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By-catch in the shrimp fishery from Shrimp Fishing Areas 0-3, 1979 to 2009

Prises accessoires de la pêche à la crevette pratiquée dans les zones de pêches à la crevette 0-3, de 1979 à 2009

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TABLE OF CONTENTS

ABSTRACT	v
RÉSUMÉ	v
INTRODUCTION	1
METHODS	1
RESULTS AND DISCUSSION.....	2
Northern Shrimp Fishing Areas (SFAs)	3
SFA0 (1985-2005)	4
SFA1 (1979-1988)	5
SFA1 (1989-1998)	12
SFA1 (1999-2007)	19
SFA1 Greenland Halibut	26
SFA1 Redfish	27
SFA1 Atlantic Cod.....	28
SFA1 American Plaice	29
SFA1 Northern, Striped and Spotted wolffishes	30
SFA 1 Set Locations	31
SFA2 (1979-1990)	39
SFA2 (1991-1999)	46
SFA2 (2000-2008/09)	53
SFA2 Greenland Halibut	60
SFA2 Redfish.....	61
SFA2 Atlantic Cod and American Plaice.....	62
SFA2 Northern, Striped and Spotted wolffishes	63
SFA2 Set Locations	64
SFA3 (1979-1994)	72
SFA3 (1995-2008/09)	74

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ABSTRACT

A summary of by-catch data from the shrimp fishery conducted in Shrimp Fishing Areas (SFAs) 0-3 in northern Canada is presented. By-catch summary weight data, recorded by observers for the four management areas are presented for years where data were available from 1979 to 2009. Data for commercial fish species, Greenland Halibut (*Reinhardtius hippoglossoides*), Redfish (*Sebastes spp.*), Atlantic Cod (*Gadus morhua*) and American Plaice (*Hippoglossoides platessoides*) and those marine fishes currently listed under the *Species at Risk Act* (SARA), Northern Wolffish (*Anarhichas denticulatus*), Spotted Wolffish (*Anarhichas minor*), and Striped Wolffish (*Anarhichas lupus*), includes measured by-catch data from Observer records. These data are only complete to the 2007/08 management year. The total number of each of these species caught is estimated for those years when measurement data were collected.

RÉSUMÉ

Le présent document résume les données sur les prises accessoires de la pêche à la crevette pratiquée dans les zones de pêche à la crevette (ZPC) 0-3, dans le nord du Canada. Les données sommaires sur le poids des prises accessoires fournies par des observateurs dans les quatre zones de gestion sont présentées pour les années où des données sont disponibles de 1979 à 2009. Les données sur des espèces exploitées commercialement, notamment le flétan du Groenland (*Reinhardtius hippoglossoides*), le sébaste (*Sebastes spp.*), la morue (*Gadus morhua*) et la plie canadienne (*Hippoglossoides platessoides*) ainsi que sur des poissons marins inscrits à la liste de la *Loi sur les espèces en péril* (LEP), comme le loup à tête large (*Anarhichas denticulatus*), le loup tacheté (*Anarhichas minor*) et le loup atlantique (*Anarhichas lupus*), comprennent des mesures sur les prises accessoires provenant des registres des observateurs. Ces données ne sont complètes que pour l'année de gestion 2007-2008. On a estimé le nombre total de prises pour chaque espèce pour les années où des mesures ont été prises.

INTRODUCTION

Shrimp fishing in northern Canada (Shrimp Fishing Areas (SFA) 0-3; Fig. 1) began in the late 1970s in SFA1, expanding to SFA3 and finally to SFA2 and in particular SFA2 commercial where the majority of shrimp in the north are now caught. Foreign vessels were allowed to fish in Canadian water at the start of the fishery but it is now conducted only by the Canadian flagged large vessel fleet (LOA>100', >500t). The fleet currently consists of approximately 10 vessels fishing the allocations of the 17 license holders. SFAs 0 and 1 fisheries are based on a calendar year from January 1 to December 31 while SFAs 2 and 3 are conducted on a fiscal year running from April 1 to March 31. The policy change from a calendar year to fiscal year in SFAs 2 and 3 was implemented in 2003, so the management year 2003/04 was actually 15 months long.

Shrimp fishing is conducted with bottom trawl gear. The high volume of catch of non-targeted species was a major management concern with this type of bottom contact fishery. The Nordmore grate, a by-catch excluder device, was introduced in 1993 to the Canadian shrimp industry. The Nordmore grate filters the catch entering the trawl allowing animals larger than the grate size to escape through an opening in the top of the net. The grate proved effective in significantly reducing the by-catch while maintaining the catch rate of shrimp. In 1997, the Nordmore grate with a bar spacing of 28 mm was made mandatory in all SFAs in northern Canada.

This report summarizes the by-catch occurring in the northern shrimp fishery as recorded by the fisheries observer program from the start of the fishery in the north to the 2008/09 management year. All vessels in the fleet fishing the north are required to have an observer on board so data coverage is complete.

METHODS

Observers, required as a condition of license for all vessels in this fishery, provide data on the total catch weights of each by-catch species. The observer database reports the weight of both the directed species and any by-catch for each set taken. These data reported here were tallied from the observer database on a management year basis. Records were assigned to a particular SFA through the recorded tow location. Errors in position are known to occur in the observer records which have not been fully corrected. While the actual error rate is unknown, it is thought to be low.

During a trip, the observer randomly selects sets for more detailed analysis of groundfish species of particular interest which include, Greenland Halibut (*Reinhardtius hippoglossoides*), Redfish (*Sebastes* spp.), Atlantic Cod (*Gadus morhua*) and American Plaice (*Hippoglossoides platessoides*) and those marine fishes currently listed under the *Species at Risk Act* (SARA), Northern Wolfish (*Anarhichas denticulatus*), Spotted Wolffish (*Anarhichas minor*), and Striped Wolffish (*Anarhichas lupus*). Lengths of these species are recorded as well as the weight of the sample taken for measurement. Weight is recorded to 1 kg precision, length to 1 cm. To estimate the overall numbers captured by the fishery, the total weight of the species collected in a management year was divided by the total weight of samples taken from the set to be measured. This ratio was used to extrapolate the observer length-frequency distribution to an overall estimate of the number of fish actually capture in the management year. Only years where measured samples were recorded in the database are reported. The species may have been caught in other years but no attempt was made to estimate the number caught.

RESULTS AND DISCUSSION

By-catch for all management years with data are reported for SFA0 (Table 1), SFA1 (Table 2), SFA2 (Table 8) and SFA3 (Tables 13). By-catch relative to total catch is low in the main shrimp fishery areas but varies by SFA. SFA0 had the highest average by-catch at 69.2% over the 12 years recorded from 1985 to 2005 (Table 1). This is a high rate but SFA0 is an exploratory area and of limited commercial interest. Few sets (72 over all years) and low shrimp catch results in the high by-catch rate. The low effort in SFA0 makes the high rate of little concern. SFA1 had an average by-catch of 3.5% over the period 1999-2007 (Table 2). This is in contrast to the over five times higher rate of 18.4% in 1979-1989 prior to the use of the Nordmore grate. SFA2 had the lowest average by-catch rate at 1.7% for 1999-2008/09, a marked improvement to the 31.8% at the start of the fishery 1979-1989 (Table 8). Average by-catch in SFA3 from 1999-2008/09 was 4.2% while the pre-grate average for 1979-1989 in SFA3 was 11.5 (Table 13). While the by-catch rates in SFA 1-3 is low, these rates are likely overestimated because of the minimum 1 kg weight precision used in recording the data.

Set locations for SFA1 (1997-2008) are shown in Figure 2. Figures 3-9 plot set locations for each of the species with more detailed length data. Unfortunately no length measurement data exists prior to the implementation of the Nordmore grate. Therefore it is not possible to judge the impact the grate has on the size of the fish caught. In SFA1, length-frequency of Greenland Halibut (Table 3, Fig.3), Redfish (Table 4, Fig. 4), Atlantic Cod (Table 5, Fig. 5), American Plaice (Table 6, Fig. 6), Northern Wolffish (Table 7, Fig. 7), Spotted Wolffish (Table 7, Fig. 8) and Striped Wolffish (Table 7, Fig. 9) are reported and include estimates of the number of individuals removed from the area.

Set locations for SFA2 (1997-2008) are shown in Figure 10. Figures 11-17 plot set locations for individual species. In SFA2, length-frequency data and estimates of number of individual Greenland Halibut (Table 9, Fig. 11), Redfish (Table 10, Fig. 12), Atlantic Cod (Table 11, Fig. 13), American Plaice (Table 11, Fig. 14), Northern Wolffish (Table 12, Fig. 15), Spotted Wolffish (Table 12, Fig. 16) and Striped Wolffish (Table 12, Fig. 17) are provided. No measured sets exist for SFA0 and one for SFA3 so they were not included.

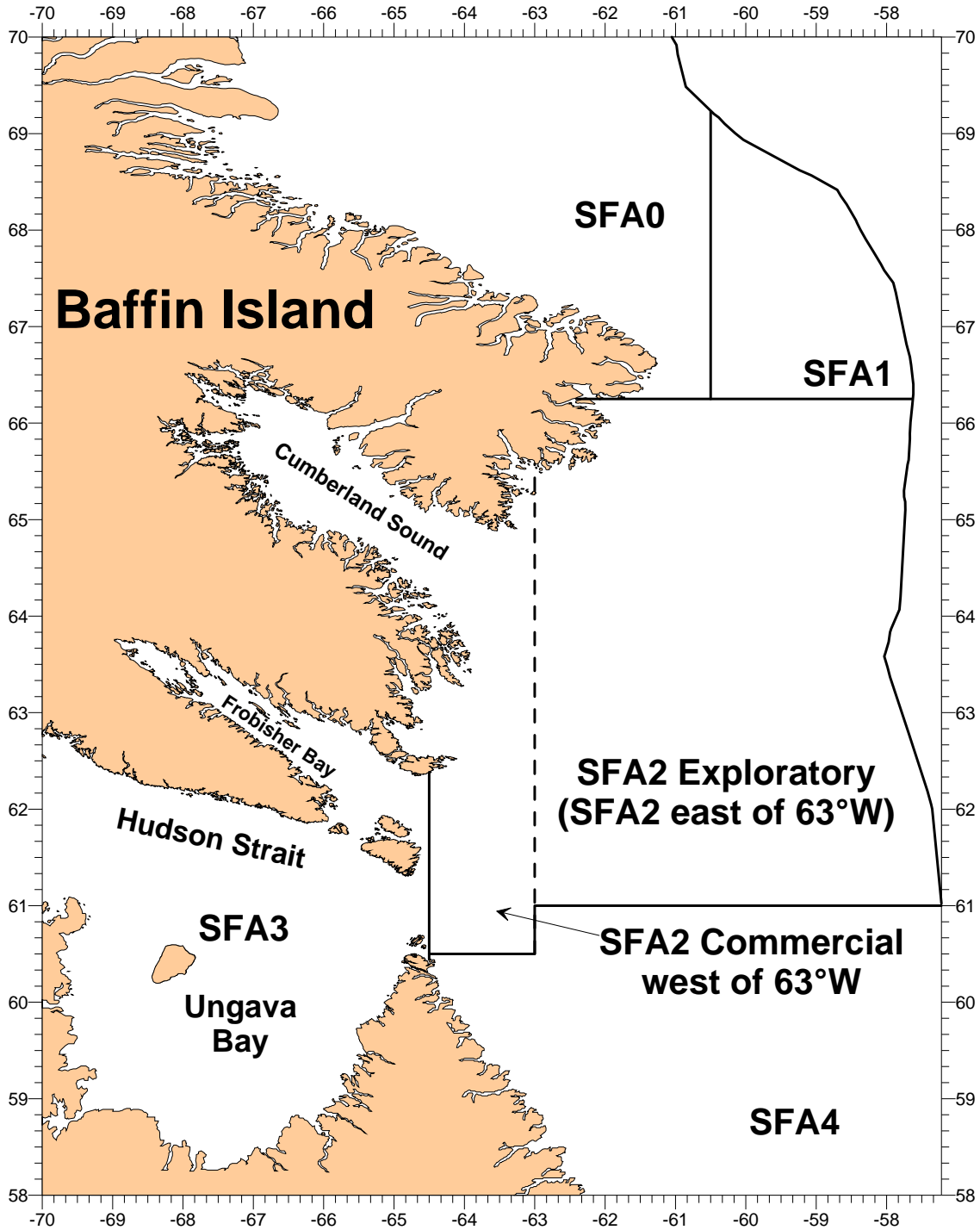


Figure 1. Shrimp Fishing Areas defined for the reporting of catch and management of the shrimp fishery in the Canadian north within the Central and Arctic region of Fisheries and Oceans Canada.

Table 1. Shrimp Fishing Area 0 - by-catch from the shrimp fishery for all years with records included in the Observer database. Missing years indicate that no fishing occurred in the area that year.

