 2	c 1000	
1968	2.8	•	3,785.6	531.1	40.4	4.9	1,147.1	168.1													
1969			0.1	0.03			157.0	18.8													
1970	1.4	0.3	_	_			0.8	0.1													
1971	0.3	0.08																			
1972																					
1973			0.7	0.07																	
1974																					
1975					_																
1976							4.3	13.2													٦
1977			0.3	1.4			19.0	6.6		_											ι α
1978								Ш												$oxed{oxed}$	
1979	_								0	.4	2.3	5.6	31	.0					_	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$	
1980									3	.5	19.8										
1981									11	.3	70.3						<u>.</u>			<u> </u>	
1982									0	.8	3.4										
1983									2	.3	8.6										
1984	4.1	50.1	11.2	172.0	0.6	7.3	3.9	42.0													
1985	0.6	1.3					0.2	0.4	2	3	19.0	0.8	8.	3							
1986	9.9	13.1					0.2	0.4	4	.6	39.0										
1987									2	1.3	20.4								_		
1988			0.05	0.4	<u> </u>		0.06	0.6	0	.1	1.1	0.8	6.	0							
1989									11	.1	91.1										

^{* =} missing information

TABLE 6. Live scallop (A) and scallop roe (B) landings, and landed values compiled from standard sale slips, in Nova Scotia, New Brunswick and Prince Edward Island, from 1968 to 1989.

A B

	NOVA SCO	TIA	NEW BRUNS	WICK	PRINCE EDWARD IS.		NOVA SCOTIA		NEW BRU	NSWICK	PRINCE EDWARD IS		
Years	t	\$ x 1000	t	\$ x 1000	t	\$ x 1000	t	\$ x 1000	t	\$ x 1000	t	\$	
1968	1,502.4	187.5	700.5	112.3	2,773.1	404.2							
1969	155.8	18.6	1.4	0.2									
1970	0.8	0.1			1.4	0.3							
1971			0.3	0.08									
1972													
1973			0.7	0.07									
1974													
1975													
1976	4.3	13.2											
1977	19.0	6.6			0.3	1.4							
1978													
1979									6.0	33.4			
1980									3.5	19.8			
1981									11.3	70.3			
1982									0.8	3.4			
1983									2.3	8.6			
1984	1.8	14.1	11.7	143.2	6.2	114.2							
1985			0.6	1.3	0.2	0.4			3.0	27.3			
1986	0.2	0.4	9.9	13.1					4.6	39.0			
1987									2.3	20.4]	
1988	0.06	0.6	0.05	0.4					0.9	7.1			
1989									11.1	91.1			

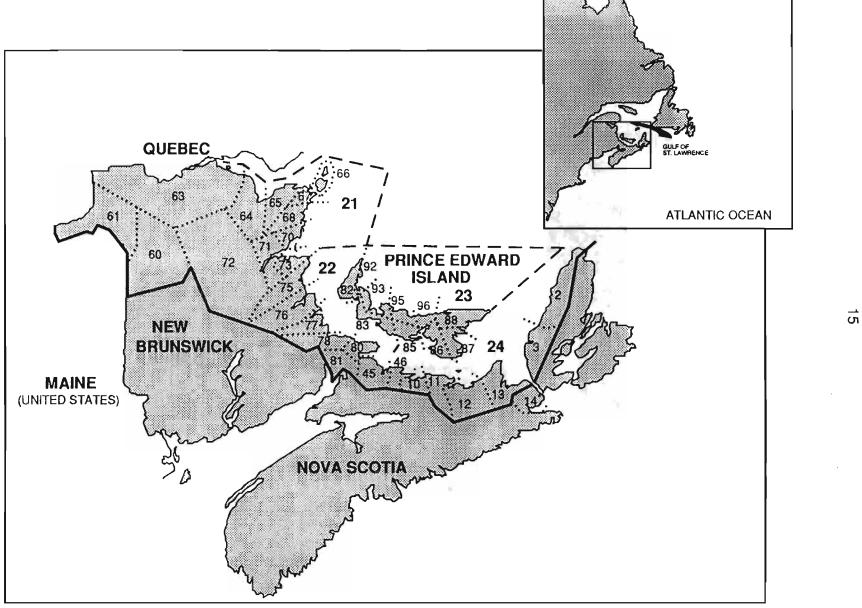


FIGURE 1. Gulf Region boundary (—), fishing areas (- -) and statistical districts (·····) in the southern Gulf of St. Lawrence.

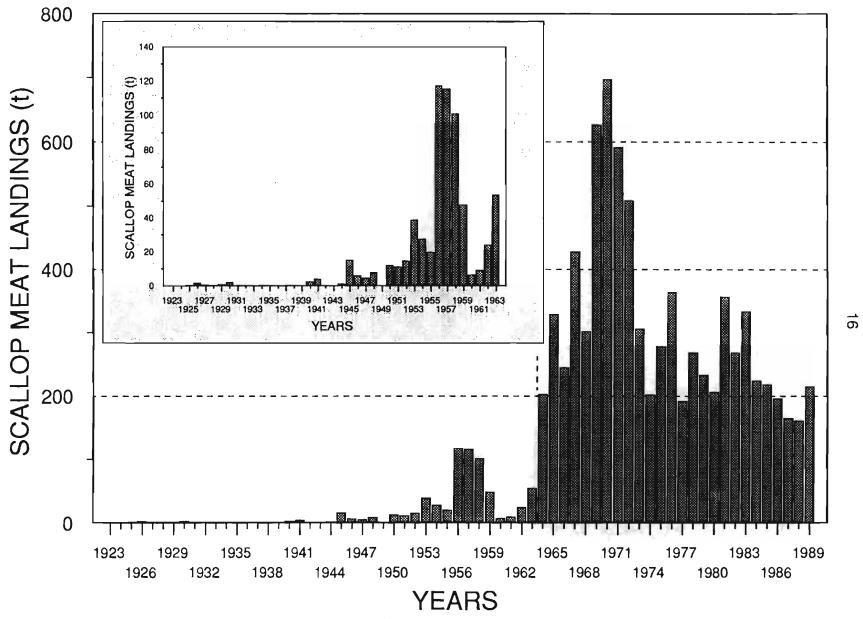


FIGURE 2. Scallop meat landings in the southern Gulf of St. Lawrence from 1923 to 1989 (Inset: detail scallop landings from 1923 to 1963).

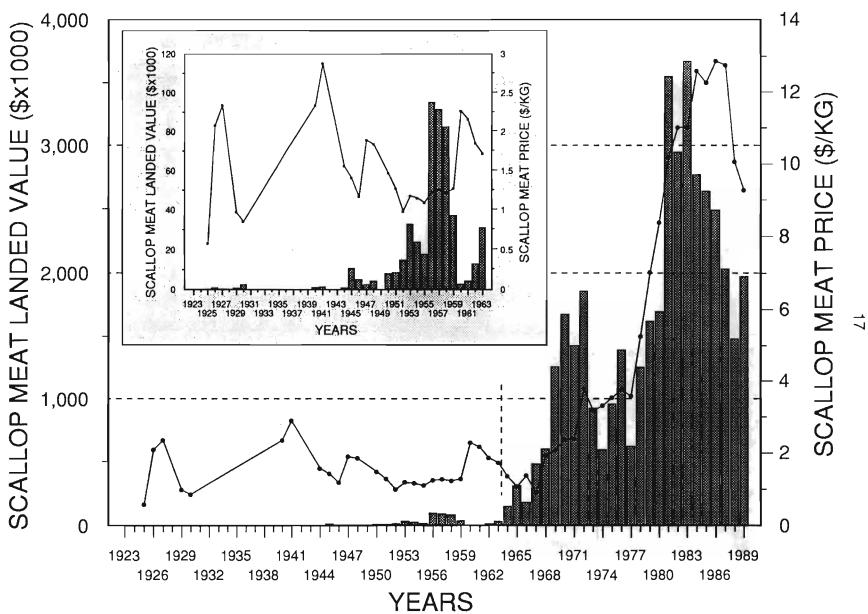


FIGURE 3. Scallop meat landed values and price/kg offered to the fishermen from 1923 to 1989 (Inset: detailed landed values and price/kg from 1923 to 1963).

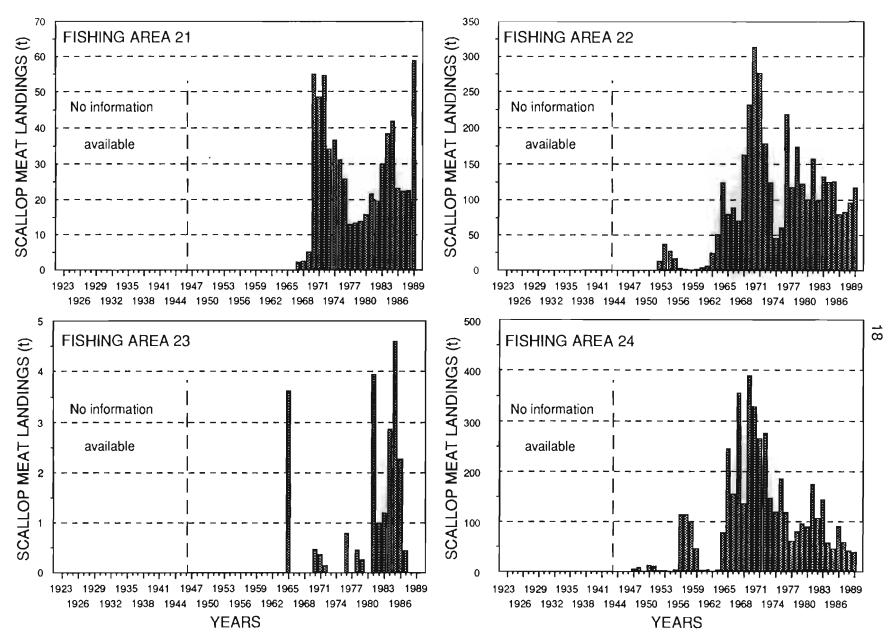


FIGURE 4. Scallop meat landings in fishing areas 21, 22, 23 and 24, from 1947 to 1989. (Prior to 1947, the landings could not be sorted by fishing area.)