Management Year	1985	1987	1989	1991	1992	1994	1996	1998	1999	2002	2004	2005
Number of Sets Observed	2	32	2	11	3	4	12	1	1	1	1	2
Commercial Shrimp Species	Total Catch Weight (tonnes)											
<i>Pandalus borealis</i>	0.145	0.028	0.001	0.009	0	2.66	0.002	0.02	0	1.274	5.134	0.002
<i>Pandalus montagui</i>	0	0.002	0.001	0.001	0	0	0	0	0	5.434	0	0
Total Shrimp	0.145	0.03	0.002	0.01	0	2.66	0.002	0.02	0	6.708	5.134	0.002
By-Catch Species	Total Catch Weight (tonnes)											
Total By-catch	0.09	7.737	0.043	2.238	1.031	0.437	0.316	0.215	0.013	0.025	0.038	0.021
Percent By-catch in Total Catch	38.3	99.6	95.6	99.6	100.0	14.1	99.4	91.5	100.0	0.4	0.7	91.3
SARA Species	Total Catch Weight (tonnes)											
<i>Anarhichas denticulatus</i>	0	0.006	0	0	0	0	0	0	0	0	0	0
Other Fish	Total Catch Weight (tonnes)											
<i>Somniosus microcephalus</i>	0	7.254	0	1.56	1	0	0	0	0	0	0	0
Rajidae	0	0.001	0	0.002	0	0	0.001	0	0	0	0	0
<i>Amblyraja radiata</i>	0	0	0	0	0	0.02	0.007	0.002	0.002	0	0	0
<i>Mallotus villosus</i>	0	0	0	0	0	0	0	0.2	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0	0	0	0	0	0	0	0	0	0	0	0.001
<i>Notacanthus chemnitzii</i>	0	0.001	0	0	0	0	0	0	0	0	0	0
<i>Gadus morhua</i>	0	0	0	0	0	0.002	0	0	0	0	0	0
<i>Boreogadus saida</i>	0.01	0.306	0.041	0.156	0.018	0.25	0.213	0	0.003	0	0.002	0.002
<i>Gaidropsarus ensis</i>	0	0.002	0	0	0	0	0	0	0	0	0	0
<i>Macrourus berglax</i>	0	0.009	0	0	0	0	0	0	0	0	0	0
<i>Leptoclinus maculatus</i>	0	0	0	0	0	0.003	0	0	0	0	0	0
Zoarcidae	0	0	0	0	0	0	0	0	0.001	0	0.001	0
<i>Lycodes sp.</i>	0	0	0	0	0.002	0	0	0	0	0	0	0
<i>Lycodes esmarkii</i>	0	0	0	0	0	0.001	0	0	0	0	0	0.002
<i>Lycodes lavalaei</i>	0	0	0	0	0	0	0.018	0	0	0	0	0
<i>Lycodes reticulatus</i>	0	0.002	0	0	0	0	0	0	0	0	0	0
<i>Lycodes turneri</i>	0	0.016	0	0	0	0	0	0	0	0	0	0
<i>Sebastes sp.</i>	0.03	0.013	0.002	0.405	0	0.095	0.005	0	0	0.015	0.03	0.002
Cottidae	0	0	0	0	0	0	0	0.003	0.005	0	0	0
<i>Arteidiellus atlanticus</i>	0	0	0	0	0	0	0	0	0	0	0	0.002
<i>Arteidiellus uncinatus</i>	0	0	0	0	0	0.03	0	0	0	0	0	0
<i>Triglops murrayi</i>	0	0.001	0	0.01	0	0	0	0	0	0	0	0.002
<i>Triglops nybelini</i>	0	0	0	0	0	0.02	0	0	0	0	0	0
<i>Myoxocephalus sp.</i>	0	0	0	0	0	0	0	0	0	0	0.002	0
<i>Myoxocephalus scorpius</i>	0	0.001	0	0	0	0	0	0	0	0	0	0
<i>Cottunculus sp.</i>	0.01	0	0	0	0	0	0	0	0	0	0	0
<i>Cottunculus microps</i>	0	0.004	0	0	0	0	0	0	0	0	0	0.002
<i>Icelus bicornis</i>	0	0.004	0	0	0	0	0	0	0	0	0	0
<i>Leptagonus decagonus</i>	0	0	0	0	0	0	0.001	0	0	0	0	0.002
<i>Eumicrotremus derjugini</i>	0	0.007	0	0	0	0	0.001	0	0	0	0	0
<i>Liparis sp.</i>	0	0.009	0	0	0	0	0	0	0	0	0	0
<i>Liparis fabricii</i>	0	0	0	0	0	0	0.003	0	0	0	0	0
<i>Liparis liparis</i>	0	0.001	0	0	0	0	0	0	0	0	0	0
<i>Liparis tunicatus</i>	0	0.006	0	0	0	0	0	0	0	0	0	0
<i>Liparis gibbus</i>	0	0	0	0	0	0	0.004	0	0	0	0	0.002
<i>Careproctus reinhardti</i>	0	0.004	0	0	0	0	0	0	0	0	0	0
<i>Careproctus ranula</i>	0	0	0	0	0	0	0.001	0	0	0	0	0
<i>Hippoglossoides platessoides</i>	0	0.001	0	0	0.005	0.002	0.001	0	0	0	0	0
<i>Reinhardtius hippoglossoides</i>	0.04	0.084	0	0.105	0.006	0.013	0.014	0.01	0.002	0.01	0.003	0.002
Invertebrates	Total Catch Weight (tonnes)											
Cnidaria	0	0	0	0	0	0	0.043	0	0	0	0	0
Teuthida	0	0	0	0	0	0	0	0	0	0	0	0.002
<i>Illex illecebrosus</i>	0	0.001	0	0	0	0.001	0	0	0	0	0	0
<i>Pasiphaea sp.</i>	0	0.004	0	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii</i>	0	0	0	0	0	0	0.001	0	0	0	0	0
<i>Sclerocrangon boreas</i>	0	0	0	0	0	0	0.003	0	0	0	0	0

Table 2. Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1988. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of Sets Observed	298	1341	5152	2363	1964	1360	2119	2054	1444	2144
Commercial Shrimp Species Total Catch Weight (tonnes)										
<i>Pandalus borealis</i>	193.886	1273.272	5383.701	2848.489	2148.072	1569.122	2550.716	2988.41	3406.075	3817.015
<i>Pandalus montagui</i>	2.07	0.84	0	0	0	0	0	0	0	0
Total Shrimp	195.956	1274.112	5383.701	2848.489	2148.072	1569.122	2550.716	2988.41	3406.075	3817.015
By-Catch Species Total Catch Weight (tonnes)										
Total By-catch	190.49	359.85	898.878	231675	139.787	231385	402.686	868.824	696.009	737.502
Percent By-catch in Total Catch	49.3	22.0	14.3	7.5	6.1	12.9	13.6	22.5	17.0	16.2
SARA Species Total Catch Weight (tonnes)										
Anarhichadidae	1	32.832	1203	0	0	0	0	0	0	0
<i>Anarhichas denticulatus</i>	0.026	0.715	0.765	0.427	0.194	0.103	1639	0.007	0.043	2.81
<i>Anarhichas lupus</i>	0	8.712	2.677	0.413	1.493	1.789	3.061	1622	0.843	1502
<i>Anarhichas minor</i>	1.61	2.509	1203	1526	0.764	0.766	157	1.157	1.3	1.93
Sponge Total Catch Weight (tonnes)										
Porifera	0.2	0	0	0	0	0	0.093	0	0	0
Soft Coral Total Catch Weight (tonnes)										
Anthozoa	0	0	0	0	0	0	0	0	0	0
<i>Gersemia rubiformis</i>	0	0	0	0	0	0	0	0	0	0
Sea Pens Total Catch Weight (tonnes)										
Pennatulacea	0	0	0	0	0	0	0	0	0	0
Other Fish Total Catch Weight (tonnes)										
Myxiniformes	0	0	0	0	0	0	0	0	0	0
<i>Myxine glutinosa</i>	0	0	0	0	0	0	0	0	0	0
<i>Petromyzon marinus</i>	0	0	0	0	0	0	0	0	0	0
Chondrichthyes	0	0	0.65	0	0	0	0	0	0	0
Squaliformes	0	0	0	1	0	0	0	0	0	0
Dalatiidae	0	0	0	0	22.325	0	0	0	0	0
<i>Somniosus microcephalus</i>	2.15	21.125	285.695	41685	6.9	84.245	147.75	177.948	30.245	95.925
<i>Squalus acanthias</i>	0	0	0	0	0	0	0	0	0	0
<i>Etmopterus spinax</i>	0	0	0	0	0	0	0	0	0	0
<i>Centroscyllium fabricii</i>	0	0	0	0	0	0	0	0	0	0
<i>Carcharias taurus</i>	0	0	0	0	0	0	0.15	0	0	0
<i>Alopias vulpinus</i>	0	0	0	0	0	0	0	0	0	0
Cetorhinidae	0	0	0	15	0	16.915	0	14.82	1.75	0
<i>Cetorhinus maximus</i>	0	0	0.8	0	0	0	0.5	0	0	0
<i>Lamna nasus</i>	0	0	0	0	0	0	0	0	0	0
<i>Carcharodon carcharias</i>	0	0	0	0	0	0	0	0	0	0
Rajiformes	0.18	7.525	0.175	1344	0	0	0.025	0	0	0
Rajidae	0.2	10.264	6.359	3.91	5.713	5.443	17.906	4.743	3.492	14.608
<i>Raja sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Amblyraja radiata</i>	4.222	11.352	2.15	0.563	0.566	3.553	0	7.367	4.337	3.603
<i>Malacoraja senta</i>	0	0	0	0	0	0	0	0	0	0
<i>Rajella bathyphila</i>	0	0	0	0	0	0	0	0	0	0
<i>Leucoraja erinacea</i>	0	0	0	0	0	0	0	0	0	0.141
<i>Rajella fyllae</i>	0	0.285	0.001	0.001	0	0	0	0.007	0	2.223
<i>Amblyraja hyperborea</i>	0	0	0	0	0	0	0	0	0	0.025
<i>Amblyraja jenseni</i>	0	0	0	0	0	0	0	0	0	0
<i>Dipturus laevis</i>	0	0	0	0	0	0	0	0	0	0.139
<i>Dipturus linteus</i>	0	0	0	0	0	0	0	0	0	0
<i>Malacoraja spinacidermis</i>	0	0	0	0	0	0	0	0	0	0
<i>Leucoraja ocellata</i>	0	0	0	0	0	0	0	0.02	0.051	0.001
<i>Bathyraja richardsoni</i>	0	0.03	0	0	0	0	0.03	0	0	0
<i>Bathyraja spinicauda</i>	0	0	0.002	0	0.285	0	0	0.001	0	0.04
<i>Harriotta raleighana</i>	0	0	0	0	0	0	0	0	0	0
<i>Acipenser oxyrinchus</i>	0	0	0	0	0	0	0	0	0	0
<i>Clupea harengus</i>	0	0	0	0	0	0	0	0.001	0	0
<i>Alosa sapidissima</i>	0	0	0	0	0	0	0	0	0	0
Alepocephalidae	0	0	0	0	0	0	0	0	0	0
<i>Alepocephalus bairdii</i>	0	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1988. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of Sets Observed	298	1341	5152	2363	1964	1360	2119	2054	1444	2144
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Bathytroctes</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Xenodermichthys copei</i>	0	0	0	0	0	0	0	0	0	0.001
<i>Salmo trutta</i>	0	0	0	0	0	0	0	0	0	0
<i>Salvelinus</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0	0	0	0	0	0	0	0
Osmeridae	0	0	0	0	0	0	0	0	0	0
<i>Mallothus villosus</i>	0.001	0.285	0.075	0	0	0	0	0.007	0.02	0.017
<i>Osmerus mordax</i>	0	0	0	0	0	0	0	0.001	0	0
<i>Argentina silus</i>	0	0	0	0	0	0	0	0	0	0
<i>Argentina striata</i>	0	0	0	0	0	0	0	0	0	0
<i>Bathylagus euryops</i>	0	0	0.005	0	0	0	0	0	0	0
<i>Cyclothone microdon</i>	0	0	0	0	0	0	0	0	0	0
<i>Gonostoma elongatum</i>	0	0	0	0	0	0	0	0	0	0
Sternoptychidae	0	0	0	0	0	0	0	0	0	0
<i>Argyropelecus aculeatus</i>	0	0	0	0	0	0	0	0	0	0
<i>Polyipnus asteroides</i>	0	0	0	0	0	0	0	0	0	0
<i>Sternoptyx diaphana</i>	0	0	0	0	0	0	0	0	0	0
Chauliodontinae	0	0	0	0	0	0	0	0	0	0
<i>Chauliodus sloani</i>	0	0	0.001	0	0	0.001	0	0.002	0.013	0.001
Stomiinae	0	0	0	0	0	0	0	0	0	0
<i>Stomias boa ferox</i>	0	0	0	0	0	0	0	0	0	0
Idiacanthinae	0	0	0	0	0	0	0	0	0	0
Paralepididae	0	0	0	0	0	0	0	0	0.002	0
<i>Anotopterus pharao</i>	0	0	0	0	0	0	0	0	0	0
Myctophidae	0	0	0.001	0	0	0.009	0	0.001	0.025	0.005
<i>Notoscopelus</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Notoscopelus elongatus kroyeri</i>	0	0	0	0	0	0	0	0	0	0
<i>Myctophum</i> sp.	0	0	0	0	0	0	0	0	0	0.012
<i>Myctophum punctatum</i>	0	0	0	0	0	0	0	0	0.001	0
<i>Myctophum affine</i>	0	0	0	0	0	0	0	0	0	0
<i>Benthosema glaciale</i>	0	0	0	0	0	0	0	0	0	0
<i>Symbolophorus veranyi</i>	0	0	0.001	0	0	0.001	0	0	0	0
Malacoosteinae	0	0	0	0	0	0	0	0	0	0
<i>Malacosteus niger</i>	0	0	0	0	0	0	0	0	0	0
<i>Synodus foetens</i>	0	0	0	0	0	0	0	0	0	0
Paralepididae	0	0	0	0	0	0	0	0	0	0
Paralepis	0	0	0	0	0	0	0	0	0	0.003
<i>Magnisudis atlantica</i>	0	0	0.005	0	0	0	0	0	0.006	0.001
<i>Paralepis coregonoides borealis</i>	0	0	0	0	0	0	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0	0	0	0	0	0	0	0	0	0
<i>Alepisaurus ferox</i>	0	0	0	0	0	0	0	0	0	0
<i>Chlorophthalmus agassizi</i>	0	0	0	0	0	0	0	0	0	0
Anguilliformes	0	0	0	0	0	0	0	0	0	0
Anguillidae	0	0.015	0	0	0	0	0	0	0	0
<i>Anguilla rostrata</i>	0.015	0	0	0	0	0	0	0	0	0
Ophichthidae	0.015	0	0	0	0	0	0	0	0	0
<i>Ophichthus cruentifer</i>	0	0	0	0	0	0	0	0	0	0.002
Derichthyidae	0	0	0	0	0	0	0	0	0	0
Nemichthyidae	0	0	0	0	0	0	0	0	0	0
<i>Nemichthys scolopaceus</i>	0	0	0	0	0	0	0	0	0	0.008
<i>Serrivomer beanii</i>	0	0	0	0	0	0	0	0	0	0.001
<i>Synphobranchus kaupii</i>	0	0	0	0	0	0	0	0	0	0
Notacanthidae	0	0	0	0	0	0	0	0	0	0
<i>Notacanthus chemnitzii</i>	0	0	0	0	0	0	0	0	0	0
<i>Scomberesox saurus</i>	0	0	0	0	0	0	0	0	0	0
<i>Gasterosteus</i> sp.	0	0	0.01	0	0	0	0	0	0	0
<i>Antimora rostrata</i>	0	0	0	0	0	0	0	0	0.001	0
<i>Halargyreus johnsonii</i>	0	0	0	0	0	0	0	0	0	0
Gadidae	0	0	0	0	0	0	0	0	0	0
<i>Gadus</i> sp.	0	0	0	0.002	0	0	0	0	0	0
<i>Gadus morhua</i>	0.355	6.962	0.662	0.466	0.92	0.288	0.75	2.228	0.614	5.61
<i>Gadus ogac</i>	0.24	0.367	0.05	0.022	0	0	0	0	0	0
<i>Micromesistius putassou</i>	0	0.001	0.001	0	0	0.033	0	0	0	0
<i>Melanogrammus aeglefinus</i>	0	0.003	0.039	0	0	0	0.005	0.002	0.003	0.005
<i>Microgadus tomcod</i>	0	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1988. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of Sets Observed	298	1341	542	2363	1964	1360	2119	2054	1444	2144
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Pollachius virens</i>	0	0	0	0	0	0	0	0	0	0
<i>Phycis chesteri</i>	0	0	0	0	0	0	0	0	0	0
<i>Urophycis chuss</i>	0	0	0	0	0	0.01	0	0	0	0
<i>Urophycis tenuis</i>	0	0.003	0	0	0	0	0	0	0	0
<i>Merluccius albidus</i>	0	0	0	0	0	0	0	0	0	0
<i>Merluccius bilinearis</i>	0	0	0	0	0	0	0	0	0	0
<i>Merluccius sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Boreogadus saida</i>	0.184	0.052	2.888	0.296	0.338	2.727	25.211	10.753	2.102	6.23
<i>Arctogadus glacialis</i>	0	0	0.003	0	0	0	0.02	0	0	0.01
<i>Gaidropsarus sp.</i>	0	0	0	0	0	0	0.001	0	0	0
<i>Gaidropsarus ensis</i>	0	0	0.056	0.001	0	0.02	0.007	0.042	0.052	0.05
<i>Gaidropsarus argentatus</i>	0	0	0.004	0.002	0	0.003	0	0.006	0	0.01
<i>Molva molva</i>	0	0	0	0	0	0	0	0	0	0
<i>Brosme brosme</i>	0.03	0	0.002	0.004	0	0	0	0	0	0
<i>Enchelyopus cimbrius</i>	0	0	0	0	0	0.001	0	0	0	0
<i>Laemonema barbatulum</i>	0	0	0	0	0	0	0	0	0	0
<i>Urophycis sp.</i>	0	0	0	0	0	0	0	0	0	0
Gadiformes	0	0	0	0	0	0	0	0	0	0
Macrouridae	0	0	0.002	0	0	0	0	0	0	0
<i>Macrurus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Macrurus berglax</i>	0	0	0	0.015	0	0	0	0.002	0.001	0.308
<i>Nezumia sp.</i>	0	0	0	0	0	0	0	0	0	0.111
<i>Nezumia bairdii</i>	0	0	0	0	0	0	0	0	0	0
<i>Coryphaenoides rupestris</i>	0	0	0	0	0	0	0	0	0	0
<i>Trachyrincus murrayi</i>	0	0	0	0	0	0	0.135	0	0	0.012
<i>Malacocephalus occidentalis</i>	0	0	0	0	0	0	0	0	0	0
Polymixiidae	0	0	0	0	0	0	0	0	0	0
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0	0	0	0	0.002
<i>Diretmus argenteus</i>	0	0	0	0	0	0	0	0	0	0
<i>Aphanopus carbo</i>	0	0	0	0	0	0.001	0	0	0	0
<i>Benthodesmus simonyi</i>	0	0	0	0	0	0.001	0	0	0	0
<i>Ruvettus pretiosus</i>	0	0	0	0.005	0	0	0	0	0	0
Apogonidae	0	0	0	0	0	0	0	0	0	0
<i>Howella sherborni</i>	0	0	0	0	0	0	0	0	0	0
<i>Lopholatilus chamaeleonticeps</i>	0	0	0	0.035	0	0	0	0	0	0
<i>Chiasmodon niger</i>	0	0	0	0.06	0	0	0	0	0	0
Trachinoidei	0	0	0	0	0	0	0	0	0	0
Ammodytidae	0	0	0	0	0	0	0	0	0	0
<i>Ammodytes dubius</i>	0	0	0	0.005	0	0	0	0.001	0	0.004
<i>Ammodytes hexapterus</i>	0	0	0.008	0	0	0	0	0	0	0
Blennioidei	0	0	0	0	0	0	0	0	0	0
<i>Pholis gunnellus</i>	0	0	0	0	0	0	0	0	0	0
Stichaeidae	0	0.002	0	0	0	0	0	0	0	0
<i>Stichaeus punctatus</i>	0	0	0	0	0	0	0	0	0	0
<i>Eumesogrammus praecisus</i>	0	0	0	0	0	0	0	0.009	0	0
<i>Lumpenus sp.</i>	0	0	0	0	0	0.019	0	0	0	0
<i>Lumpenus fabricii</i>	0	0	0	0	0	0	0	0	0	0
<i>Lumpenus lampretaeformis</i>	0	0	0.005	0	0	0	0	0	0	0
<i>Leptoclinus maculatus</i>	0	0	0	0	0	0	0	0.009	0.197	0.026
<i>Anisarchus medius</i>	0	0	0	0	0	0	0	0	0	0.003
Zoarcidae	0	0.049	3.087	3.51	2.738	1.15	2.546	3.521	0.825	4.198
<i>Lycodes sp.</i>	0	0	0.01	0	0	0	0.022	0.003	0	0
<i>Lycodes esmarkii</i>	0	0	0	0	0	0.028	0	0.008	0.012	0.069
<i>Lycodes lavalaei</i>	0	0	0	0	0	0	0	0	0	0
<i>Lycodes reticulatus</i>	0	0.029	0.013	0	0	0.001	0	0.079	0.016	0.186
<i>Lycodes vahlii</i>	0.07	2.337	0.43	0.427	0	0.856	0	0.061	0.113	0.185
<i>Lycodes turneri</i>	0	0	0	0	0	0	0	0.031	0	0.091
<i>Lycodes terraenovae</i>	0	0	0	0	0	0	0	0	0	0
<i>Lycodes eudipleurostictus</i>	0	0	0	0	0	0	0	0	0	0
<i>Lycodes pallidus</i>	0	0	0.005	0.004	0	0	0	0.349	0.603	0.032
<i>Lycodon mirabilis</i>	0	0	0	0	0	0	0.015	0	0	0
<i>Zoarcis americanus</i>	0	0	0	0.044	0	0	0	0	0.001	0.005
<i>Melanostigma atlanticum</i>	0	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1988. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of Sets Observed	298	1341	5152	2363	1964	1360	2119	2054	1444	2144
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Gymnelus viridis</i>	0	0	0	0.044	0	0	0	0	0	0.001
<i>Lycenchelys sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Lycenchelys paxillus</i>	0	0	0	0	0.239	0	0	0.024	0.066	0.025
<i>Lycenchelys sarsii</i>	0	0	0.001	0	0	0	0	0	0	0
<i>Lycenchelys verrilli</i>	0	0	0	0	0	0	0	0.01	0	0
<i>Sebastes sp.</i>	172.991	224.193	518.096	145.776	55.803	66.377	141579	556.034	566.044	474.389
Triglidae	0	0.008	0	0	0	0	0	0	0	0
<i>Prionotus alatus</i>	0	0	0	0	0.005	0.01	0	0	0	0
Cottidae	0.05	0	5.044	0.225	6.046	5.65	5.863	4.947	6.763	7.208
<i>Hemirhamphus americanus</i>	0	0	0	0	0	0	0	0	0	0.01
<i>Arctodiellus sp.</i>	0	0	0.14	0	0	0	0	0.023	0	0.738
<i>Arctodiellus atlanticus</i>	0	0	0	0	0	0	0	0	0	0
<i>Arctodiellus uncinatus</i>	0	0.001	0.301	0.167	0	0.479	0	0	0	0.391
<i>Triglops sp.</i>	0	0	0.08	0	0	3.434	0	4.046	0.318	0.56
<i>Triglops murrayi</i>	0	0.001	0	0	0	0.025	0	2.043	1.916	1.56
<i>Triglops nybelini</i>	0	0.012	0.141	0.205	0	2.38	0	0.042	0	0.031
<i>Triglops pingelii</i>	0	0	0.277	0	0	0	0	0	0	0
<i>Myoxocephalus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus aeneus</i>	0	0	0	0	0	0	0	0.723	2.378	0.586
<i>Myoxocephalus scorpius</i>	0	0.189	0.065	0	0.302	0	0	0.007	0.226	0.081
<i>Myoxocephalus octodecemspinosus</i>	0	0.41	0	0.003	1.095	0	3.401	0.004	0	0.065
<i>Myoxocephalus quadricornis</i>	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus scorpioides</i>	0	0	0	0	0	0.01	0	0	0.911	0.002
<i>Gymnocanthus tricuspis</i>	0	0	0	0	0	0	0	0	0	0
<i>Cottus sp.</i>	0	0	0	0	0	0	0.002	0	0	0
<i>Cottus bairdii</i>	0	0	0	0	0	0	0	0	0	0
<i>Cottus cognatus</i>	0	0	0	0	0	0	0	0	0	0
<i>Cottunculus sp.</i>	0	0	0	0	0	0	5.713	0	0	0.015
<i>Cottunculus thomsonii</i>	0	0	0	0	0	0	0	2.393	0	0
<i>Cottunculus microps</i>	0	0.013	0.01	0.001	0	0	0	0.037	1.519	0.025
<i>Icelus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Icelus bicornis</i>	0	0	0	0	0	0	0	0.372	0	0.001
<i>Icelus spatula</i>	0.05	0	0	0	0	0	0	0	0	0
Agonidae	0	0	0	0	0.222	0.011	0	0.002	0	0.009
<i>Leptagonus decagonus</i>	0	0.001	0.086	0	0	0	0.003	0.007	0.014	0.051
<i>Ulcina olrikii</i>	0	0	0.04	0	0	0	0	0	0	0
<i>Aspidophoroides monopterygius</i>	0	0.002	0	0	0	0	0	0.001	0	0.001
Cyclopteridae	0	0	0.234	0.11	0	0	1.168	0	0	0
<i>Eumicrotremus sp.</i>	0	0	0	0	0	0	7.158	0.399	0	0
<i>Eumicrotremus spinosus</i>	0	0.031	0.002	0	0.156	3.532	1.88	4.869	1.301	0.472
<i>Eumicrotremus derjugini</i>	0.395	0	0.288	0.131	0	0.695	0.006	0.727	0.281	0.12
<i>Eumicrotremus terraenovae</i>	0	0	0	0	0	0	0.025	0	0	0
<i>Cyclopterus lumpus</i>	0.331	0.817	0.034	0.005	0	0	1.99	0.001	0.004	0.05
<i>Cyclopteroopsis mcalpini</i>	0	0	0.003	0	0	0	0	0	0	0
Liparidae	0	0	0	0	0	0.006	0	0.663	0	0.016
<i>Paraliparis sp.</i>	0	0	0.207	0	0	0.852	0	1.21	0.08	0.971
<i>Paraliparis copei</i>	0	0	0	0	0	0	0	0	0	0
<i>Liparis sp.</i>	0	0	0	0.004	0	0	0	0	0.041	0.015
<i>Liparis atlanticus</i>	0	0	0	0	0	0	0	0	0	0
<i>Liparis fabricii</i>	0	0	0.061	0	0	0.024	0	0.673	0.125	0.565
<i>Liparis liparis</i>	0	0	0	0	0	0	0	0.002	0	0.001
<i>Liparis tunicatus</i>	0	0	0.113	0	0	0.068	0	0.001	0	0.095
<i>Liparis gibbus</i>	0	0	0.02	0	0	0	0	0	0	0
<i>Careproctus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Careproctus longipinnis</i>	0	0	0	0	0	0	0	0	0	0
<i>Careproctus reinhardtii</i>	0	0	0	0	0	0	0	0.059	0	0.025
<i>Careproctus ranula</i>	0	0	0.022	0	0	0	0	0.001	0	0
<i>Dactylopterus volitans</i>	0	0	0	0	0	0	0	0	0	0
Pleuronectiformes	0.3	0.274	0	0.001	0	0	0	0	0	0
Pleuronectidae	0.3	0	0.005	0	0	0	0	0	0	0
<i>Hippoglossoides platessoides</i>	1.206	16.956	12.479	3.165	3.84	1.804	3.578	11.685	4.016	14.386