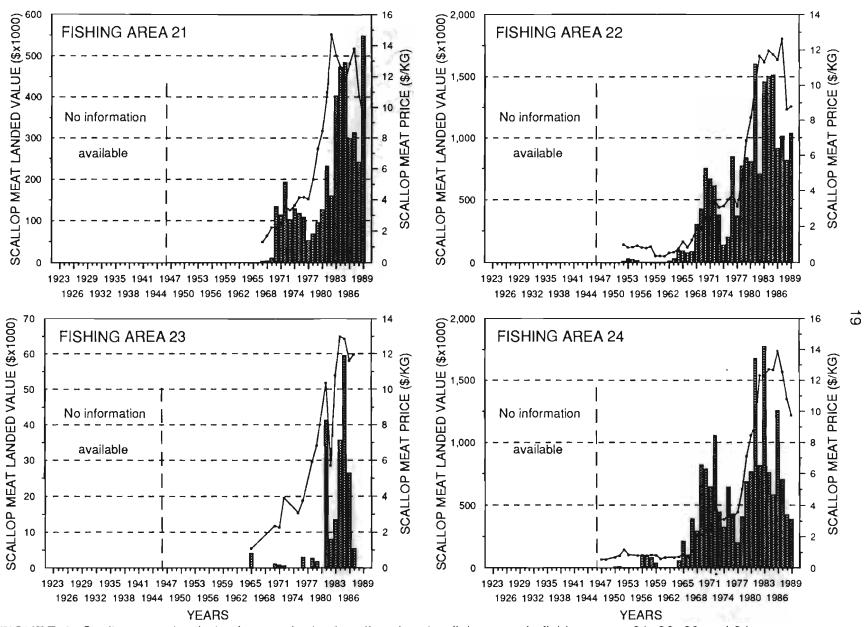


FIGURE 5. Scallop meat landed values and price/kg offered to the fishermen, in fishing areas 21, 22, 23 and 24, from 1947 to 1989. (Prior to 1947, the data could not be sorted by fishing area.)

landed value
price.



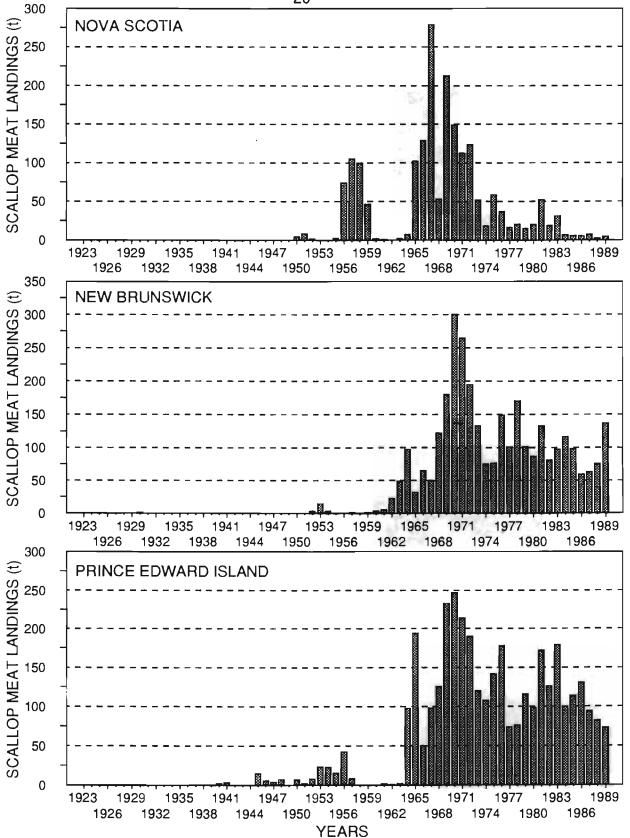


FIGURE 6. Scallop meat landings in Nova Scotia, New Brunswick and Prince Edward Island, from 1923 to 1989.

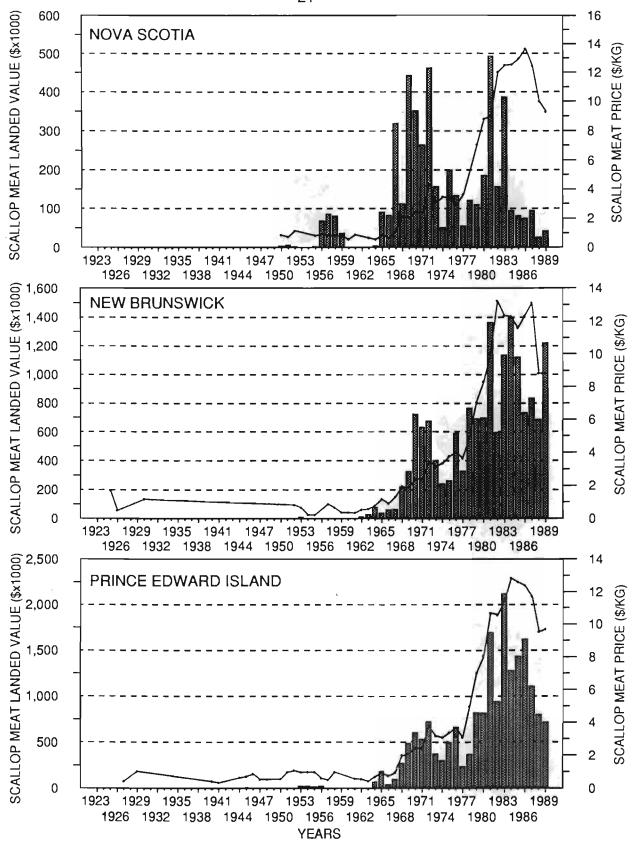


FIGURE 7. Scallop meat landed values and price/kg offered to the fishermen in Nova Scotia, New Brunswick and Prince Edward Island, from 1923 to 1989.

landed value
price.

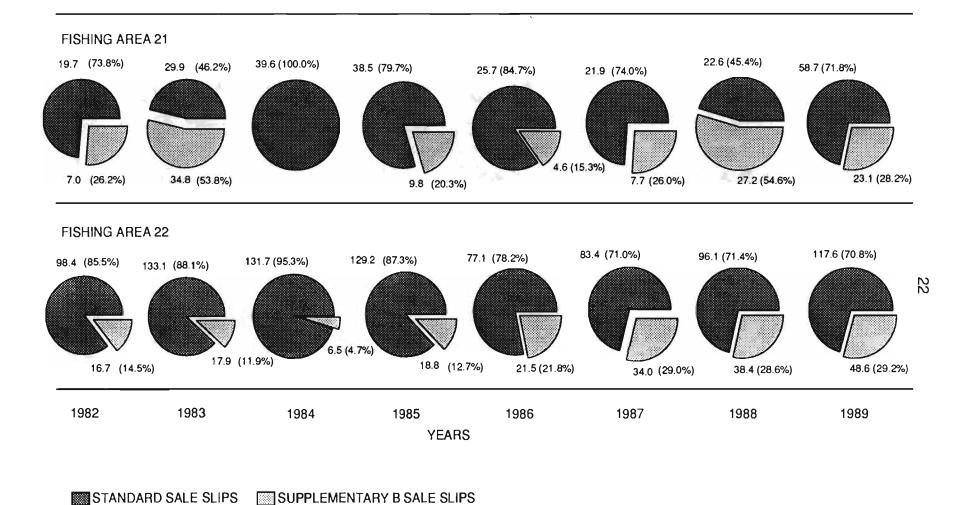
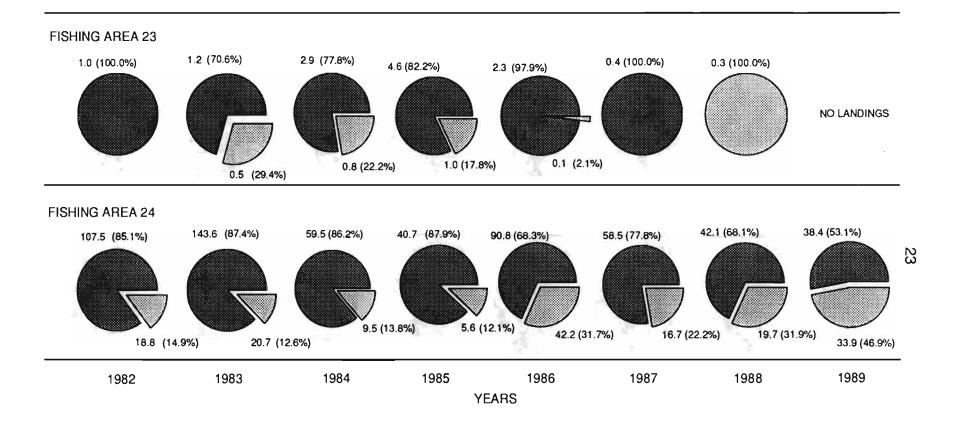


FIGURE 8. Quantities (t) and proportions of scallop meat landings reported onstandard and supplementary B sale slips in fishing areas 21, 22, 23 and 24, from 1982 to 1989.



STANDARD SALE SLIPS SUPPLEMENTARY B SALE SLIPS

FIGURE 8 (continued). Quantities (t) and proportions of scallop meat landings reported on standard and supplementary B sale slips in fishing areas 21, 22, 23 and 24, from 1982 to 1989.

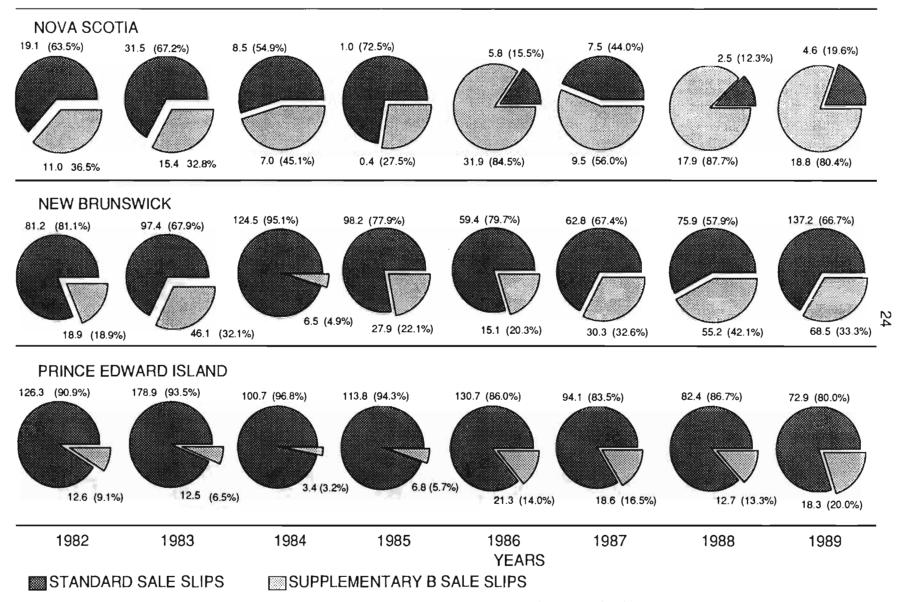


FIGURE 9. Quantities (t) and proportions of scallop meat landings reported on standard and supplementary B sale slips in Nova Scotia, New Brunswick and Prince Edward Island, from 1982 to 1989.

, .

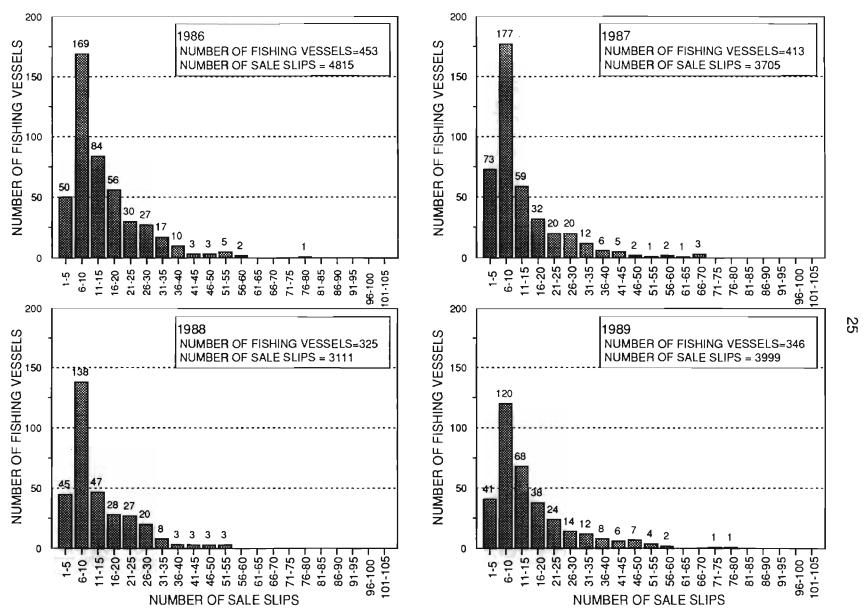


FIGURE 10. Fishing effort as indicated by frequency distributions of fishing vessels as a function of the number of standard sale slips reported, from 1986 to 1989 (all landing types combined).

Appendix I. Scallop landings, landed values and price/kg by statistical district, and landing type, from 1968 to 1989. (n = number of monthly reports, sale slip types were not indicated).

1968

Districts	Meat	n	Live	n	Roe	п	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
Districts	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)	
1	1,154.4	7					2,475	2.12				
2						1						
3												
10												
11	40,084.6	12	700,528.5	11			83,855	1.99	112,320	0.17		•
12	7,132.9	7					15,725	2.21				
13	4,592.7	5					10,125	2.21				
14												
45												_
46	70.3	3					145	2.04				
63												
64												
65	2,524.3	1					4,335	1.72				
66												
67			2,805.5	1								
68												
70												
71												
72												
73	_											
75												
76	80,840.6	20	1,960,579.4	15			148,610	2.05	290,205	0.15		
77	2,159.1	6	208,277.2	7			5,260	2.27	29,985	0.15		
78	13,932.3	15	599,666.0	13			21,745	1.87	83,745	0.15		
80	22,759.4	21	1,725.9	1			40,795	1.85	285	0.17		
82	33,346.4	11	885,622.2	18			67,575	1.69	112,730	0.13		
83	9,691.2	9	129,763.6	5			16,225	1.70	14,135	0.11		
85					_							
86	5,146.1	5	102,704.1	4			11,175	2.17	12,980	0.12		
87	77,003.1	22	234,948.9	13			168,570	2.17	30,525	0.13		
88	836.9	5	108,945.6	18			1,835	2.19	12,270	0.12		
92			40,384.0	2				1 1	4,860	0.12		
93												
95												
96												

⁼ missing information

Appendix I (continued). Scallop landed, landing values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of monthly reports, sale slip types were not indicated).

1303												1000
D:	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
Districts	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)	
1	2,522.0	14					4,375	2.10				
2							_					
3	6,130.4	13					12,925	2.14				
10												
11	192,224.3	9	1,363.1	1			400,535	2.07	215	0.16		
12	7,207.7	8					15,130	2.15				
13	3,107.2	10					6,690	2.12				
14	1,392.6	4					3,170	2.14				
45												
46	65.8	1					125	1.90				
63												
64	5,087.1	3					11,485	2.23				
65												
66												
67												
68												
70			_							1 1		
71									_			
72												
73												
75												
76	66,150.8	15					124,535	1.96	_			
77	34.0	1					45	1.32		1 1		
78	17,953.5	12					30,655	1.93	_	1		
80	91,277.9	24					160,870	1.95				
82	31,645.4	23	115.7	1			59,935	1.97	25	0.22		
83	24,716.7	14					47,290	1.96				
85				1				1 1		1 1		
86	46,866.0	10	107,596.2	7		-	101,650	2.17	12,455	0.12		
87	122,481.1	30	45,035.7	7			258,800	2.07	5,385	0.11		
88	7,300.7	15	3,034.6	4			15,165	2.12	780	0.25		1
92							·	1 1		1 1		
93								1		1 1		
95	-					1 1		1 1		1 1		
96	**	1 1		\top				1 1		1 1		

Appendix I (continued). Scallop landed, landing values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of monthly reports, sale slip types were not indicated).

1970

	Most						Most	# Ava	
Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	L
	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)	+	(9
1	805.1	3		+			1,865	2.32	
2	38.6	1		→			85	2.21	
3	2,004.9	4				\perp	4,870	2.40	
10								\bot	
11	138,837.9	80					327,520	2.43	
12	5,350.2	7					12,865	2.41	
13	1,610.3	6					3,800	2.35	
14									
45	97.5	1					245	2.51	
46	34.0	1					85	2.50	
63									
64	8,294.1	7	753.0	2			20,105	2.42	_ 1:
65	7,838.2	14	548.9	2			18,890	2.42	1
66									
67									
68	18,860.7	10	52.2	1			45,670	2.44	
70	19,940.3	4					48,930	2.41	
71	_								
72									
73	14,603.7	5					35,455	2.43	
75	3,957.7	5					9,615	2.43	
76	128,849.6	22					306,460	2.36	
77	213.2	2					520	2.43	
78	1,283.7	10					3,205	2.51	
80	97,288.1	30	_				234,520	2.41	
82	54,649.7	28					132,500	2.43	
83	12,170.1	12		1 1			28,505	2.46	
85	163.3	2	494.4	2			390	2.40	
86	31,085.2	10		1 1			75,310	2.43	
87	139,928.8	35	315.3	1			339,905	2.40	
88	8,754.5	18					21,270	2.53	
92	471.7	2	_	+ +			1,120	2.36	
93	771.7	+- -		+		+	1,1.25	+	
95				+ +		+		+ +	
96		 		+		+		+ +	
90									

					1370
Meat	\$/kg	Live	\$/kg	Roe	\$/kg
(\$)		(\$)		(\$)	
1,865	2.32				
85	2.21				
4,870	2.40				
327,520	2.43				
12,865	2.41		1		
3,800	2.35				
245	2.51				
85	2.50				
20,105	2.42	120	0.18		
18,890	2.42	130	0.24		
_					
45,670	2.44	45	0.86		1
48,930	2.41				
35,455	2.43				
9,615	2.43			_	
306,460	2.36			_	
520	2.43				
3,205	2.51				
234,520	2.41				
132,500	2.43				
28,505	2.46				
390	2.40	90	0.18		
75,310	2.43				
339,905	2.40	45	0.14		
21,270	2.53				\top
1,120	2.36		\top		
-,			1		
	\top				
_	+				

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Appendix I (continued). Scallop landings, landed values and price/kg by statistical district, and landing type, from 1968 to 1989, (n = number of monthly reports, sale slip types were not indicated).