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Number of Sets Observed	298	1341	5152	2363	1964	1360	2119	2054	1444	2144
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Glyptocephalus cynoglossus</i>	0.14	0.217	1.295	0.204	0.154	0	0	0.076	0	0.02
<i>Limanda ferruginea</i>	0.009	0	0.02	0.028	0.002	0	0	0	0	0.015
<i>Reinhardtius hippoglossoides</i>	3.901	9.796	49.396	23.456	28.457	26.406	28.182	51.849	60.021	88.522
<i>Hippoglossus hippoglossus</i>	0.315	0.944	0.732	0.735	1.23	0.39	0.648	0.71	0.39	2.897
<i>Pseudopleuronectes americanus</i>	0	0	0.003	0	0	0	0	0	0	0
Bothidae	0	0.294	0.002	0	0	0	0	0	0	0
<i>Paralichthys sp.</i>	0	0	0	0.001	0	0	0	0	0	0
<i>Hippoglossina oblonga</i>	0	0	0	0	0	0	0	0	0	0
<i>Scophthalmus aquosus</i>	0	0	0	0	0	0	0	0	0	0
<i>Aluterus scripius</i>	0	0	0	0	0	0	0	0	0	0
<i>Lophius americanus</i>	0	0	0.002	0	0	0	0	0	0	0
Ceratiidae	0	0	0	0	0	0	0	0	0	0
<i>Ceratias holboellii</i>	0	0	0.001	0	0	0	0	0	0	0
<i>Cryptopsaras couesii</i>	0	0	0	0	0	0	0	0	0	0
<i>Linophryne coronata</i>	0	0	0	0	0	0	0	0	0	0
<i>Himantolophus groenlandicus</i>	0	0	0	0	0	0	0	0	0	0
Unidentified Fish	0	0	0.3	0	0	0	0.002	0.003	0.001	3.098
Other Invertebrates	Total Catch Weight (tonnes)									
Invertebrata	0.004	0	0	0	0	0.012	0	0	0	0
Cnidaria	0	0	0	0	0	0	0	0	0	0
Scyphozoa	0	0.214	0	0.02	0	0	0	0	0	0
Actiniaria	0	0	0	0	0	0	0	0	0	0
Ctenophora	0	0	0	0	0	12.37	0	0	0	0
Chaetognatha	0	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0	0
Buccinidae	0	0	0	0	0	0	0	0	0	0
Bivalvia	0	0	0	0	0	0	0	0	0	0
Pectinidae	0	0	0	0	0	0	0	0	0	0
<i>Chlamys islandica</i>	0	0	0	0	0	0	0	0	0	0
Cephalopoda	0	0	0.04	0	0	0.001	0	0.007	0	0
Sepiolidae	0	0	0	0	0	0	0	0	0	0
Rossinae	0	0	0	0	0	0.013	0	0	0	0
<i>Rossia sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Heteroteuthis dispar</i>	0	0	0	0	0	0	0	0	0	0
Teuthida	0	0	0.104	0	0	0	0	0	0	0
Loliginidae	0	0	0	0	0	0	0	0	0	0
<i>Loligo sp.</i>	0	0	0	0	0	0.011	0	0	0	0
<i>Loligo pealeii</i>	0	0.001	0	0	0	0	0	0	0	0
<i>Sepioteuthis sepioidea</i>	0	0	0	0	0	0	0	0	0	0
<i>Illex sp.</i>	0	0	0	0	0	0	0	0	0.001	0
<i>Illex illecebrosus</i>	0	0	0.027	0.054	0	0.009	0.063	0.293	0.155	0.127
<i>Ommastrephes bartramii</i>	0	0	0	0	0	0	0	0	0	0
<i>Gonatus fabricii</i>	0	0	0	0	0	0	0	0	0	0
Octopoda	0	0	0	0	0	0.003	0	0.031	0	0.005
<i>Cirroteuthis mulleri</i>	0	0	0	0	0	0	0	0	0	0.043
Incirrina	0	0	0	0	0	0	0	0	0	0
Bolitaenidae	0	0	0	0	0	0	0	0	0	0
Octopodidae	0	0	0	0	0	0.006	0	0	0	0
<i>Bathypolypus arcticus</i>	0	0	0	0	0	0	0	0	0	0
<i>Octopus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Octopus burryi</i>	0	0	0	0	0	0	0	0	0	0
Tremoctopodidae	0	0	0	0	0	0	0	0	0	0
Pycnogonida	0	0	0	0	0	0	0	0	0	0
Crustacea	0	0	0	0	0	0	0	0	0	0
Lophogastrida	0	0	0	0	0	0	0	0	0	0
Euphausiacea	0	0	0	0	0	0	0	0	0	0
<i>Euphausia sp.</i>	0	0	0	0	0	0	0	0	0	0
Decapoda	0	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1988. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of Sets Observed	298	1341	542	2363	1964	1360	2119	2054	1444	2144
Other Invertebrates cont'd	Total Catch Weight (tonnes)									
Dendrobranchiata	0	0	0.035	0	0	0	0	0	0.001	0
Sergestidae	0	0	0	0	0	0	0	0	0	0
<i>Sergestes arcticus</i>	0	0	0	0	0	0	0	0	0	0
<i>Acantheephyra</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Acantheephyra pelagica</i>	0	0	0	0	0	0	0	0	0	0
Pasiphaeidae	0	0	0	0	0	0	0	0	0	0
<i>Pasiphaea</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Pasiphaea tarda</i>	0	0	0.005	0	0	0	0	0	0	0
<i>Pasiphaea multidentata</i>	0	0	0	0	0	0	0	0.002	0.004	0
<i>Eualus fabricii</i>	0	0	0	0	0	0	0	0	0	0
<i>Eualus macilentus</i>	0	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii</i>	0	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii gaimardii</i>	0	0	0	0	0	0	0	0	0.001	0
<i>Eualus gaimardii belcherii</i>	0	0	0	0	0	0	0	0	0	0
<i>Spirontocaris</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Spirontocaris spinus</i>	0	0	0	0	0	0	0	0	0	0
<i>Spirontocaris phippisii</i>	0	0	0	0	0	0	0	0	0	0
<i>Spirontocaris lilljeborgii</i>	0	0	0	0	0	0	0	0	0	0
<i>Lebbeus</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Lebbeus groenlandicus</i>	0	0	0	0	0	0	0	0	0	0
<i>Lebbeus polaris</i>	0	0	0	0	0	0	0	0	0	0
<i>Lebbeus microceros</i>	0	0	0	0	0	0	0	0	0	0
<i>Lebbeus microceros</i>	0	0	0	0	0	0	0	0	0	0
<i>Caridion gordonii</i>	0	0	0	0	0	0	0	0	0	0
<i>Dichelopandalus leptocerus</i>	0	0	0	0	0	0	0	0	0	0
<i>Pandalus</i> sp.	0	0	0	0	0	0	0	0	2.7	0.002
<i>Atlantopandalus propinquus</i>	0	0	0	0	0	0	0	0	0.001	0
Crangonidae	0	0	0	0	0	0	0	0	0	0
<i>Sclerocrangon boreas</i>	0	0	0	0	0	0	0	0	0	0
<i>Sclerocrangon ferox</i>	0	0	0	0	0	0	0	0	0	0
<i>Crangon</i>	0	0	0	0	0	0	0	0	0	0
<i>Crangon septemspinosa</i>	0	0	0	0	0	0	0	0	0	0
<i>Sabinea</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Sabinea septemcarinata</i>	0	0	0	0	0	0	0	0	0	0
<i>Sabinea sarsii</i>	0	0	0	0	0	0	0	0	0	0.077
<i>Pontophilus norvegicus</i>	0	0	0.017	0	0	0	0	0	0	0
<i>Argis dentata</i>	0	0	0	0	0	0	0	0	0	0
Pleocyemata	0	0	0	0	0	0	0	0	0	0
<i>Polycheles sculptus</i>	0	0	0	0	0	0	0	0	0	0
<i>Homarus americanus</i>	0	0	0	0.005	0	0	0	0	0	0
Galatheidae	0	0	0	0	0	0	0	0	0	0
<i>Munida tenuimana</i>	0	0	0	0	0	0	0	0	0	0
Paguridae	0	0	0.001	0	0	0	0	0	0	0
<i>Pagurus</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Pagurus pubescens</i>	0	0	0	0	0	0	0	0	0	0
<i>Parapagurus pilosimanus</i>	0	0	0	0	0	0	0	0	0	0
Lithodidae	0	0	0	0	0	0	0	0.001	0	0.04
<i>Lithodes</i> sp.	0	0	0	0	0	0	0	0	0	0.003
<i>Lithodes maja</i>	0	0	0	0	0	0	0.002	0.028	0.062	0.025
<i>Neolithodes</i> sp.	0	0	0	0	0	0	0	0	0	0.005
<i>Neolithodes grimaldii</i>	0	0.022	0	0	0	0	0.017	0	0	0
Brachyura	0	0	0.007	0.021	0	0	0	0	0	0
Cancridae	0	0	0.082	0.022	0	0	0	0.001	0	0
<i>Cancer irroratus</i>	0	0	0.001	0.015	0	0	0	0	0	0
<i>Cancer borealis</i>	0	0	0.001	0	0	0	0	0	0	0
Majidae	0	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1988. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of Sets Observed	298	1341	5152	2363	1964	1360	2119	2054	1444	2144
Other Invertebrates cont'd	Total Catch Weight (tonnes)									
<i>Chionoecetes sp.</i>	0	0	0.002	0.009	0	0	0	0	0	0
<i>Chionoecetes opilio</i>	0	0	0.013	0	0	0.012	0	0.01	0.001	0.01
<i>Hyas araneus</i>	0	0	0	0	0	0	0	0	0	0.003
<i>Hyas coarctatus</i>	0	0	0	0	0	0	0	0	0	0
<i>Chaceon quinquegens</i>	0	0	0	0.001	0	0	0	0	0	0
Holothuroidea	0	0	0	0	0	0	0	0	0	0
<i>Psolus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Psolus fabricii</i>	0	0	0	0	0	0	0	0	0	0
Echinoidea	0	0	0	0	0	0	0	0	0	0
<i>Strongylocentrotus droebachiensis</i>	0	0	0	0	0	0	0	0	0	0
Astroidea	0	0	0	0	0	0	0	0	0	0
Solasteridae	0	0	0	0	0	0	0	0	0	0
<i>Asterias sp.</i>	0	0	0	0	0	0	0	0	0	0
Marine Mammals	Total Catch Weight (tonnes)									
Caniformia	0	0	0	0	0	0	0	0	0	0
<i>Pagophilus groenlandicus</i>	0	0	0	0	0	0	0	0	0	0
<i>Halichoerus grypus</i>	0	0	0	0	0	0	0	0	0	0
<i>Cystophora cristata</i>	0	0	0	0	0	0	0	0	0	0
Other	Total Catch Weight (tonnes)									
Unidentified Material	0	0	0	0	0	0	0	0	0	0
Stone	0	0	0	0	0	0	0	0	0	0
Unidentified Eggs	0	0	0	0	0	0	0	0	0	0
Plant Material	0	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1989 to 1998. Missing years indicate that no fishing occurred in the area that year.

Management Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Sets Observed	4880	3733	5406	4429	3250	3558	925	2201	202	415
Commercial Shrimp Species Total Catch Weight (tonnes)										
<i>Pandalus borealis</i>	7360.36	5663.01	6941.37	7484.294	5287.166	4357.796	1162.858	2682.54	520.377	872.785
<i>Pandalus montagui</i>	0	0.007	0.006	0.208	0.001	0.002	0.001	0	0	0
Total Shrimp	7360.36	5663.017	6941.376	7484.502	5287.167	4357.798	1162.859	2682.54	520.377	872.785
By-Catch Species Total Catch Weight (tonnes)										
Total By-catch	1848.42	1354.118	2523.826	2457.688	1429.958	1498.128	371.08	613.391	67.024	155.234
Percent By-catch in Total Catch	20.1	19.3	26.7	24.7	21.3	25.6	24.2	18.6	11.4	15.1
SARA Species Total Catch Weight (tonnes)										
Anarhichadidae	0.02	0	0	0	0	0	0	0	0	0
<i>Anarhichas denticulatus</i>	1.267	0.555	0.318	0.578	0.02	0.047	0.027	0.004	0	0
<i>Anarhichas lupus</i>	3.276	0.455	1.247	3.556	0.336	0.497	0.017	0.009	0	0.04
<i>Anarhichas minor</i>	8.709	5.055	5.351	5.843	3.83	3.612	0.619	0.732	0.039	0.035
Sponge Total Catch Weight (tonnes)										
Porifera	2.174	0.202	0.425	0	0	0.271	0.039	0.09	0	0.005
Soft Coral Total Catch Weight (tonnes)										
Anthozoa	0	0	0	0	0	0	0	0	0	0
<i>Gersemia rubiformis</i>	0	0	0	0	0	0	0	0	0	0
Sea Pens Total Catch Weight (tonnes)										
Pennatulacea	0	0	0	0	0	0	0	0	0	0
Other Fish Total Catch Weight (tonnes)										
Myxiniformes	0	0	0	0	0	0.001	0	0	0	0.001
<i>Myxine glutinosa</i>	0	0.018	0.004	0.001	0.002	0.005	0	0.001	0	0
<i>Petromyzon marinus</i>	0	0	0	0.001	0	0	0	0	0	0
Chondrichthyes	0	0.1	0	0	0	0	0	0	0	0
Squaliformes	0	0	0	0	0	0	0	0	0	0
Dalatiidae	0	0	0	0	0	0	0	0	0	0
<i>Somniosus microcephalus</i>	314.558	184.584	190.654	119.936	100.555	64.524	5.265	12.885	0.2	0
<i>Squalus acanthias</i>	0	0	0.001	0	0	0	0	0	0	0
<i>Etmopterus spinax</i>	0	0	0	0	0	0	0	0	0	0.002
<i>Centroscyllium fabricii</i>	0.01	0	0	0.007	0	0.003	0	0	0	0
<i>Carcharias taurus</i>	0	0	0	0	0	0	0	0	0	0
<i>Alopias vulpinus</i>	0	0	0	0	0	0.06	0	0	0	0
Cetorhinidae	0	0	0	0	0	0	0	0	0	0
<i>Cetorhinus maximus</i>	0	0	0	0	0	0	0	0	0	0
<i>Lamna nasus</i>	1.555	0	0	0	0	0	0	0	0	0
<i>Carcharodon carcharias</i>	0	0	0	0	0	0.015	0	0	0	0
Rajiformes	0	0	0	0	0	0	0	0	0	0
Rajidae	26.873	24.134	60.771	118.19	6.657	9.273	2.021	0.12	0	0.005
<i>Raja sp.</i>	0.028	0	2.872	9.192	1.427	0	0.13	0.367	0.001	0.186
<i>Amblyraja radiata</i>	18.199	18.056	22.858	38.182	44.884	43.306	8.903	22.505	2.156	0.874
<i>Malacoraja senta</i>	0.001	0.019	0	0.005	0.037	0.044	0	0.01	0.002	0.002
<i>Rajella bathyphila</i>	0	0.5	0	0	0	0	0	0	0	0
<i>Leucoraja erinacea</i>	0.006	0.037	0.001	0	0	0.017	0	0	0	0
<i>Rajella fyllae</i>	0.267	1.775	0.011	0.047	0.01	0.655	0	0.003	0	0
<i>Amblyraja hyperborea</i>	0	0	0	0	0.012	0.011	0.226	0.018	0	0.001
<i>Amblyraja jenseni</i>	0	0	0.05	0.002	0	0.028	0	0	0	0
<i>Dipturus laevis</i>	0.015	0	0	0.205	0	0.003	0	0.05	0	0
<i>Dipturus linteus</i>	0	0	0	0	0	0	0	0.463	0	0
<i>Malacoraja spinacidermis</i>	0	0.001	0	0	0	0	0	0.025	0	0
<i>Leucoraja ocellata</i>	0.058	0.521	0.011	0.048	2.961	3.331	0	0.003	0	0.044
<i>Bathyrāja richardsoni</i>	0	0	0	0	0	0	0.05	0	0	0
<i>Bathyrāja spinicauda</i>	0.001	0.842	0.012	3.386	4.437	1.848	1.36	0.002	0	0.095
<i>Harriotta raleighana</i>	0	0	0	0	0	0	0.002	0	0	0
<i>Acipenser oxyrinchus</i>	0	0.014	0	0	0	0	0	0	0	0
<i>Clupea harengus</i>	0	0.004	0.001	0.002	0	0	0.001	0.001	0	0
<i>Alosa sapidissima</i>	0	0	0	0	0	0.001	0	0	0	0
Alepocephalidae	0	0	0	0	0	0.001	0	0	0	0
<i>Alepocephalus bairdii</i>	0.001	0	0	0	0	0	0	0	0	0