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
DISTICES	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)	
1	741.6	3					1,725	2.32				
2								1				
3	81.6	2					200	2.35				
10												
11	90,264.1	79					210,745	2.44				
12	15,669.6	9					38,015	2.42				
13	5,615.6	12					13,610	2.52				
14												
45												
46												
63	8,693.2	7					18,605	2.38				
64	9,852.2	8					22,470	2.25				
65	3,102.6	10	319.8	1			7,490	2.58	75	0.24		
66	_											
67	537.5	3					1,335	2.54				
68	26,365.5	15					63,405	2.33				
70	-				-							
71												
72												
73	7,425.4	6					17,920	2.38				
75	3,095.8	5					7,475	2.49				
76	101,477.1	25					241,545	2.39				
77	258.6	2					600	2.33				
78	2,227.2	10					5,490	2.34				
80	101,894.4	23					246,635	2.36				
82	47,632.5	30					115,210	2.41	<u></u>			
83	12,247.2	10					29,790	2.41	_			
85												
86	16,322.8	9					39,835	2.43				1
87	123,882.7	38		1			311,760	2.48				1
88	13,553.6	26					31,180	2.35				1
92	362.9	4					830	2.28		<u> </u>		1
93				1 -								
95												
96											-	1 -

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989, (n = number of monthly reports, sale slip types were not indicated).

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg	
-	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)	+	(\$)		
1		\vdash				+				+			
2		├ ──											
3		↓						\perp		+			1
10		\vdash		\perp						\perp			-
11	95,691.5	106					355,270	3.76		+			1
12	16,018.9	9					61,915	3.92		+			
13	11,201.7	15					43,195	3.77		+			1
14										+			1
45		\vdash								+			
46	365.1	1				<u></u>	2,205	6.04		+			
63	4,805.9	9				 	15,655	3.26					1
64	10,677.7	10					32,470	3.34		\perp			
65	22,605.2	23				\perp	82,395	3.67					1
66													ی ا
67	163.3	2					640	3.87					2
68	16,252.5	14					61,740	3.73					
70													
71													1
72													
73	26,807.8	16	_				100,030	3.79					
75	9,899.8	13					33,185	3.40					
76	58,596.0	20					202,690	3.50					
77	93.0	1					265	2.85					
78	1,460.6	8	•				5,170	3.45					
80	43,545.6	24					141,540	3.57					
82	28,257.0	23					97,465	3.59					ı
83	9,219.4	9					29,665	3.55					
85													l
86	15,805.7	9				<u> </u>	61,115	3.89					
87	111,937.1	31				7 1	435,345	3.77		 		1 -	
88	25,068.2	43				 	95,105	3.88		1		\top	
92	147.4	3					575	3.92		\top			
93										1 1			
95							-	\top		1	_	\top	1
96		\vdash				 				+	-	-	1

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of monthly reports, sale slip types were not indicated).

1973

Districts	Meat	n	Live	п	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$
DISTRICTS	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)	
1											• • •	
2	2,778.3	5	<u>-</u> _				8,165	3.11				
3	1,437.9	10					4,150	2.91				
10	-											\top
11	43,581.9	28					131,270	3.04				
12	1,272.3	9					4,720	3.38				
13	2,837.3	9					8,145	2.91				
14												
45									·			
46												П
63	4,121.0	5					14,965	3.63				
64	14,782.8	8					41,580	2.76				
65	721.2	6					2,930	4.11				\Box
66												
67	233.6	1					665	2.85	_			
68	14,283.9	12					41,820	3.03				\top
70	6.8	1	_				25	3.67				\neg
71												
72									_			
73	11,548.7	4					33,060	3.00				
75	6,926.5	12					21,010	2.96				
76	36,916.2	13	678.1	1			106,375	3.03	65	0.10		
77	1,038.7	2					3,160	3.02				
78	2,565.1	7					7,630	2.98				
80	40,272.9	25					126,145	3.04				
82	19,175.9	13					58,880	3.08				7
83	5,729.0	8					19,000	3.39				\top
85	315.3	1					1,065	3.38				\neg
86	5,109.8	7					15,015	3.04				\neg
87	86,211.2	30	_	1 1		1	263,110	3.16				\top
88	3,347.6	22	-				9,880	3.15				\top
92						1 1						丁
93						1 1						\top
95												
96												

ယ

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of monthly reports, sale slip types were not indicated).

1974

Districts	Meat	n (mant)	Live	n (live)	Roe	n (rno)	Meat _(\$)	\$/kg	Live	\$/kg	Roe	\$/kg
	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	- (2)	+ +	(\$)	+	(\$)	
2		_					-	+ +		+ +		
3 .										+ +		
10		+				+		+ +				
11	15,692.3	13				-	38,465	2.53			<u> </u>	
12	15,092.5	1 13				+	30,403	2.55				
13	2,889.4	4		 		+	12,720	4.40		+ +		
14	2,009.4	+ -					12,720	+				
45								+ +				
46							_					+
63	5,554.3	9					20,105	3.66	_			
64	13,217.9	8		_			48,260	3.74			-	
65	2,773.8	7					9,735	3.66				_
66	2,,,,,,,,	1		1			5,700					
67									-			_
68	15,064.1	12					50,200	3.48				
70												
71												
72												
73												
75	3,358.9	7					9,975	2.97				
76	28,023.4	12					83,400	2.97				
77											_	
78												
80	7,348.3	10					21,840	2.95				
82	6,536.4	10			·		20,960	3.43				
83	719.0	3					2,375	3.41				
85												
86												
87_	98,671.6	16					268,450	2.78				
88	2,193.2	7					5,725	2.75				
92												
93												
95												
96												

33

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of monthly reports, sale slip types were not indicated).

Districts	Meat	n	Live	n	Roe	n .	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)	-	(\$)	
1										+		
2												
3										+		_
10		\bot								\perp		
11	55,990.1	21					188,535	3.36		$\downarrow \qquad \downarrow$		
12	111.1	3					365	3.23		\dashv		
13	2,145.5	6				,	8,620	3.76				
14			256.3	1								
45		\perp										
46	682.7	1					2,255	3.30				
63	3,365.7	14					15,650	4.68			·	
64	12,467.2	7					46,955	3.98				
65	1,385.7	7					5,435	3.97				
66												
67												
68	13,914.2	15					49,005	3.90				
70											_	
71		1 1										-
72												
73	2,304.3	4				1	7,550	3.30				
75	3,583.4	6					11,560	3.34				
76	9,228.5	13					30,215	3.21				
77	61.2	1				111	255	4.16		 		
78		1				1				1 1		
80	30,295.9	20					94,780	3.29	-			
82	9,763.7	13					37,630	4.02				
83	5,202.8	12		+		11	15,100	3.21		 		
85		+ - +		+ +		11	,			1 1		
86	5,797.0	2		+		11	19,170	3.31		1 1		
87	116,411.9	32		+ +		11	406,170	3.51		+ +		+
88	4,849.0	10		-		11	16,150	3.17		+ +		+
92	11.3	1 1		+ +		1	35	3.09		+ +		+
93	11.5	+ ' +		+				3.03		+		_
95		+		+ +		─┼──┤┤		╅		+-+		_
96		+						+				

⁼ Missing information

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of monthly reports, sale slip types were not indicated).

1976

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
0.00.00	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)	
1										4	<u>_</u>	\bot
2	29.5	1										
3				ļ								\rightarrow
10												
11	31,795.1	21					111,305	3.74		\perp		
12	138.3	1				\perp	445	3.22				
13	4,531.5	8					19,310	3.83				\rightarrow
14	678.1	3					2,805	3.93				
45					_					\bot		
46		ļ				4						
63	4,411.3	17					21,045	4.71		4		
64	5,704.0	11_					25,055	4.36		\bot		
65	1,918.7	6					8,160	4.29		\bot		
66												
67	344.7	2					1,130	3.27				
68	13,471.9	12					52,080	4.18		\perp		
70										\perp		
71												
72											_	
73	678.1	3					2,615	3.86				
75	14,492.5	8					56,490	3.82				Ш.
76	40,728.7	16			_		158,510	3.91				
77	4,331.9	4					17,370	4.02				
78	15,152.5	13					57,195	3.78				
80	47,709.6	28					188,540	3.97				
82	82,090.3	25					317,025	3.87				
83	13,310.9	17					50,925	3.72				
85												
86	28,581.3	12	4,288.8	1			96,160	3.40	13,245	3.09		
87	50,791.9	27			_		189,805	3.54				
88	2,438.1	11					9,825	3.92				7
92	793.8	4					2,960	3.76				
93	-											
95			-				_			\top		
96						1 1			-	1 1		

^{* =} missing information

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of sale slips, sale slip types were not indicated).

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)	
1		\perp				\perp		\perp		\bot		
2								+		\perp		
3		\perp						\perp				
10		\bot						1				
11	13,494.6	146					44,030	3.08				
12	1,120.4	12					3,710	3.07				
13	1,247.4	6					5,420	4.06				
14												
45												
46	546.6	1					2,405	4.40				
63	3,209.2	25					14,915	4.53				
64	362.9	6	303.9	14			1,560	4.29	1,360	4.51	-	
65	1,521.8	9					6,645	4.38				
66			-		_							
67	197.3	1					785	3.98				
68	7,439.0	68					27,670	3.81				
70	2,088.8	29					8,095	3.90				
71												
72			_									
73	328.9	1					1,075	3.27				
75	7,997.0	34					24,640	3.08		\top		
76	18,395.7	41					57,235	3.10				
77	4,141.4	22					13,480	3.25				
78	11,206.2	71	,				35,595	3.20				
80	44,178.4	129					138,045	3.14				
82	20,754.5	95		-			61,235	2.98	<u> </u>			\top
83	11,262.9	32					37,450	3.04				\top
85		17-31	-	1	-			\Box				
86	21,305.6	72					69,110	3.22		7 1		
87	21,017.6	187	18,969.6	26		1 1	66,885	3.18	6,610	1.37		\top
88	1.0					1	·		-	1 1		\dashv
92				/		1		1 1				+
93		 		1 1		1		1 — 1		 		+-+
95		1 1				 		 		- -		+
96		1		1 1		 		1		 		\dashv

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of sale slips, sale slip types were not indicated).