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Management Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Sets Observed	4880	3733	5406	4429	3250	3558	925	2201	202	415
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Bathytroctes</i> sp.	0	0	0.001	0	0	0.006	0	0	0	0.001
<i>Xenodermichthys copei</i>	0.001	0.002	0	0	0	0	0	0	0	0
<i>Salmo trutta</i>	0	0	0	0.075	0	0	0	0	0	0
<i>Salvelinus</i> sp.	0	0	0	0	0	0.013	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0	0	0	0.017	0	0	0	0
Osmeridae	0.618	0	0	0	0	0	0	0	0	0
<i>Mallothus villosus</i>	0.005	0.061	0.004	0.001	0.053	0.014	0.013	0.011	0.001	4.154
<i>Osmerus mordax</i>	0	0	0	0	0	0	0	0	0	0
<i>Argentina silus</i>	0	0.001	0.001	0	0	0	0	0	0.002	0
<i>Argentina striata</i>	0	0	0	0	0	0	0	0	0	0
<i>Bathylagus euryops</i>	0	0	0	0	0.001	0.001	0	0.006	0	0
<i>Cyclothone microdon</i>	0	0	0	0	0	0.003	0	0	0	0
<i>Gonostoma elongatum</i>	0	0	0	0.003	0	0.001	0	0	0	0
Sternoptychidae	0	0	0	0	0	0	0	0	0	0
<i>Argyropelecus aculeatus</i>	0.001	0	0	0	0	0	0	0.006	0.001	0
<i>Polyipnus asteroides</i>	0	0	0	0	0	0.002	0	0	0	0
<i>Sternoptyx diaphana</i>	0	0	0	0	0	0	0	0	0	0.001
Chauliodontinae	0	0	0	0	0	0.001	0	0	0.005	0
<i>Chauliodus sloani</i>	0.014	0.01	0.017	0.335	0.01	0.072	0	0.133	0.004	0.004
Stomiinae	0	0	0	0	0.001	0	0	0	0	0
<i>Stomias boa ferax</i>	0	0.013	0.001	0.014	0.002	0.005	0	0.002	0	0
Idiacanthinae	0	0	0	0	0	0	0	0	0	0
Paralepididae	0	0	0	0	0	0	0	0	0	0
<i>Anotopterus pharao</i>	0	0	0	0.105	0	0	0.005	0	0	0
Myctophidae	0.079	0.488	0.918	0.02	0.316	0.326	0.074	0.486	0.136	0.232
<i>Notoscopelus</i> sp.	0.009	0	0	0	0	0	0.005	0	0	0
<i>Notoscopelus elongatus kroyeri</i>	0.018	0.035	0.016	0.002	0.001	0	0	0.001	0	0
<i>Myctophum</i> sp.	0	0	0	0	0	0.011	0	0	0	0
<i>Myctophum punctatum</i>	0	0	0	0	0	0	0	0.069	0	0
<i>Myctophum affine</i>	0	0	0	0	0	0	0	0	0	0
<i>Bentho sema glaciale</i>	0	1954	0	0	1422	0.031	0	0	0	0
<i>Symbolophorus veranyi</i>	0	0	0	0	0	0	0	0	0	0
Malaco steinae	0	0	0	0	0	20.478	0	0	0	0.001
<i>Malacosteus niger</i>	0	0.003	0	0	0	0.002	0	0	0	0
<i>Synodus foetens</i>	0	0	0	0	0	0.003	0	0	0	0
Paralepididae	0	0	0	0	0	0	0	0	0.008	0.02
Paralepis	0	0	0.001	0.001	0	0	0.019	0.001	0	0.001
<i>Magnisudis atlantica</i>	0	0	0	0	0	0.067	0	0.001	0	0
<i>Paralepis coregonoides borealis</i>	0	0	0.01	0	0.002	0	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0.021	0.023	0.003	0.002	0.001	0.035	0.003	0.189	0.058	0
<i>Alepisaurus ferax</i>	0	0	0.02	0	0	0	0	0	0	0
<i>Chlorophthalmus agassizi</i>	0	0	0	0	0	0.005	0	0	0	0
Anguilliformes	0	0	0	0	0.001	0.046	0	0	0	0
Anguillidae	0	0	0.001	0	0	0	0	0	0	0
<i>Anguilla rostrata</i>	0	0	0	0	0	0	0	0	0	0
Ophichthidae	0	0	0	0	0	0	0	0	0	0
<i>Ophichthus cruentifer</i>	0	0	0	0	0	0	0	0	0	0
Derichthyidae	0	0	0	0	0	0	0	0	0	0
Nemichthyidae	0	0	0.005	0	0	0.001	0	0	0	0
<i>Nemichthys scolopaceus</i>	0	0	0.007	0.003	0	0	0	0.001	0.002	0.002
<i>Serrivomer beanii</i>	0.003	0.002	0.003	0.004	0	0.011	0	0	0	0.023
<i>Synphobranchus kaupii</i>	0	0.015	0	0.403	0	0.034	0	0	0	0.001
Notacanthidae	0	0	0.002	0	0.001	0	0	0	0	0
<i>Notacanthus chemnitzii</i>	0	0	0	0	0	0	0	0	0	0
<i>Scomberesox saurus</i>	0	0	0	0	0	0	0.004	0	0	0.001
<i>Gasterosteus</i> sp.	0	0.52	0	0	0	0	0	0	0	0
<i>Antimora rostrata</i>	0	0	0	0	0	0	0	0	0	0
<i>Halargyreus johnsonii</i>	0	0	0	0	0	0	0	0	0	0
Gadidae	0	0	0	0	0	0	0	0.05	0	0
<i>Gadus</i> sp.	0	0	0	0	0	0	0	0	0	0
<i>Gadus morhua</i>	18.88	8.541	8.845	5.764	10.12	0.788	0.219	1.324	0.001	0.087
<i>Gadus ogac</i>	0	0.96	0.255	0	0.009	0.001	0.002	0.004	0	0
<i>Micromesistius poutassou</i>	0.003	0.001	0	0	0	0	0	0.001	0	0
<i>Melanogrammus aeglefinus</i>	0.017	0	0	0.001	0	0	0	0	0	0
<i>Microgadus tomcod</i>	0	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1989 to 1998. Missing years indicate that no fishing occurred in the area that year.

Management Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Sets Observed	4880	3733	5406	4429	3250	3558	925	2201	202	415
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Pollachius virens</i>	0.005	0	0	0	0	0	0	0	0	0
<i>Phycis chesteri</i>	0	0	0.005	0	0.003	0.001	0	0.001	0	0
<i>Urophycis chuss</i>	0	0	0.01	0	0	0	0	0	0	0
<i>Urophycis tenuis</i>	0	0	0.015	0.001	0	0	0	0	0	0
<i>Merluccius albidus</i>	0	0	0	0	0	0.001	0	0	0	0
<i>Merluccius bilinearis</i>	0	0	0	0	0	0	0	0	0	0
<i>Merluccius sp.</i>	0	0	0	0.03	0	0	0.22	0	0	0
<i>Boreogadus saida</i>	26.764	63.971	78.618	96.911	143.166	81.216	26.198	30.941	0.811	16.534
<i>Arctogadus glacialis</i>	0.1	5.31	0	0	0.051	0	0	0	0	0
<i>Gaidropsarus sp.</i>	0.001	0.159	0.099	0.002	0.052	0.071	0.003	0	0	0
<i>Gaidropsarus ensis</i>	0.316	0.068	0.094	0.261	0.31	0.233	0.082	1.101	0.002	0
<i>Gaidropsarus argentatus</i>	0.107	0.089	0.107	0.039	0.004	0.052	0.009	0.04	0.088	0.014
<i>Molva molva</i>	0	0	0.002	0	0	0	0	0	0	0
<i>Brosme brosme</i>	0.001	0.028	0.035	0.009	0.009	0.042	0	0.002	0	0
<i>Enchelyopus cimbrius</i>	0.001	0	0	0	0.001	0	0	0	0	0
<i>Laemonema barbatulum</i>	0	0	0	0.43	0	0	0	0	0	0
<i>Urophycis sp.</i>	0	0	0.003	0	0	0	0	0	0	0
<i>Gadiformes</i>	0	0	0	0	0	0.001	0	0.001	0	0
<i>Macrouridae</i>	0	0	0	0.004	0	0	0	0	0	0
<i>Macrurus sp.</i>	0.004	0.05	0.019	0.033	0.003	0	0.001	0	0	0
<i>Macrurus berglax</i>	0.076	1.796	0.023	0.575	0.014	0.005	0	0.003	0.001	0.001
<i>Nezumia sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Nezumia bairdii</i>	0.001	0.035	0.003	0.005	0	0.002	0	0.001	0	0
<i>Coryphaenoides rupestris</i>	0.037	0.046	0	0.128	0.073	0.001	0	0.003	0	0
<i>Trachyrincus murrayi</i>	0.02	0	0	0	0	0	0	0	0	0
<i>Malacocephalus occidentalis</i>	0	0	0	0	0.221	0	0	0	0	0
<i>Polymixiidae</i>	0	0	0	0	0	2.786	0	0	0	0
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0	0	0	0	0
<i>Diretmus argenteus</i>	0	0	0	0	0	0	0	0	0	0
<i>Aphanopus carbo</i>	0	0	0	0	0	0	0	0	0	0
<i>Benthodesmus simonyi</i>	0	0	0	0	0	0	0	0	0	0
<i>Ruvettus pretiosus</i>	0	0	0	0	0	0	0	0	0	0
<i>Apogonidae</i>	0	0	0	0.75	0	0	0	0	0	0
<i>Howella sherborni</i>	0.001	0	0	0	0	0	0	0	0	0
<i>Lopholatilus chamaeleonticeps</i>	0	0	0	0.025	0	0	0	0	0	0
<i>Chiasmodon niger</i>	0	0	0	0	0.018	0.007	0	0	0	0
<i>Trachinoidei</i>	0	0	0	0	0	0	0	0	0	0
<i>Ammodytidae</i>	0	0	0	0	0	0	0.004	0	0	0
<i>Ammodytes dubius</i>	0	0.775	0.002	0	0.002	0.008	0.015	0.011	0	0.001
<i>Ammodytes hexapterus</i>	0	0	0	0	0	0	0	0	0	0
<i>Blennioidei</i>	0	0	0.029	0	0	0	0.021	0	0	0
<i>Pholis gunnellus</i>	0	0	0	0	0.017	0	0	0	0	0
<i>Stichaeidae</i>	0	0	0	0	0	0	0	0	0	0
<i>Stichaeus punctatus</i>	0	0	0	0.005	0	0	0	0	0	0
<i>Eumesogrammus praecisus</i>	0	0	0.041	0	0	0	0	0	0	0
<i>Lumpenus sp.</i>	0	0	0	0	0	0	0.01	0	0.025	0.034
<i>Lumpenus fabricii</i>	0	0.013	0	0	0.034	0.001	0	0	0	0
<i>Lumpenus lampretaeformis</i>	0.002	0.007	0.027	0.108	0.027	0.031	0.056	0.004	0.066	0
<i>Leptoclinus maculatus</i>	0.041	0.105	0.008	0.011	0.161	0.297	0	0.046	0	0
<i>Anisarchus medius</i>	0	0.006	0.521	0.028	0.388	0.142	0	0.052	0	0
<i>Zoarcidae</i>	10.678	3.582	4.803	0.603	0	2.588	0.68	3.541	0.574	0.508
<i>Lycodes sp.</i>	1.558	1.14	1.638	5.201	2.356	3.209	0.563	1.156	0.095	0.008
<i>Lycodes esmarkii</i>	0.094	0.041	0.158	0.133	0.438	0.288	0.002	0.695	0.874	0.412
<i>Lycodes lavalaei</i>	0	0.055	0.005	0.058	0.736	0.218	0	0.005	0	0
<i>Lycodes reticulatus</i>	0.556	0.121	0.042	0.822	0.876	0.657	0.389	0.137	0.369	0.027
<i>Lycodes vahlii</i>	0.322	0.501	0.288	2.37	2.123	0.951	0.095	1.103	0	0.001
<i>Lycodes turneri</i>	0.104	0.433	0.587	0.728	0.617	0.929	0.105	0.147	0	0.583
<i>Lycodes terraenovae</i>	0.002	0	0.025	0	0	0	0.021	0.001	0	0.02
<i>Lycodes eudipleurostictus</i>	0	0	0	0	0	0.039	0	0	0	0
<i>Lycodes pallidus</i>	0.196	0.049	0.123	0.518	0.924	1.1	0.035	0	0	0
<i>Lycodonus mirabilis</i>	0	0	0	0	0	0	0	0	0	0
<i>Zoarcetes americanus</i>	0	0	0.006	2.165	0	0.663	0.001	0	0	0
<i>Melanostigma atlanticum</i>	0	0.021	0.001	0	0.049	0	0	0.001	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1989 to 1998. Missing years indicate that no fishing occurred in the area that year.