1978

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)	4	(\$)	\bot	(\$)	\bot
1												
2 _												
3								\perp				
10												
11	18,128.1	591					107,095	5.73				
12	108.9	4					530	5.31				
13	2,424.5	51					13,595	4.91				
14												
45												
46												
63	3,143.4	18					19,500	6.15				
64	1,034.2	6					5,360	5.17				
65	582.9	7					3,095	5.60	_			
66												
67					_							
68	5,538.5	222	_				25,335	4.72				
70	3,068.6	187					14,525	4.89				
71												
72					·							
73	1,363.1	1					7,505	5.51				
75	6,112.3	105					25,735	4.34				
76	25,585.3	219					114,855	4.58			-	
77	11,387.6	235					52,425	4.64				
78	12,004.5	229					52,545	4.49				
80	100,692.4	1699		, [443,990	4.42				
82	9,607.2	170					42,250	4.41				
83	7,107.9	98					33,800	5.31				
85			,									
86	22,673.2	505					117,005	5.09				\neg
87	36,440.0	663					165,725	4.51				
88	385.6	6			-		1,850	4.72				\neg
92	455.9	1					2,705	5.93				
93		1 1				7 1 1		1 1				
95		1 1		1 1		1 1		\top				
96		1 1		1 1		 		1 1				\top

'n

1979

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
	(kg)	(meat)	(kg)	(live)	(kq)	(roe)	(\$)	+	(\$)		(\$)	_
1						\perp						
2	_					↓						
3												
10												
11	13,251.9	497					96,055	6.88				
12	528.4	43					3,565	6.64				
13	787.0	25					6,315	7.47				
14	_											
45	621.4	18					4,470	7.21				
46	646.4	17					4,795	7.21				
63	2,685,3	38	_				19,100	7.28				
64	1,589.9	33	_		11.3	1	12,675	7.83			45	3.97
65	292.6	11	,				2,010	7.35				
66			_				•					
67	619.2	3			297.1	3	5,385	7.75			1,765	5.91
68	6,300.5	242	-		90,7	4	41,490	6.90			5 30	5.82
70	2,351.9	113			*-11		15,025	6.67			***	
71		,,,,									,	
72			_			1 1						
73						1 1						
75	3,002.8	50					19,410	6.60				
76	20,747.7	268				<u> </u>	141,130	6.78				
77	10,881.9	268				1 1	74,080	6.82				
78	10,194.7	417			181.4	6	69,755	6.88			1,020	5.62
80	42,227.9	1285			5,463.6	257	286,085	6.74			30,000	5.66
82	28,138.7	475					178,765	6.85			33,000	1,11
83	9,251.2	277					62,655	6.88				
85	156.5	13		†		+	1,125	7.28				\top
86	24,741.6	621				 	182,635	7.39				
87	54,082.7	1162				+	383,400	7.10				
88	1,217.9	29				1 1	8,305	6.85				
92	263.1	29					1,790	6.82				
93	203.1	-					1,730	0.02				+
95												
96		1								_		_
90					<u> </u>					1		

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Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of sale slips, sale slip types were not indicated).

1980

Districts	Meat	n	Live	n	Roe	n ,	Meat	\$/kg	Live	\$/kg	Roe	\$/kg	
	(kg)	(moat)	(kg)	(live)	(kg)	(roe)	(\$)	+	(\$)		(\$)	+	
1		\vdash	 			4		+		-			
2			<u> </u>	4						<u> </u>			
3						\perp							
10						+						—	
11	17,282.2	47 <u>4</u>				\perp	154,490	8.74					
12						4				-			
13	664.5	41				\perp	5,710	8.89					
14	2,494.8	2				\perp	22,010	8.81					
45	204,1	8					1,770	8.62					
46	93.0	5					835	8.99					
63	639.6	4					6,610	9.76					
64	5,007,7	86	11.1	1	18.1	2	43,660	8.47	•		40	2.21	
65	183.7	1 1					1,685	9.17					ı
66													۱,
67	2,385.9	84					19,380	8.14		Ti Ti			8
68	4,957.8	280			3,499.5	133	37,835	8.25			19,775	5.71	ı
70	2,567.4	144					16,650	6.99					ı
71	<u> </u>										,		ı
72											1		ı
73													ı
75	1,780.4	5					14,645	8.18					ı
76	21,707.0	373					178,465	8.17		1		1	ı
77	573.8	11	 I				4,615	8.29				1	١
78	6,178.0	126					50,030	8.06				 	١
80	40,814.9	1106					323,360	7.91					١
82	23,675.7	491					190,465	8.02				1	١
83	5,493.1	142	-				42,870	8.01			-	+	١
85 85	326.6	6		1 1		+	2,500	7.58				+	1
86 65	25,447.0	618		+		+	214,220	8.41				+	1
87	41,665,4	933		+		+	349,590	8.28		+		+	1
				+		+				1		+	1
88	1,764.5	10		+		+	14,370	7.94			_	+-	1
92		\vdash		+	——	+		+		+		+	1
93			<u> </u>			+		-				+	1
95			<u> </u>			+		+-		_		+	-
96													J

^{* =} missing information

Appendix I (continued). Scallop landings, landed values and price/kg for each statistical district, and landing type, from 1968 to 1989. (n = number of sale slips, sale slip types were not indicated).

Districts	Meat (kg)	n (meat)	Live (kg)	n (live)	Roe (kg)	n (roe)	Meat (\$)	\$/kg	Live (\$)	\$/kg	Roe (\$)	\$/kg	
1								\bot					1
_2						\perp		\perp				ļ	
3	618.7	17				\Box	5,204	8.57					
10		\bot				\Box		\perp					
11	43.884.0	1087					416.056	9.26					1
12	2,629.5	67				\Box	23,625	9.16					
13	4,585,0	151		_			43,346	9.44					
14						\perp							
45	342.0	9					3,016	8.93					
46	213,6	2					1,884	8.82]
63	1,857.5	29					24,570	13.23					
64	2.880.8	50_					30,395	10.20					
65	1,148.5	7					13,168	11.57					
66													1
67	2.017.2	17					22,235	11.02] [
68	6,638.4	476			10,184.2	423	68,779	10.39			62,963	6.20] `
70	825.1	40			1.152.1	37	8,648	10.49			7,324	6,37]
7.1													_
72													1
73	6,305.5	127					63,416	10.04					
75	1.677.9	36					16,906	10.08					
76	26,721,1	567					265,492	9,93					
77	16,850.3	353					169,977	10.09					J
78	5,207.8	128					56.864	10.91]
80	60,906.7	1764					623,338	10.24]
82	39,521,3	870_					400,470	10.10					1
83	6,303.7	183					63,480	10.00					1
85	264.0	13				1	2,423	9.25					1
86	31.617.7	596					303,427	9.62	=.				1
87	82,570.6	1589					806,736	9.74					1
88	7,661,3	268				170.00	74,607	9.78					1
92	1,356.3	23					14,204	10.47]
93	2,547,0	63					26,584	10.42]
95	43.1	2		1 26	Con L. HOTE	38:44	438	10.21					
96					A SAM YOU	In History	March Her	ACC. 10-1					1

1982

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg	
Districts	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)		
1													
2													
3													
10													
11	16,715.1	802					137,763	12.09					
12	164.2	8					1,189	11.57					
13	1,013.8	42					7,538	17.05					
14													
45	373.8	13					3,296	6.48					
46	837.8	21					7,122	12.95			-		
63	195.1	11					1,935	14.95					
64	3,681.0	41					33,834	13.46					
65													
66													_
67											_		40
68	14,024.4	667			559.8	39	109,067	19.39			2,175	3.88	
70	1,614.8	96			258.5	10	12,742	11.18			1,273	4.92	
71									_				
72													
73	150.6	8					1,496	14.61					
75	2,612.3	38			_		20,161	5.67	•				
76	16,701.1	321					115,727	15.28					
77	4,170.4	67					32,715	11.52					
78	1,902.9	41					13,936	11.03					
80	36,137.4	1179					252,296	15.30					l
82	30,113.1	725					222,920	16.69					l
83	6,432.5	190					46,994	11.48	_				l
85	4,014.8	136					29,394	11.81					l
86	32,589.8	666					245,562	11.16					l
87	51,377.9	926					382,345	16.62					l
88	777.0	18					5,608	5.34	-				l
92	713.5	27					5,574	5.74	_				l
93								1 1					l
95	318.9	2				+	2,461	5.67					l

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg	
Districts	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)		
1	2.3	1					25	10.87					
_ 2	4,146.8	161					53,681	12.95					
3	2,754.3	138					36,432	13.23					
10	1,656.6	59					21,997	13.28					
11	15,028.7	798					180,748	12.03					
12	1,653.4	108					19,548	11.82					
13	4,291.1	112					49,835	11.61					
14	163.3	4					2,062	12.63					
45	22.7	1					325	14.32					
46	1,760.8	35					21,823	12.39					i
63	593.8	13					7,501	12.63					i
64	5,861.8	52					77,604	13.24					i
65	540.7	15					7,152	13.23					i
66													
67													41
68	14,576.4	200			1,684.6	33	199,055	13.66			4,162	9.58	i
70	4,721.1	182			644.6	27	65,214	13.81			4,445	12.09	i
71	12.7	1					182	14.33					
72													i
73	3,630.6	143	_				45,893	12.64					i
75	7,760.2	215					84,290	10.86					
76	23,550.0	406					253,629	10.77					i
77	11,027.9	104					121,960	11.06					
78	3,003.3	18					33,105	11.02					i
80	22,168.3	656					241,339	10.89					i
82	54,388.5	1162					605,035	11.12					i
83	11,146.4	305					117,092	10.50					i
85	707.6	32					7,412	10.47					ı
86	27,758.5	754					355,885	12.82					i
87	76,163.0	2016					924,275	12.14					i
88	7,494.8	222					100,300	13.38					i
92	634.6	18					6,995	11.02					i
93	483.5	16					5,219	10.79					i
95	122.5	7					1,288	10.51					i
96													l

Districts	Meat	n	Live	n	Roe	n
DISTICIS	(kg)	(meat)	(kg)	(live)	(kg)	(roe)
1			857.3	1 1		
2	293.0	11				
3	113.9	10	<u>76.</u> 2	5		
10	237.7	11	200.5	4		
11	4,077.9	178	564.3	21		
12	37.2	3	_			
13	2,426.8	93	15.4	1 1		
14						
45			68.0	2		
46	1,284.6	34				
63	1,149.4	38	392.4	13		
64	9,469.8	96	2,991.0	11		
65	1,880.2	19	494.0	5		
66	2,975.2	65	106.1	7		
67	885.4	21				
68	16,885.7	355	73.0	1		
70	6,227.9	197	9.1	1		
71	90.7	11				
72						
73	3,752.2	112				
75	14,736.1	252	939,9	6		
76	27,700.4	526	44,9	1		
77	2,648.1	29				
78	786.1	16				
80	35,267.9	931	6,693.8	275	_	
82	37,434.7	846	3,461.9	125		
83	9,378.6	252				
85	2,357.4	84				
86	29,103.0	702	124.7	3		
87	17,699.5	456	1,891.1	36		
88	1,851.1	54	148.3	4		
92	2,300.7	58	508.5	5		
93	62.6	6	_			
95	232.2	9	73.9	2		
96	269.0	6				

			ı		
Meat	\$/kg	Live	\$/kg	Roe	\$/kg
(\$)		(\$)		(\$)	
		1,512	1.76		
3,230	11.02_				
1,506	13.23	1,008	13.23		
2,965	12.63	2,763	13.78		
54,336	13.19	7,658	13.41		
460	12.13				
32,765	13.15	221	14.33		
		938	13.78		
16,813	13.07				
14,700	12.85	3,976_	10.10		
111,973	12.09	38,733	12.63		
23,886	12.39	5,049	9.08		
37,842	12.84	1,404	13.23		
11,624	13.02				
214,650	12.39	966	13.23		
77,661	12.53	12	1.32		
1,250	13.78				
48,717	13.10				
177,281	11.56	11,396	12.13		
324,425	11.70	495	11.02		
32,221	11.74				
9,449	11.22				
417,453	11.72	81,164	12.13		
462,683	12.42	78,034	12.13		
114,920	12.28				
27,850	11.88				
383,996	13.28	1,788	14.33		
233,451	13.32	25,113	13.60		
24,561	13.40	1,889	12.68		
28,146	12.17	6,446	12.68		
828	13.23				
2,955	12.74	897	12.13		
3,706	13.78				

Districts	Meat (kg)	n (meat)	Live (kg)	n (live)	Roe (kg)	n (roe)	Meat (\$)	\$/kg	Live (\$)	\$/kg	Roe (\$)	\$/kg	
1	(NQ)	(III IÇ QI)	(NG)	(live)	(Kg)	1100/-	1.2	1	(Ψ)		ΙΨ)		1
2										1 1	-		1
3													1
10	19.5	1 1					215	11.02					1
11	1,006.5	41					13,072	12.76		 			1
12	1,000.5	+ +				+ +	13,072	12.70				_	1
						+ -		+ +					1
13 14													1
45				+						+ +	_	+	1
46				+-+				+ +		+ +			1
	1 440 Q	58					18,799	12.02		1	-		1
63 64	1,448.8 16,571.8	162			409.1	10		13.03 11.58		+ +	3,383	8.27	1
65	1,748.2	16		+-	405.1	 '' 	191,609 22,162	11.75				0.27	1
			597.4	6	59.1	+ ,			1 217	1 70	495	0.07	1
66	4,399.5	41 47	597.4	6		1	50,882	11.58	1,317	1.70	926	8.27 8.27	3
67	2,824.1	$\overline{}$			112.0		32,620	11.48		+ +			ł۳
68	6.046.0	238 172		+ -	1,638.9	<u>55</u> 2	65,993	10.89			13.537	8.25 9.92	1
70	5,489.5	1/2			61.2	1 2	62,940	11.40		+ +	619	9.92	1
71								+					┨
72	0.075.0	191	<u> </u>		758.0	122	39,094	11.91			8,330	10.93	1
73	3,275.9				7,30.0	122	82,442			1	6,550	10.55	1
75	7.117.0	166		1		+		11.60		+			จ
76	30,738.7	532				+ -	346,795	11.22		-			1
77	3,416.1	35				+	39,538	11.57					┨
78	4,999.6	121			-	+	57,991	11.57	-	+ +			┨
80	10,105.3	381					113,298	11.18		+ +			┨
82	64,674.7	1518				-	810,760	12.56		+			┨
83	4,876.2	204				-	61,843	12.61		1		_	┨
85	276.7	13		\vdash		1	3,660	13.23		+ -		_	┨
86	9,204.5	233	242.5	+			111,597	12.12	250	- 1 40	_	+	1
<u>87</u>	29,603.8	699	249.5	1			378,639	12.64	358	1.43	_	+	1
88	556.6	16		+		-	6,421	11.63		+			1
92	3,921.4	78		+			50,821	12.85		+ +			1
93	347.5	9		+		1	4,547	12.93	T.	-	1071		1
9 <u>5</u> 96	325.2	8		-		(to the little of the little	4,189	12.81				_	1

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
51041045	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)	
1												
2												
3												
10	99.8	2					1,210	12.13				
11	3,910.5	121	244,9	2			58,843	15.42	405	1.65		
12	102.5	5					1,243	12.13				
13	1,336.8	40					17,686	13.28				
14	350.6	1					5,025	14.33	<u> </u>			
45												
46	34.0	1					525	15.43				
63	281.2	13				\perp	3,720	13,23				
64	11,208.9	196					146,110	13.01				
65	4,943.3	40					64,719	13.39				
66	1,779.0	31	9,867.6	32	680.9	15	22,047	12.47	13,105	1.33	6,379	9.37
67	275.3	3					3,519	12.64				
68	2.168.7	132			3,730.9	118	26,017	12.05			30,844	8.27
70	2,499.8	98			84.8	3	31,760	12.74			748	8.82
71	71.2	3			75.3	2	942	13.23			664	8.82
72												
73	2,496.6	117			37.2	4	31,494	12.58			410	11.02
75	5,033.1	109					61,773	12.30				
76	13,572.2	251					153,554	11.32				
77	1,061.4	32					11,700	11.02				
78	385.6	13					4,565	11.83				
80	13,590.8	346					155,085	11.35				
82	34,440.5	880					384,621	11.19				
83	9,011.7	383					100,088	11.15				
85												
86	41,368.8	786					580,864	14.22				<u> </u>
87	38,745.6	885					524,166	13.90				
88	4,884.4	88					73,112	14.67				
92	1,941.9	64					21,476	11.06				
93	133.8	4					1,512	11.85				
95	152.4	3					1,884	12.49			_	7
96	45.4	2					500	11.02		"		

Districts	Meat (kg)	n (meat)	Live (kg)	n (live)	Roe (kg)	n (roe)	Meat (\$)	\$/kg	Live (\$)	\$/kg	Roe (\$)	\$/kg
1	(<u>N</u> 9/	Villouty		(2)	(1.9)	(100)	(4)	+	(4)		(4)	+
2				1		\vdash		+				+
3				 		+ 1		 				+
10				1		+						+
11	6,213.0	133		1		+	77,500	12.30				+
12	79.8	2				+	1,056	13.23				_
13	873.2	18		+			12,147	13.56				+
14	88,0	18		+			1,164_	13.23				+
45	\$8,0	+		1		+	1,104	13.23		\vdash		+
46	230.4	5		+			2,695	11.68				+
63	244.9	9		+			3,456	9.06		 		+
64	10,946.7	244		+			154,896	12.28				+
65	7,047.6	38		+			97,269	14.30		\vdash		+
66	1,051.4	15				+	14,803	14.18		\vdash		+
67	347.0	3					4,781	14.18				+
68	1,172.1	84		+	0.079.0	81	15,622	14.33			20,368	8.95
70	1,172.1	40			2.278.9	 °' 	15,111	13.46			20,368	0.95
7 1	1,120.3	40		1			15,111	13.40		\vdash		+
72						\dashv	76					+
73	508.5	24		1			6,789	13.27		\vdash		+
.75	1,687,4	37		+			22,320	13.23		\vdash		+
				1			195,014	12.64		\vdash		+
76 77	15.256.8	304					7,658	13.45		+		+
	566.1 968.4	16 25		1						11		+
78		$\overline{}$				 	12,676	13.14				+
80	21,860.8 32,409.3	633 797		+		+	283,100 370,154	11.37				
82						+		11.37		\vdash		+
83	10,191.0	404				1	119,684 374					+
85	29.5	1 204		+		1		12.68		 		+
86	24,999.3	304		+			300,177	12.15		 		+
87	23,141.3	420		+			274,251	11.91		 		+-
88	2,866.8	55		1			34,582	12.10	Company and	 		+
92	417.8	11		+ -			5,169	12.39		 		+
93		\vdash				+		+		2 200		+
95				+		+	222	14.57			377	
96	22.7	1					263	11.57				