Management Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Sets Observed	4880	3733	5406	4429	3250	3558	925	2201	202	415
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Gymnelus viridis</i>	0.118	0	0.616	0.189	1.642	0.035	0.137	0.022	0	0
<i>Lycenchelys sp.</i>	0	0	0.031	0	0	0.004	0	0.003	0	0
<i>Lycenchelys paxillus</i>	0.044	0.029	0.017	0	0.009	0.408	0	0.005	0	0
<i>Lycenchelys sarsii</i>	0	0	0	0	0.012	0	0	0	0	0
<i>Lycenchelys verrillii</i>	0	0	0	0	1.037	0	0	0	0	0
<i>Sebastes sp.</i>	1111.32	735.718	1500.006	1682.407	776.811	880.114	236.494	335.001	48.87	106.986
Triglidae	0	0	0	0	0	0	0	0	0	0
<i>Prionotus alatus</i>	0	0	0	0	0	0	0	0	0.01	0
Cottidae	4123	51371	79.089	14.614	1.378	5.63	0.794	2.812	0	0.446
<i>Hemirhamphus americanus</i>	0	0.002	0	0	0	0.002	0	0	0	0
<i>Arctodiellus sp.</i>	0.403	0.057	1.922	1.528	1.981	5.551	0.172	1.211	0.262	1.457
<i>Arctodiellus atlanticus</i>	0	0	3.686	3.629	0.38	3.049	5.179	0.057	0.205	0.311
<i>Arctodiellus uncinatus</i>	3.662	4.359	4.997	8.02	5.453	10.48	0.603	0.236	0.019	0
<i>Triglops sp.</i>	1.771	0.853	0	4.405	0.025	27.095	0.769	26.023	10.15	4.574
<i>Triglops murrayi</i>	9.048	11.751	67.904	33.407	23.149	15.949	5.471	3.507	1.229	0.815
<i>Triglops nybelini</i>	4.447	17.039	32.717	38.742	12.457	20.395	4.949	1.946	0.004	0
<i>Triglops pingelii</i>	0	0.002	0.015	0.27	5.478	0	2.515	0	0	0
<i>Myoxocephalus sp.</i>	0.637	0.006	0	3.373	0	0	0.77	3.213	0	0
<i>Myoxocephalus aeneus</i>	2.899	157	0	0.005	1.923	0	0.014	1.861	0	0
<i>Myoxocephalus scorpius</i>	0.051	0.068	0.065	0.081	0.463	0.001	0.003	0.149	0	0
<i>Myoxocephalus octodecemspinosus</i>	0.365	2.62	3.713	4.793	0.574	2.69	0.166	0.713	0	0
<i>Myoxocephalus quadricornis</i>	0	0.002	0.007	0	0.261	0.007	0.002	0.121	0	0
<i>Myoxocephalus scorpioides</i>	0.35	0.089	3.618	7.313	16.967	0.03	0.044	4.697	0	0.025
<i>Gymnocanthus tricuspis</i>	0	0.045	0.013	0	0.002	0	0.013	0.008	0	0
<i>Cottus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Cottus bairdii</i>	0.01	0	0	0	0	0	0	0	0	0
<i>Cottus cognatus</i>	0	0.001	0	0	0	0.004	0	0	0	0
<i>Cottunculus sp.</i>	0.076	0	0.464	0	0	0	0.735	0	0	0
<i>Cottunculus thomsonii</i>	0.055	0	0	0	0.003	0	0	0	0	0
<i>Cottunculus microps</i>	1.67	0.093	2.645	12.51	6.204	0.484	0.003	0.038	0.06	0.007
<i>Icelus sp.</i>	0	0.4	0	0	0.003	0	0	0	0	0
<i>Icelus bicornis</i>	1.947	1.781	0.001	1.545	0.001	0.659	0.011	0	0	0
<i>Icelus spatula</i>	0	0.086	0.001	5.336	0.072	0	0	0	0	0
Agonidae	2.464	0.939	0.332	0.401	0.002	0.128	0.002	0.39	0	0
<i>Leptogobius decagonus</i>	0.29	0.208	0.609	0.597	0.903	4.427	0.292	1.494	0.19	0.348
<i>Ulcina olrikii</i>	0.006	0	0.003	0	0	0	0.005	0	0	0
<i>Aspidophoroides monopterygius</i>	0	0.042	0.545	0.494	0.635	0.734	0.113	0.116	0.002	0.045
Cyclopteridae	7.16	0	0.05	0	0	0	0.01	0	0	0
<i>Eumicrotremus sp.</i>	4.579	0.69	0.388	0	0	0	0.001	0	0	0
<i>Eumicrotremus spinosus</i>	3.567	1.5	1.615	2.326	1.45	0.335	0.183	0.181	0.002	0
<i>Eumicrotremus derjugini</i>	1.487	0.562	2.563	0.059	0.765	1.754	0.013	0.142	0.001	0
<i>Eumicrotremus terraenovae</i>	0	0	0	0	0	0	0	0	0	0
<i>Cyclopterus lumpus</i>	0.004	0.039	0.026	1.11	0.179	0.01	0	0.001	0	0.001
<i>Cyclopteroopsis mcalpini</i>	0.015	0	0	0	0	0	0	0	0	0
Liparidae	1.446	11.482	13.688	1.59	4.679	11.422	0	0.607	2.168	0.487
<i>Paraliparis sp.</i>	2.431	0.99	1.433	0	0.056	0	0.031	1.017	0	0.062
<i>Paraliparis copei</i>	0	0	0	0.02	0.141	0	0	0	0	0
<i>Liparis sp.</i>	3.621	15.475	12.659	0.276	0.478	9.187	1.314	0	0.15	0
<i>Liparis atlanticus</i>	0.003	0.062	0	0	0	0	0	0.001	0	0
<i>Liparis fabricii</i>	19.89	3.629	10.843	2.207	7.81	7.554	0.706	1.67	0.027	0
<i>Liparis liparis</i>	0.002	0.029	0.002	1.572	0.188	0.001	0	0.002	0	0
<i>Liparis tunicatus</i>	0.368	7.152	4.67	1.243	1.364	4.437	0.027	1.311	0	0
<i>Liparis gibbus</i>	0.043	0.017	0.181	3.213	30.436	0.596	1.024	0.186	0.829	0
<i>Careproctus sp.</i>	0	0	0	0	0	0.447	0	0	0	0
<i>Careproctus longipinnis</i>	0	0.088	0	0	0	0.004	0	0.001	0	0
<i>Careproctus reinhardti</i>	0.172	0.452	1.66	1.612	5.259	0	0.025	0	0	0
<i>Careproctus ranula</i>	0	0	0	0.015	0	0.09	0	0.054	0	0
<i>Dactylopterus volitans</i>	0.028	0	0	0	0	0	0	0	0	0
<i>Pleuronectifomes</i>	0	0	0.022	0	0	0	0	0	0	0
<i>Pleuronectidae</i>	0	0	0	0.002	0	0	0	0	0	0
<i>Hippoglossoides platessoides</i>	14.115	8.013	27.005	37.143	27.374	20.442	3.582	11.967	1.888	1.004

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1989 to 1998. Missing years indicate that no fishing occurred in the area that year.

Management Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Sets Observed	4880	3733	5406	4429	3250	3558	925	2201	202	45
Other Fish cont'd	Total Catch Weight (tonnes)									
<i>Glyptocephalus cynoglossus</i>	0.015	0.001	0.53	0.03	0	0	0	0	0.015	0.001
<i>Limanda ferruginea</i>	0	0.688	0.036	0	0	0.003	0	0	0	0
<i>Reinhardtius hippoglossoides</i>	160.516	131.002	337.282	256.084	162.041	192.841	52.658	124.825	4.198	14.173
<i>Hippoglossus hippoglossus</i>	1559	1749	10.111	3.318	113	1231	0.33	2.305	0	0
<i>Pseudopleuronectes americanus</i>	0.015	0	0	0	0	0	0	0.02	0	0
Bothidae	0	0	0	0	0	0	0	0	0	0
<i>Paralichthys sp.</i>	0	0	0	0	0.025	0	0	0	0	0
<i>Hippoglossina oblonga</i>	0	0	0	0	0	0	0	0	0	0
<i>Scophthalmus aquosus</i>	0	0	0	0	0.04	0	0	0.003	0	0
<i>Aluterus scriptus</i>	0	0	0	0	0	0.125	0	0	0	0
<i>Lophius americanus</i>	0	0	0	0	0	0.271	0	0.001	0	0
Ceratiidae	0	0	0	0	0	0.003	0	0	0	0
<i>Ceratias holboelli</i>	0	0.001	0	0	0	0	0	0	0	0
<i>Cryptosaras couesii</i>	0	0	0	0.001	0	0	0	0	0	0
<i>Linophryne coronata</i>	0	0	0	0	0	0	0	0	0	0.003
<i>Himantolophus groenlandicus</i>	0.002	0	0.003	0	0.003	0	0	0	0	0
Unidentified Fish	0.338	0.869	0.652	5.549	4.023	5.553	1.136	3.206	0	0
Other Invertebrates	Total Catch Weight (tonnes)									
Invertebrata	0.001	0.003	0.001	0	2.066	0.006	0	0.312	0	0
Cnidaria	0	0	0	0	0	2.282	0	1.263	0.012	0
Scyphozoa	3.23	8.736	10.587	1.938	0.591	12.749	1.925	0.384	0	0.02
Actiniaria	0	0	0	0	0	0	0	0	0	0
Ctenophora	0	0	0	0	0	0	0	0	0	0
Chaetognatha	0	0	0	0.002	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0.002	0	0	0	0
Buccinidae	0	0	0	0.001	0	0.007	0	0	0	0
Bivalvia	0	0	0	0	0	0	0	0	0	0
Pectinidae	0	0	0	0	0.001	0	0	0	0	0
<i>Chlamys islandica</i>	0	0	0	0	0	0	0	0	0	0
Cephalopoda	0	0.046	0	0	0	0.043	0	0.005	0	0
Sepiolidae	0	0	0	0.002	0.009	0.056	0	0	0	0
Rossinae	0	0	0	0	0	0.125	0	0	0	0
<i>Rossia sp.</i>	0	0.028	0	0	0	0	0	0	0.098	0
<i>Heteroteuthis dispar</i>	0	0	0	0	0	0.002	0	0	0	0
Teuthida	0	0	0	0.23	0.184	0.319	0.092	1.085	0.185	0.263
Loliginidae	0.007	0	0.06	0.073	0.146	0.542	1.063	0.148	0	0.001
<i>Loligo sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Loligo pealeii</i>	0	0	0.013	0.003	0	0	0	0	0	0.002
<i>Sepioteuthis sepioidea</i>	0	0	0	0	0	0	0	0	0	0
<i>Illex sp.</i>	0	0.004	0.01	0.165	0	0	0	0	0	0
<i>Illex illecebrosus</i>	0.202	0.52	0.12	0.792	0.276	1.041	0.08	0.091	0	0
<i>Ommastrephes bartramii</i>	0	0.001	0	0	0	0	0	0	0	0
<i>Gonatus fabricii</i>	0	0	0	0	0	0	0	0	0	0
Octopoda	0.329	0.097	0.065	0.172	0.032	0.409	0.045	0.145	0.008	0.019
<i>Cirroteuthis mulleri</i>	0.002	0	0	0	0	0	0	0	0	0
Incirrina	0	0	0	0	0	0	0	0	0	0
Bolitaenidae	0	0	0	0	0	0	0	0	0	0
Octopodidae	0	0	0	0.004	0	0	0	0	0	0
<i>Bathypolypus arcticus</i>	0	0	0	0	0	0	0	0	0	0
<i>Octopus sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Octopus burryi</i>	0	0	0	0	0	0	0	0	0	0
Tremoctopodidae	0.014	0	0	0	0	0	0	0	0	0
Pycnogonida	0	0	0	0	0.001	0	0	0	0	0
Crustacea	0.012	0.001	0.001	0.001	0	0.001	0	0	0	0
Lophogastrida	0	0	0	0	0	0	0	0	0	0
Euphausiacea	0	0	0	0	0	0	0	0	0	0.005
<i>Euphausia sp.</i>	0	0	0	0.004	0	0	0	0	0	0
Decapoda	0.003	0.001	0.006	0.002	0	0.016	0.002	0	0	0

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Number of Sets Observed	4880	3733	5406	4429	3250	3558	925	2201	202	415
Other Invertebrates cont'd	Total Catch Weight (tonnes)									
Dendrobranchiata	0	0.013	0.004	0.001	0.01	0.032	0	0	0	0
Sergestidae	0	0	0	0	0	0	0	0	0	0
<i>Sergestes arcticus</i>	0	0	0	0	0	0	0	0	0	0.001
<i>Acantheephyra</i> sp.	0	0	0	0	0	0.006	0	0	0.03	0.006
<i>Acantheephyra pelagica</i>	0	0	0	0.006	0.001	0	0	0	0	0
Pasiphaeidae	0	0	0	0	0	0.005	0	0	0.004	0.086
<i>Pasiphaea</i> sp.	0	0	0	0	0	0.001	0	0	0	0
<i>Pasiphaea tarda</i>	0	0	0	0	0.001	0	0	0	0	0.008
<i>Pasiphaea multidentata</i>	0.004	0.004	0.003	0.001	0.003	0	0	0.003	0	0
<i>Eualus fabricii</i>	0	0	0	0	0.002	0	0	0	0	0
<i>Eualus macilentus</i>	0	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii</i>	0	0.003	0	0	0	0	0	0	0	0
<i>Eualus gaimardii gaimardii</i>	0	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii belcherii</i>	0	0.001	0	0	0	0	0	0	0	0
<i>Spirontocaris</i> sp.	0	0	0	0	0	0.003	0	0	0	0
<i>Spirontocaris spinus</i>	0.001	0	0	0.004	0	0	0	0	0	0
<i>Spirontocaris phippisii</i>	0.005	0	0	0	0	0	0	0	0	0
<i>Spirontocaris lilljeborgii</i>	0	0.003	0	0	0	0	0	0	0	0
<i>Lebbeus</i> sp.	0	0	0	0	0	0.001	0	0	0	0
<i>Lebbeus groenlandicus</i>	0	0	0	0	0	0.001	0	0	0	0
<i>Lebbeus polaris</i>	0	0	0	0.036	0.016	0	0	0	0	0
<i>Lebbeus microceros</i>	0.001	0	0	0	0	0	0	0	0	0
<i>Lebbeus microceros</i>	0	0	0	0	0	0.001	0	0	0	0
<i>Caridion gordonii</i>	0	0	0	0	0	0.398	0	0	0	0
<i>Dichelopandalus leptocerus</i>	0	0.001	0	0	0	0	0	0	0	0
<i>Pandalus</i> sp.	0.019	2.519	0.002	0	0	0.201	0	0	0	0
<i>Atlantopandalus propinquus</i>	0	0	0.003	0.008	0	0.001	0	0.003	0	0
Crangonidae	0	0	0	0	0.001	0	0	0.007	0	0
<i>Sclerocrangon boreas</i>	0.007	0.014	0.007	0	0	0	0	0.004	0	0
<i>Sclerocrangon ferox</i>	0	0	0	0	0	0	0	0	0	0
Crangon	0	0	0	0	0	0.006	0	0	0	0
<i>Crangon septemspinosa</i>	0	0	0.002	0.004	0	0.004	0	0	0	0
<i>Sabinea</i> sp.	0	0	0	0.006	0	0.071	0.006	0	0.017	0.027
<i>Sabinea septemcarinata</i>	0	0.054	0	0	0	0	0	0	0	0
<i>Sabinea sarsii</i>	0.134	0.017	0	0	0	0	0	0	0	0
<i>Pontophilus norvegicus</i>	0.014	0.04	0	0	0	0.001	0	0	0	0
<i>Argis dentata</i>	0	0	0.003	0.009	0.001	0	0	0	0	0
Pleocyemata	0	0	0	0.002	0	0	0	0	0	0
<i>Polycheles sculptus</i>	0	0	0	0	0	0	0.001	0	0	0
<i>Homarus americanus</i>	0	0	0	0	0	0	0	0	0	0
Galatheidae	0	0	0	0	0	0.006	0	0	0	0
<i>Munida tenuimana</i>	0	0	0	0	0.006	0.003	0	0	0	0
Paguridae	0	0	0	0.007	0.001	0.005	0.001	0	0	0
<i>Pagurus</i> sp.	0	0	0	0	0.002	0	0	0.003	0	0.002
<i>Pagurus pubescens</i>	0	0	0	0.001	0	0	0	0	0	0
<i>Parapagurus pilosimanus</i>	0	0	0.001	0	0	0	0	0	0	0
Lithodidae	0	0.006	0.006	0.013	0.002	0	0	0	0	0
<i>Lithodes</i> sp.	0.026	0	0	0	0	0	0	0	0	0
<i>Lithodes maja</i>	0.158	0.068	0.043	0.056	0.048	0.083	0.006	0.031	0.003	0.005
<i>Neolithodes</i> sp.	0	0	0.025	0	0.017	0	0	0	0	0
<i>Neolithodes grimaldii</i>	0	0	0.07	0	0.01	0.027	0.013	0	0	0
Brachyura	0.01	0.033	0.003	0.011	0	0.001	0	0	0	0.046
Cancriidae	0	0	0	0	0	0	0	0	0	0
<i>Cancer irroratus</i>	0	0	0	0	0	0	0	0	0	0
<i>Cancer borealis</i>	0	0	0	0	0	0	0	0	0	0
Majidae	0	0	0.002	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1989 to 1998. Missing years indicate that no fishing occurred in the area that year.

Management Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Sets Observed	4880	3733	5406	4429	3250	3558	925	2201	202	415
Other Invertebrates cont'd	Total Catch Weight (tonnes)									
<i>Chionoecetes sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Chionoecetes opilio</i>	0.001	0.029	0.003	0.011	0.002	0	0.027	0.002	0	0
<i>Hyas araneus</i>	0.001	0.001	0.002	0.003	0	0	0	0	0	0
<i>Hyas coarctatus</i>	0	0	0	0	0.001	0	0	0	0	0
<i>Chaceon quinquegens</i>	0	0	0	0	0	0	0	0	0	0
Holothuroidea	0	0	0	0	0	0	0	0	0	0
<i>Psolus sp.</i>	0	0	0	0.008	0	0	0	0	0	0
<i>Psolus fabricii</i>	0	0	0	0	0.001	0	0.001	0	0	0
Echinoidea	0	0	0	0	0.004	0	0	0	0.002	0.004
<i>Strongylocentrotus droebachiensis</i>	0	0	0	0	0	0.013	0	0.003	0	0
Asteroidea	0.01	0.002	0	0.002	0.001	0	0.008	0.038	0	0.033
Solasteridae	0	0	0	0	0	0	0	0.176	0	0
<i>Asterias sp.</i>	0	0	0	0.052	0	0	0	0	0	0
Marine Mammals	Total Catch Weight (tonnes)									
Caniformia	0	0	0.1	0.1	0.195	0.1	0	0	0	0
<i>Pagophilus groenlandicus</i>	0.045	0	0.15	0.13	0.1	0.15	0	0	0	0
<i>Halichoerus grypus</i>	0	0	0	0	0.305	0	0	0	0	0
<i>Cystophora cristata</i>	0	0	0.15	0	0	0	0	0	0	0
Other	Total Catch Weight (tonnes)									
Unidentified Material	0	0	0	0	0	0.16	0	0	0	0
Stone	2.27	0.35	1.915	1.303	0	0	0	0	0	0
Unidentified Eggs	0	0	0	0	0	0	0	0	0	0
Plant Material	0	0	0	0	0	0	0	0	0	0

Table 2. Shrimp Fishing Area 1- by-catch from the shrimp fishery for all years with records included in the Observer database from 1999 to 2007. Missing years indicate that no fishing occurred in the area that year.

Management Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Sets Observed	866	438	973	1639	1505	1940	996	729	353
Commercial Shrimp Species	Total Catch Weight (tonnes)								
<i>Pandalus borealis</i>	2097.685	1675.793	3540.426	6471.816	6983.031	7179.209	4930.383	3589.353	2024.225
<i>Pandalus montagui</i>	0	0	0.001	0	0.047	0.003	0	0	0
Total Shrimp	2097.685	1675.793	3540.427	6471.816	6983.078	7179.212	4930.383	3589.353	2024.225
By-Catch Species	Total Catch Weight (tonnes)								
Total By-catch	132.927	34.82	87.97	206.18	318.334	352.975	162.736	153.285	37.395
Percent By-catch in Total Catch	6.0	2.0	2.4	3.1	4.4	4.7	3.2	4.1	1.8
SARA Species	Total Catch Weight (tonnes)								
Anarhichadidae	0	0	0	0.132	0.289	0	0	0	0
<i>Anarhichas denticulatus</i>	0.008	0.006	0	0.002	0.013	0.038	0.002	0.002	0
<i>Anarhichas lupus</i>	0.205	0.193	0.796	0.206	0.59	0.352	0.367	0.117	0.087
<i>Anarhichas minor</i>	0.16	0.017	0.07	0.046	0.245	0.145	0.181	0.046	0.04
Sponge	Total Catch Weight (tonnes)								
Porifera	0.056	0	0.114	0.084	0.319	0.103	0.252	0.3	0.063
Soft Coral	Total Catch Weight (tonnes)								
Anthozoa	0.007	0	0.036	0.014	0	0	0.065	0.022	0.019
<i>Gersemia rubiformis</i>	0	0	0	0	0	0	0	0	0.001
Sea Pens	Total Catch Weight (tonnes)								
Pennatulacea	0	0	0	0	0	0	0	0.001	0
Other Fish	Total Catch Weight (tonnes)								
Myxiniformes	0	0	0	0	0	0	0	0	0
<i>Myxine glutinosa</i>	0.001	0	0	0	0.004	0	0	0	0
<i>Petromyzon marinus</i>	0	0	0	0	0	0	0	0	0
Chondrichthyes	0	0	0	0	0	0	0	0	0
Squaliformes	0	0	0	0	0	0	0	0	0
Dalatiidae	0	0	0	0	0	0	0	0	0
<i>Somniosus microcephalus</i>	0	0	0	0	0	0	0	0	0
<i>Squalus acanthias</i>	0	0	0	0	0	0	0	0	0
<i>Etmopterus spinax</i>	0	0	0	0	0	0	0	0	0
<i>Centroscyllium fabricii</i>	0	0	0	0	0	0	0	0	0
<i>Carcharias taurus</i>	0	0	0	0	0	0	0	0	0
<i>Alopias vulpinus</i>	0	0	0	0	0	0	0	0	0
Cetorhinidae	0	0	0	0	0	0	0	0	0
<i>Cetorhinus maximus</i>	0	0	0	0	0	0	0	0	0
<i>Lamna nasus</i>	0	0	0	0	0	0	0	0	0
<i>Carcharodon carcharias</i>	0	0	0	0	0	0	0	0	0
Rajiformes	0	0	0	0	0	0	0	0	0
Rajidae	0.188	0.004	0.002	0.004	1.054	0.034	0.081	0.119	0.02
<i>Raja sp.</i>	0.069	0.008	0.196	0.109	0.005	0.003	0.009	0.219	0
<i>Amblyraja radiata</i>	0.864	0.381	0.442	0.495	0.495	0.464	0.355	0.336	0.348
<i>Malacoraja senta</i>	0.013	0	0	0	0	0	0	0	0
<i>Rajella bathyphila</i>	0	0	0	0	0	0	0	0	0
<i>Leucoraja erinacea</i>	0	0	0	0	0	0	0	0	0
<i>Rajella fyllae</i>	0	0.001	0	0	0	0	0	0	0.001
<i>Amblyraja hyperborea</i>	0	0	0	0.001	0	0.016	0	0	0
<i>Amblyraja jenseni</i>	0	0	0	0	0	0	0	0	0
<i>Dipturus laevis</i>	0	0	0	0	0	0	0	0	0.001
<i>Dipturus linteus</i>	0	0	0	0	0	0.006	0	0	0
<i>Malacoraja spinacidervis</i>	0	0	0	0	0	0.002	0	0	0
<i>Leucoraja ocellata</i>	0	0	0	0.001	0.011	0.075	0.072	0	0
<i>Bathyraja richardsoni</i>	0	0	0	0	0	0	0	0	0
<i>Bathyraja spinicauda</i>	0.143	0	0	0.003	0.103	0	0	0	0
<i>Harriotta raleighana</i>	0	0	0	0	0	0	0	0	0
<i>Acipenser oxyrinchus</i>	0	0	0	0	0	0	0	0	0
<i>Clupea harengus</i>	0	0	0.002	0	0.005	0.064	0.1	0.021	0.002
<i>Alosa sapidissima</i>	0	0	0	0	0	0	0	0	0
Alepocephalidae	0	0	0	0.001	0	0	0	0	0
<i>Alepocephalus bairdii</i>	0	0	0	0	0	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1999 to 2007. Missing years indicate that no fishing occurred in the area that year.

Management Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Sets Observed	866	438	973	1639	1505	1940	996	729	353
Other Fish cont'd	Total Catch Weight (tonnes)								
<i>Bathytroctes</i> sp.	0.001	0	0	0.001	0	0	0	0.002	0
<i>Xenodermichthys copei</i>	0	0	0	0	0	0	0	0	0
<i>Salmo trutta</i>	0	0	0	0	0	0	0	0	0
<i>Salvelinus</i> sp.	0	0	0	0	0	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0	0	0	0	0	0	0
Osmeridae	0	0	0	0	0	0	0	0	0
<i>Mallotus villosus</i>	0.003	0.002	3.714	0.435	10.267	74.306	5.194	0.183	0.463
<i>Osmerus mordax</i>	0	0	0	0	0	0	0	0	0
<i>Argentina silus</i>	0.004	0.002	0	0.008	0.005	0.001	0	0.007	0
<i>Argentina striata</i>	0	0	0	0	0	0.001	0	0	0
<i>Bathylagus euryops</i>	0	0	0	0	0	0.005	0	0	0
<i>Cyclothone microdon</i>	0	0	0	0	0	0	0	0	0
<i>Gonostoma elongatum</i>	0	0	0	0	0	0	0	0	0
Sternoptychidae	0	0	0.003	0	0	0.001	0.007	0	0
<i>Argyropelecus aculeatus</i>	0.001	0.004	0.006	0.003	0.004	0.006	0.008	0.002	0
<i>Polyipnus asteroides</i>	0.001	0	0	0	0	0	0	0.002	0
<i>Sternoptyx diaphana</i>	0	0	0	0	0	0	0	0	0
Chauliodontinae	0	0	0	0	0	0	0	0	0
<i>Chauliodus sloani</i>	0.025	0.003	0	0.001	0.005	0.008	0.005	0.001	0.002
Stomiinae	0	0	0	0	0	0	0	0	0
<i>Stomias boa ferax</i>	0	0	0.016	0.001	0.011	0.005	0.002	0.002	0.002
Iliacanthinae	0	0	0	0	0	0	0.001	0	0
Paralepididae	0	0	0	0	0	0	0	0	0
<i>Anotopterus pharao</i>	0	0	0	0	0.001	0	0	0.001	0
Myctophidae	0.708	0.006	0.863	0.455	0.124	0.172	0.11	0.248	0.016
<i>Notoscopelus</i> sp.	0	0	0	0.114	0	0	0.032	0	0
<i>Notoscopelus elongatus kroyeri</i>	0	0	0	0	0	0	0	0	0
<i>Myctophum</i> sp.	0	0	0	0	0	0	0	0	0
<i>Myctophum punctatum</i>	0	0	0	0	0	0	0	0	0
<i>Myctophum affine</i>	0	0	0	0	0	0.001	0	0	0
<i>Bentho sema glaciale</i>	0	0	0	0	0	0	0	0	0
<i>Symbolophorus veranyi</i>	0	0	0	0	0	0	0	0	0
Malacosteinae	0	0	0	0	0.001	0	0	0	0
<i>Malacosteus niger</i>	0	0	0	0	0	0	0	0	0
<i>Synodus foetens</i>	0	0	0	0	0	0	0	0	0
Paralepididae	0	0	0.006	0.229	0.008	0.397	0.252	0.045	0.014
Paralepis	0	0	0.006	0.961	0.033	0.011	0.028	0	0
<i>Magnisudis atlantica</i>	0	0	0.018	0	0	0	0	0	0
<i>Paralepis coregonoides borealis</i>	0	0	0	0.002	0	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0.052	0.015	0.013	0.338	0.146	0.449	0.084	0.261	0.066
<i>Alepisaurus ferax</i>	0	0.001	0	0	0	0	0	0	0
<i>Chlorophthalmus agassizi</i>	0	0	0	0	0	0	0	0	0
Anguilliformes	0	0	0	0	0	0	0	0	0
Anguillidae	0	0	0	0	0	0	0	0.003	0
<i>Anguilla rostrata</i>	0	0	0	0	0	0	0	0	0
Ophichthidae	0	0	0	0	0	0	0	0	0
<i>Ophichthus cruentifer</i>	0	0	0	0.005	0	0.001	0	0	0
Derichthyidae	0	0	0.001	0	0	0	0	0	0
Nemichthyidae	0.001	0	0.001	0.109	0.001	0.004	0.001	0	0
<i>Nemichthys scolopaceus</i>	0	0	0	0	0	0	0.019	0	0
<i>Serrivomer beanii</i>	0	0	0	0	0	0.177	0	0	0
<i>Synphobranchius kaupii</i>	0	0	0.195	0.013	0	0.003	0.018	0	0
Notacanthidae	0	0	0	0	0	0	0	0	0
<i>Notacanthus chemnitzii</i>	0	0	0	0.001	0	0	0	0	0
<i>Scomberesox saurus</i>	0	0	0	0	0	0	0	0	0
<i>Gasterosteus</i> sp.	0	0	0	0	0	0	0	0	0
<i>Antimora rostrata</i>	0	0	0	0	0.001	0	0	0	0
<i>Halargyreus johnsonii</i>	0	0	0	0	0.003	0	0	0	0
Gadidae	0	0	0	0	0	0	0	0.014	0
<i>Gadus</i> sp.	0	0	0	0	0	0	0	0	0
<i>Gadus morhua</i>	0.014	0.125	0.163	0.02	0.463	0.357	0.22	0.845	0.46
<i>Gadus ogac</i>	0	0	0.003	0.019	0	0	0.002	0.001	0
<i>Micromesistius poulassou</i>	0	0	0.001	0	0.003	0	0	0	0.003
<i>Melanogrammus aeglefinus</i>	0	0	0.001	0	0	0.001	0.009	0	0
<i>Microgadus tomcod</i>	0	0	0	0	0	0.001	0	0	0