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
DISTRICTS	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		<u>(\$</u>)		(\$)	
1												
2	309.8	5					3,244	10.47				
3												
10	85.7	4					945	11.02				
11	1,544.1	37					15,772	10.28				
12	45.8	2					505	11.02				↓
13	452.2	13	56.2	1 1			5,043	11.11	620	11.02		
14												
45												
46	76.2	2		\perp			840	11.02				
63												+
64	8,997.6	130					98,006	10.60				
65	10,120.7	78					106,224	10.66				
66	534.8	4					5,895	11.02				
67												
68	1,033.8	21			127.9	2	11,555	11.08			1,128	8.82
70	1,678.3	60					16,847	9.98				
71		\sqcup										
72												
73	241.8	4					2,602	10.89				
75	5.814.2	112			618,3	24	51,502	8.84			4,907	7.94
76	14.982.0	242			12.2	11	132,069	8.81			97	7.94
77	1,069.1	16		\perp		ļ	9,478	8.89				↓
78	736.2	16					6,161	8.54				
80	30,642.5	601	48.1	1	120.2	5	246,051	8.00	398	8.27	1,007	8.38
82	23,981.4	546					207,652	8.72				
83	18,910.6	485		1	_		161,786	8.54				
85		$\downarrow \downarrow \downarrow$						\bot				
86	20,533.1	332		igsquare			211,601	10.27				
87	17.324.8	333	_	$oxed{oxed}$		\bot	196,644	11.37				
88	1,683.8	34					17,725	10.71				
92												
93								\bot				
95								\bot				
96			<u> </u>									

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)	+	(\$)	+
_1								\perp		+		+
2						<u> </u>						
_3	131.1	3				$\sqcup \sqcup$	1,351	9.92				
10								\bot				
11	4,143.6	86					38,509	9.26	<u></u>			\bot
12												
13	207.3	7					2,057	9.92				
14	7.3	1 1					72	9.92				
45	10.4	1					_ 86	8.27				
46	89.8	2					713	7.94				
63												
64	10,995.3	186					105,966	9.67				
65	14,548.8	79					140,886	9.86				
66	3,077.2	24					27,167	8.86				
67	6,256.5	50					55,642	8.94				1
68	14,581.4	404			11,077.8	236	132,773	9.08			91,122	8.22
70	4,623.1	82			•		42,753	9.28			•	
71	.,	1					, <u> </u>					1
72												\top
73	4,661.2	113					42,433	9.09				1
75	7.241.3	48			_		63,856	8.82				1
76	14,028,0	248					122,326	8.70	_			
77	5,980.3	34					53,007	8.84				1
78	3,798.0	58					32,653	8.59				_
80	47,408.5	815	_				401,821	8.45				+
82	20,081.3	422					176,718	8.76				
83	19,050.7	489					187,184	9.82				+
85	399.2	15				 	3,646	9.82		+ -		+
86	17,029.5	316				 	164,296	9.67		+ +		+-
87	15,782.6	258				\vdash	171,281	10.82	_	+ +		+
88		228					6,175	11.02		+		+-
	560.2	1 22		\vdash	-		0,175	11.02		+ +		+-
92		1			Tena.	CL US				+ +		+-
93	-	+			3 69	15 0	Ta.			+		+-
95 96					ig (1,01)	126 8	100	+				+

Appendix II. Supplementary B scallop landings, landed values and price/kg for each statistical district and landing type, from 1982 to 1989. (n = number of supplementary B sale slips).

Districts	Meat	n	Live	n	Roe	n [Meat	\$/kg	Live	\$/kg	Roe	\$/kg	l
Districts	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)	\dashv	(\$)		(\$)		
1		-											
2	113.4	1					1,250	11.02					1
3		1									<u> </u>		
10		\perp											1
	10,902.3	21				\perp	96,817	8.88			ļ		
12						+							
13				1			 			_			
14		+ , +					070	-					l
45	31.3	1 1					276	8.82			<u> </u>		l
46		 _ 				+		1.2.21					1
63	2,803.2	15	_			+	29,735	10.61					1
64	2,071.1	11		<u> </u>		4	19,089	9.22					l
65	272.2	2		 		\perp	2,550	9.37					
66													4
67													ļα
68	1,717.3	37			449.1	15	16,147	9.40			2,029	4.52	
70	136.1	1					1,305	9.59					
71											<u> </u>		
72		_		<u> </u>							<u> </u>		
73										_			1
75	1 001 7							+				+	
76	1,224.7	4					8,100	6.61		 	ļ		
77				4				_				+	
78	10.000.1							_			-		
80	10,669.1	29					74,813	7.01		<u> </u>			
82	811.5	15					6,128	7.55			1		
83	3,966.7	6					30,609	7.72					
85				ļ				_					
86	3,606.1	7		1			27,750	7.70					
<u>87</u>	4,193.5	31					31,876	7.60					
88													
92		↓↓						\perp					1
93				<u> </u>		\perp							1
95													
96													l

1983

Districts	Meat	n	Live	n	Roe	n	ΙГ	Meat	\$/kg	Live	\$/kg	Roe
Districts	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	ΙL	(\$)		(\$)		(\$)
1							ΙL					
2	680.4	2					ΙL	9,000	13.23			
3							ΙL					
10	659.5	13					ΙL	8,998	13.64			
11	11,676.1	20					ΙL	149,206	12.78			
12							ΙL					
13	1,743.6	14					ΙL	26,886	15.42			
14							ΙL				<u> </u>	
45							ΙL					
46	644.1	17					ΙL	8,750	13.58			
63							ΙL					
64	1,859.8	21					ΙL	25,652	13.79			<u> </u>
65							۱L					
66							l L					
67							l L					
68	32,931.4	4					I⊥	471,550	14.32			
70							۱L					
71							I⊥					
72							۱L					
73	45.4	2					ΙL	600	13.22			
75	1,814.4	1					ΙL	20,000	11.02			
76	7,894.5	13					ΙL	87,020	11.02			
77	1,066.9	2					ΙL	11,760	11.02			
78							ΙL					
80	451.3	4					ΙL	4,975	11.02			
82	5,026.4	23					ΙL	58,916	11.72			
83	1,615.3	6					ΙL	17,737	10.98			
85							ΙL					
86	1,470.5	8					ΙL	19,362	13.17			
87	3,256.4	32					ΙĹ	39,785	12.22			
88	587.9	10					ΙĹ	7,457	12.68			
92							ΙĹ					
93	510.3	2					ΙL	7,250	14.21			
95							ΙĹ					
96							ΙĹ					

49

1983

\$/kg

1984 1984 Roe Live Meat \$/kg n Live Meat \$/kg Roe \$/kg Districts (kg) (kg) (meat) (kg) (roe) (live) (\$) (\$) 13.78 2 362.9 2 5,000 13.78 95,3 3 1,313 3 181.4 4 2,500 13.78 10 5,352.5 24 *(1) 73,750 13.78 *(49,381) (12.35) *(3,999.8) 11 3 13.78 37,500 16.53 86.2 2,268.0 1,188 12 13.78 13 136.1 2 1,875 14 45 46 755.2 10 10,406 13.78 63 64 65 66 67 68 70 71 72 73 <u>7</u>5 76 77 78 6,475.1 8 89,219 13.78 80 82 83 85 907.2 12,000 13.23 86 513.9 3 33,125 13.78 1,398 9.26 87 2,404.1 11 88 136.1 1 1,875 13.78 92 3 11,156 13.78 816.3 93 95

96

G

* . * .

^{* =} Supplementary A scallop landings.

Live Meat n Roe n Meat \$/kg \$/kg \$/kg Roe Districts (kg) (meat) (kg) (live) (kg) (roe) (\$) (\$) (\$) 2 3 389.2 5,577 14.33 1 10 11 12 13 14 45 46 63 1,510.5 8 23,310 15.43 64 4,536.0 65 55,000 12.13 1 66 67 2,290.7 26,513 11.57 68 1,417.5 9 16,600 11.76 70 71 72 73 2 997.9 11,550 11.57 75 20,035 1,678.3 5 11.97 76 3 14,379.1 171,225 11.94 77 167.8 1,850 11.02 78 4 907.2 3 10,000 11.02 80 3 9,000 680.4 13.23 82 83 85 1,814.4 3 22,500 12.49 86 3,356.6 10 12.13 87 41,300 88 92 997.9 2 13,000 12.13 93 95 96

'n

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg	
	_(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		(\$)		
_1					·								
2													
3				_						+			
10	2,068.4	4	_		<u>_</u>		_28,503	13.23		\bot			
11	26,254.4	15				}	385,260	14.22	-				1
12	816.5	1				1	12,600	15.43	_				
13	1,251.9	6					18,893	15.16					
14													
45													
46	1,506	5					21,585	13.89					
63													1
64	1,716.9	8					25,483	14.88					
65	453.6	1					6,000	13.23					
66	1,814.4	3					22,000	12.13					١.,
67													2
68	657.7	4					9,425	14.33					
70													
71													
72													
73													
75													
76	1,814.4	6					22,000	12.13					
77	3,991.7	3					47,350	12.31					1
78	589.7	2					6,500	11.02					1
80	4,082.4	8					45,000	11.02					1
82	8,958.6	8			_		107,750	11.85					
83	2,041.2	2					24,750	12.13					
85											<u> </u>		l
86	3,628.8	3			•		51,125	13.78			-		
87	6,667.9	12	-				93,575	14.51					
88	-,	1 1				1 1	1-7-					\neg	ĺ
92	45.4	1 1				 	550	12.13				\top	ĺ
93						- 						1	l
95			_			- 				1 1		_	ĺ
	-	+ - 1				- 						_	1
96													ĺ

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg	Roe	\$/kg
	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)	+	(\$)	
1	501.0	 					0.050	45.40		+ +		+
2	521.6	2			-	+	8,050	15.43		+		+-
3	680.4	2				+	9,000	13.23		+ +		+
10	6,395.8	9		1		+	81,700	12.49		+ +		
11 12	226.8	1		+		+	2,750	12.13		+ +		+
13	220.0	+ '	 	1			2,730	12.13		+ +		
14		1		 		+		_		+ +		+
45						+				+ +		\dashv
46	1,716.9	8				1	23,285	14.19		1 1		
63	117 (0.0	† •		1		111	20,200	1		1 1		
64	2,200.0	8				1 1	33,950	9.09				_
65	3,390.7	9				1 1	52,025	9.19				
66	•					\Box	,			1 1	_	
67						1 1						
68	1,633.0	4				1 1	22,950	8.96		7 7		
70	453.6	3					6,000	9.19				
71												
72												
73	1,111.3	4					14,700	9.09			_	
75	907.2	2					12,000	13.23				
76	1,859.8	5					24,600	13.23				
77	14,197.7	4					201,175	13.64				
78	79.4	1					1,050	13.23				
80	4,479.3	7					59,250	13.23				
82	5,715.4	6				\perp	69,750	12.68				
83	5,670.0	7				↓	75,125	13.07				
85						↓				\perp		
86	3,175.2	4				↓	38,500	12.13		\bot		
87	3,991.7	13				↓	47,500	11.91		\bot		
88				<u> </u>		↓		\perp		\bot		
92						<u>↓</u>		\perp		\bot		
93						↓				\bot		
95				1		<u>↓</u>				\bot		
96												

D: 4 : 4	Meat	n	Live	n	Roe	n	Me
Districts	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(9
_1							
2	45.4	1					
3	13.6	1					
10	526.2	3					6
11	13,213.4	11					145
12	1,122.7	3					12
13	2,050.3	10			-		24
14							
45							
46	916.3	3					10
63							
64	1,950.5	8					27
65	19,255.3	16					241
66							
67			<u> </u>				
68	1,587.6	4					17
70	3,946.3	8					43
71			_				
72			-				
73	499.0	3					6
75	1,451.5	2					16
76	6,370.8	8					62
77	4,853.5	2					47
78	7,711.2	3	•				68
80	7,529.8	10					66
82	4,173.1	8					37
83	6,350.4	4					63
85							
86	1,020.6	3					9,
87	816.5	5					7,
88				 			
92	319.8	1				- - 	2,
93		 				 	
95		-		+		 	
96		1 1		 		 	
30							

Meat	\$/kg	Live	\$/kg	Roe	\$/kg
(\$)	wing	_(\$)	4/1.9	(\$)	****
(A)		7.45)		(4)	_
600	13.23				
120	8.82	_			
6,470	11.39				
145,925	11.07				
12,375	11.02				
24,900	11.74		-		
10,930	11.02				
27,644	14.19		_		\dashv
241,988	13.23			_	
	+				
17,100	10.75				
43,500	11.02				
			+		
6,050	12.13				
16,300	11.30				
62,036	11.02				
47,225	9.92				
68,000	8.82				
66,400	8.82				
37,350	9.56		4		
63,000	9.92				
9,725	10.18				
7,385	9.06	-	+-+		
2,820	8.82				
	+ +				+-
	-				-

Districts	Meat	n	Live	n	Roe	n	Meat	\$/kg	Live	\$/kg		Roe
מטווופוע	(kg)	(meat)	(kg)	(live)	(kg)	(roe)	(\$)		(\$)		L	(\$)
1												
2	362.9	4					4,613	12.81				
3	317.5	2					2,975	9.37				
10	870.9	3					9,450	10.29				
11	12,310.7	9	·				125,750	10.17				
12	2,757.9	3					29,650	10.66				
13	1,156.7	3					13,000	11.76				
14	_											
45												
46	1,036.5	6					11,213	10.29				
63												
64	2,449.4	8					29,910	12.32				
65	10,427.4	67					102,754	9.71				
66	1,701.0	36					18,750	11.02				
67	226.8	8					2,500	11.02				
68	2,721.6	2					24,000	8.82				
70	4,309.2	6					42,000	9.74				
71												
72												
73	1,270.1	6					13,900	10.84				
75	2,767.0	4					27,750	10.20				
76	18,370.8	6					192,250	10.66				
77	9,072.0	3					85,250	9.92				1
78	907.2	9					9,000	9.92				
80	14,265.7	10		Ì			125,800	8.82				
82	3,175.2	1					29,050	9.15				
83												
85	136.1	1					1,350	9.92				
86	6,804.0	4					73,250	10.06				
87	8,142.1	22					83,800	10.00				
88												
92												
93											_	
95												
96											I	

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Appendix III. Number of fishing vessels reported as a function of the number of sale slips, by fishing area, from 1986 to 1989.

1986 1987

1300						1307					
Number sale slips	Outside Gulf Region	Fishing area 21	Fishing area 22	Fishing area 23	Fishing area 24	Number sale slips	Outside Gulf Region	Fishing area 21	Fishing area 22	Fishing area 23	Fishing area 24
1-5	10	3	12	4	31	1-5	7	3	13	1	56
6-10	33	21	51	6	89	6-10	29	21	51		105
11-15	13	11	31		40	11-15	8	9	24	1	25
16-20	9	14	18	3	21	16-20	4	5	18		9
21-25	4	9	9		12	21-25	3	1	16		3
26-30	3	4	17		6	26-30	4	3	14		3
31-35	4		10		7	31-35	3	1	10		1
36-40	5	2	4		4	36-40	3		5		1:
41-45	4		2		1	41-45	3		3		2
46-50	1		1		2	46-50	8		2		
51-55	3		:3		2	51-55	3		1		-
56-60		1			1	56-60		1	1		
61-65	4					61-65	1	1			
66-70	1					66-70	2	1	2		
71-75	2					71-75	2				_
76 80	3				1	76-80	1				
81-85	2					81-85					
86-90	3					86-90	1				
91-95	-					91-95					
96-100	1					96-100	1				
101-105	1					101-105					
Total	106	65	158	13	217	Total	83	46	160	2	205

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Appendix III (continued). Number of fishing vessels reported as a function of the number of sale slips, by fishing area, from 1986 to 1989.

1988						1989						
Number sale slips	Outside Gulf Region	Fishing area 21	Fishing area 22	Fishing area 23	Fishing area 24	Number sale slips	Outside Gulf Region	Fishing area 21	Fishing area 22	Fishing area 23	Fishing area 24	
1-5	3	2	11		32	1-5	1	10	12		19	1
6-10	9	22	45		71	6-10	3	20	46		54	1
11-15	10	8	25		14	11-15	2	16	32		20	1
16-20	10	5	17		6	16-20		7	24		7	1
21-25			21		6	21-25		4	18		2	1
26-30	3	2	15		3	26-30	1	2	11		1	1
31-35	1		7		1	31-35		4	5		3	1
36-40	2		3			36-40	1	3	5			1
41-45	1		3			41-45		4	1		1] ပ္
46-50	4	1	2			46-50		4	2		1	1 `
51-55	1		3			51-55		3	1			1
56-60	1					56-60		1	1			1
61-65						61-65						1
66-70	1					66-70	1					1
71-75						71-75	1		1			1
76-80	1					76-80			1			1
81-85						81-85						1
86-90						86-90						1
91-95						91-95						1
96-100						96-100						1
101-105						101-105						1
Total	47	40	152	0	133	Total	10	78	160	0	108	-]

Appendix IV. Number of fishing vessels reported as a function of the number of sale slips, by province, from 1986 to 1989.

1986 1987

000									
Number sale slips	Outside Gulf Region	Nova Scotia	New Brunswick	Prince Edward Island	Number sale slips	Outside Gulf Region	Nova Scotia	New Brunswick	Prince Edward Island
1-5	10	13	11	27	1-5	7	17	15	42
6-10	33	39	69	58	6-10	29	33	68	76
11-15	13	8	33	41	11-15	8	4	29	25
16-20	9	1	27	27	16-20	4	2	20	9
21-25	4	1	14	15	21-25	3	1	7	12
26-30	3	1	6	19	26-30	4	2	3	16
31-35	4		1	18	31-35	3		4	8
36-40	5		2	8	36-40	3	1	3	2
41-45	4			3	41-45	3	1		4
46-50	1			3	46-50	8		1	f
51-55	3	1		4	51-55	3		1	
56-60	-		1	1	56-60			1	1
61-65	4				61-65	1		1	
66-70	1				66-70	2		1	2
71-75	2				71-75	2			
76-80	3	1			76-80	1			
81-85	2				81-85				
86-90	3				86-90	1			
91-95					91-95				
96-100	1				96-100	1			
101-105	1				101-105				
Total	106	65	164	224	Total	83	61	154	198

Appendix IV (continued). Number of fishing vessels reported as a function of the number of sale slips, by province, from 1986 to 1989.

1988 1989

						-			
Number sale slips	Outside Gulf Region	Nova Scotia	New Brunswick	Prince Edward Island	Number sale slips	Outside Gulf Region	Nova Scotia	New Brunswick	Prince Edward Island
1-5	3	4	11	30	1-5	1	9	21	10
6-10	9	14	57	67	6-10	3	14	57	50
11-15	10	1	26	20	11-15	2	3	43	22
16-20	10		21	7	16-20			21	17
21-25		1	13	13	21-25		1	14	9
26-30	3		10	10	26-30	1	1	8	5
31-35	1		1	7	31-35		1	8	3
36-40	2		1	2	36-40	1		4	4
41-45	1			3	41-45			4	2
46-50	4		1	2	46-50			5	2
51-55	1			3	51-55			3	1
56-60	1				56-60			1	1
61-65					61-65				
66-70	1				66-70	1			
71-75					71-75	1		1	
76-80	1				76-80				. 1
81-85					81-85				
86-90					86-90				
91-95					91-95				
96-100					96-100				
101-105					101-105				
Total	47	20	141	164	Total	10	29	190	127