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Management Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Sets Observed	866	438	973	1639	1505	1940	996	729	353
Other Fish cont'd	Total Catch Weight (tonnes)								
<i>Pollachius virens</i>	0	0	0	0	0	0	0	0	0
<i>Phycis chesteri</i>	0	0	0	0	0	0	0.036	0	0
<i>Urophycis chuss</i>	0	0	0.005	0	0	0	0	0	0
<i>Urophycis tenuis</i>	0	0.023	0	0	0	0	0	0	0.007
<i>Merluccius albidus</i>	0	0	0	0	0	0	0	0	0
<i>Merluccius bilinearis</i>	0	0	0	0	0	0	0	0	0.001
<i>Merluccius sp.</i>	0	0	0	0	0	0	0	0	0
<i>Boreogadus saida</i>	19.624	2.586	13.326	10.659	15.78	120.71	34.744	6.044	2.364
<i>Arctogadus glacialis</i>	0	0	0	0	0	0	0	0	0
<i>Gaidropsarus sp.</i>	0.002	0	0.007	0.035	0.055	0	0.005	0.008	0
<i>Gaidropsarus ensis</i>	0.065	0.015	0.047	0.047	0.217	0.22	0.045	0.077	0.018
<i>Gaidropsarus argentatus</i>	0.551	0	0.01	0.01	0.008	0.02	0.078	0.009	0.024
<i>Molva molva</i>	0	0	0	0	0	0	0	0	0
<i>Brosme brosme</i>	0	0	0	0	0.011	0.002	0.004	0.015	0
<i>Enchelyopus cimbrius</i>	0	0	0	0	0.001	0	0.001	0.012	0
<i>Laemonema barbatulum</i>	0	0	0	0	0	0	0	0	0
<i>Urophycis sp.</i>	0	0	0	0	0	0	0	0	0
<i>Gadiformes</i>	0	0	0	0.002	0	0.125	0.037	0.001	0
<i>Macrouridae</i>	0	0	0	0	0	0	0	0	0
<i>Macrurus sp.</i>	0	0	0	0.01	0	0.001	0	0	0
<i>Macrurus berglax</i>	0.014	0	0.002	0.003	0.036	0.085	0.002	0.001	0.005
<i>Nezumia sp.</i>	0	0	0	0	0	0	0	0	0
<i>Nezumia bairdii</i>	0.005	0	0	0.081	0.001	0	0	0	0
<i>Coryphaenoides rupestris</i>	0	0.026	0	0.099	0	0.003	0.04	0	0
<i>Trachyrincus murrayi</i>	0	0	0	0	0	0	0	0	0
<i>Malacocephalus occidentalis</i>	0	0	0	0	0	0	0	0	0
<i>Polymixiidae</i>	0	0	0	0	0	0	0	0	0
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0	0	0	0
<i>Diretmus argenteus</i>	0.001	0	0	0	0	0	0	0	0
<i>Aphanopus carbo</i>	0	0	0	0	0	0	0	0	0
<i>Benthodesmus simonyi</i>	0	0	0	0	0	0	0	0	0
<i>Ruvettus pretiosus</i>	0	0	0	0	0	0	0	0	0
<i>Apogonidae</i>	0	0	0	0	0	0	0	0	0
<i>Howella sherborni</i>	0	0	0	0	0	0	0	0	0
<i>Lopholatilus chamaeleonticeps</i>	0	0	0	0	0	0	0	0	0
<i>Chiasmodon niger</i>	0	0	0	0	0	0	0	0	0
<i>Trachinoidei</i>	0	0	0	0	0	0	0	0	0.005
<i>Ammodytidae</i>	0	0	0	0.003	0	0	0	0	0
<i>Ammodytes dubius</i>	0.003	0	0.016	0.053	0.006	0	0	0	0
<i>Ammodytes hexapterus</i>	0	0	0	0	0	0	0	0	0
<i>Blennioidei</i>	0.014	0.201	0	0	0	0	0	0	0
<i>Pholis gunnellus</i>	0	0	0.013	0	0	0.001	0	0	0
<i>Stichaeidae</i>	0	0	0	0	0	0	0	0	0
<i>Stichaeus punctatus</i>	0	0	0	0	0	0	0	0	0
<i>Eumesogrammus praecisus</i>	0	0	0	0	0	0	0	0	0
<i>Lumpenus sp.</i>	0	0	0.062	0	0	0	0	0.001	0
<i>Lumpenus fabricii</i>	0	0	0	0.059	0	0	0	0	0
<i>Lumpenus lampretaeformis</i>	0.175	0	0.024	0.089	0.174	0.43	0.088	0.072	0.013
<i>Leptoclinus maculatus</i>	0.069	0.153	0.001	0.06	0.126	0.161	0.097	0.023	0.008
<i>Anisarchus medius</i>	0.045	0	0.002	0.16	0.289	0.032	0.114	0	0
<i>Zoarcidae</i>	1.649	0.734	1.689	3.265	3.563	1.625	0.487	1.073	0.166
<i>Lycodes sp.</i>	0.015	0.049	0.023	0	0	0.005	0	0	0
<i>Lycodes esmarkii</i>	0	0	0.012	0.054	0.02	0.002	0.043	0.007	0.095
<i>Lycodes lavalaei</i>	0.11	0.009	0	0.002	0	0	0.005	0	0
<i>Lycodes reticulatus</i>	0.134	0	0	0.175	0.55	0.353	0.134	0.07	0.121
<i>Lycodes vahlii</i>	0.247	0	0.009	0.113	0.008	0.043	0.005	0	0
<i>Lycodes turneri</i>	0	0	0.201	0	0.018	0	0.053	0	0.001
<i>Lycodes terraenovae</i>	0	0.003	0.001	0.001	0.018	0	0	0	0
<i>Lycodes eudipleurostictus</i>	0	0	0	0	0	0	0	0	0
<i>Lycodes pallidus</i>	0	0	0	0.166	0	0	0	0.03	0
<i>Lycodon mirabilis</i>	0	0	0	0	0	0	0	0	0
<i>Zoarcis americanus</i>	0	0	0.211	0.006	0	0	0.216	0	0
<i>Melanostigma atlanticum</i>	0	0	0	0.028	0.008	0	0	0	0

Table 2. Cont'd Shrimp Fishing Area 1 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1999 to 2007. Missing years indicate that no fishing occurred in the area that year.

Management Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of Sets Observed	866	438	973	1639	1505	1940	996	729	353
Other Fish cont'd	Total Catch Weight (tonnes)								
<i>Gymnelus viridis</i>	0	0	0	0	0	0.005	0	0.016	0
<i>Lycenchelys sp.</i>	0	0	0	0	0.171	0.037	0.003	0.031	0
<i>Lycenchelys paxillus</i>	0.069	0.006	0.001	0.001	0.054	0.018	0.009	0.005	0
<i>Lycenchelys sarsii</i>	0	0	0	0	0	0	0	0	0
<i>Lycenchelys verrillii</i>	0	0	0	0	0	0	0	0	0
<i>Sebastes sp.</i>	74.914	13.614	44.149	135.194	207.291	97.367	80.796	114.205	24.14
Triglidae	0	0	0	0	0	0	0	0	0
<i>Prionotus alatus</i>	0	0	0	0	0	0	0	0	0
Cottidae	9.63	2.677	1.961	5.463	19.597	2.549	0.429	0.957	0.096
<i>Hemimicropus americanus</i>	0	0	0	0	0.001	0	0	0	0
<i>Arteidiellus sp.</i>	0.632	0.397	1.304	1.976	1.029	1.74	0.072	1.149	0.007
<i>Arteidiellus atlanticus</i>	0.38	0.001	0	0.505	3.8	0.147	1.491	0.548	0.214
<i>Arteidiellus uncinatus</i>	0	0.605	0.802	0.113	6.59	1.043	1.18	0.033	0.157
<i>Triglops sp.</i>	4.63	2.475	3.552	1.232	6.252	6.449	6.03	0.375	0.222
<i>Triglops murrayi</i>	14.36	0	0.103	0.044	4.961	1.307	2.253	0.89	0.161
<i>Triglops nybelini</i>	0.163	0	2.786	2.019	0	1.265	0	0.009	0
<i>Triglops pingelii</i>	0	0	0	0	0	0.015	0	1.808	0
<i>Myoxocephalus sp.</i>	0	0.28	0.157	0.518	0.535	0.535	0.17	0.075	0.095
<i>Myoxocephalus aeneus</i>	2.064	0	0	0.002	1.014	0.146	0.011	0	0
<i>Myoxocephalus scorpius</i>	0	0	0	0	0	0.001	0	0	0
<i>Myoxocephalus octodecemspinosus</i>	0	0	0	2.454	0.316	0	0.082	0.129	0
<i>Myoxocephalus quadricornis</i>	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus scorpioides</i>	0.153	3.239	0	0.669	0.001	0.001	0	0	0.061
<i>Gymnocanthus tricuspis</i>	0	0	0	0.001	0	0.005	0	0.004	0
<i>Cottus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Cottus bairdii</i>	0	0	0	0	0	0	0	0	0
<i>Cottus cognatus</i>	0	0	0	0	0	0	0	0	0
<i>Cottunculus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Cottunculus thomsonii</i>	0	0	0	0	0.065	0	0	0	0
<i>Cottunculus microps</i>	0.329	0.133	0.008	0.012	0.044	0.02	0.078	0.016	0.048
<i>Icelus sp.</i>	0	0	0.382	0	0	0.036	0	0	0
<i>Icelus bicornis</i>	0	0	0	0.016	0.207	0.092	0	0.032	0
<i>Icelus spatula</i>	0	0	0.049	0.099	0.073	0.012	0	0.001	0
Agonidae	0.014	0.037	0.092	0.011	0.076	0.007	0.012	0.029	0
<i>Leptagonus decagonus</i>	0.65	0.013	0.052	0.169	0.065	0.197	0.031	0.14	0.011
<i>Ulcina olrikii</i>	0	0	0	0	0	0	0	0	0.008
<i>Aspidophoroides monopterygius</i>	0.475	0.118	0	0.01	0.014	0.056	0.005	0.054	0
Cyclopteridae	0	0	0	0	0	0	0	0	0
<i>Eumicrotremus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Eumicrotremus spinosus</i>	0.093	0	0.015	0.081	0.002	0.018	0.048	0.117	0.009
<i>Eumicrotremus derjugini</i>	0.05	0.004	0.022	0.009	0.052	0.012	0.018	0.01	0.006
<i>Eumicrotremus terraenovae</i>	0	0	0	0	0	0	0	0	0
<i>Cyclopterus lumpus</i>	0	0	0	0	0.004	0.004	0.002	0	0
<i>Cyclopteroopsis mcalpini</i>	0	0	0	0	0	0	0	0	0
Liparidae	0	0.01	0.072	0.025	0.288	0.237	0.193	0.004	0.003
<i>Paraliparis sp.</i>	0.041	0	0	0.02	0	0.218	0	0.007	0
<i>Paraliparis copei</i>	0	0	0	0.007	0	0.665	0	0	0
<i>Liparis sp.</i>	0.353	0.012	0	0	0	0	0	0	0
<i>Liparis atlanticus</i>	0	0	0	0	0	0	0	0	0
<i>Liparis fabricii</i>	0.096	2.881	0.016	0.001	0.596	0.053	0.061	0.067	0.004
<i>Liparis liparis</i>	0	0	0	0	0	0	0	0	0
<i>Liparis tunicatus</i>	0.025	0	0	0	0	0	0	0.044	0
<i>Liparis gibbus</i>	0.219	0.004	0	0	3.591	0.032	0.445	0.06	0.005
<i>Careproctus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Careproctus longipinnis</i>	0	0	0	0	0	0	0	0	0
<i>Careproctus reinhardti</i>	0	0	0	0	0	0	0	0	0
<i>Careproctus ranula</i>	0.145	0.002	0	0	0	0.001	0	0.001	0
<i>Dactylopterus volitans</i>	0	0	0	0	0	0	0	0	0
Pleuronectiformes	0	0	0	0	0	0	0	0	0
Pleuronectidae	0	0	0	0	0	0	0	0	0
<i>Hippoglossoides platessoides</i>	1.071	0.721	3.105	5.649	8.824	7.138	4.524	6.404	1.728

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Number of Sets Observed	866	438	973	1639	1505	1940	996	729	353
Other Fish cont'd	Total Catch Weight (tonnes)								
<i>Glyptocephalus cynoglossus</i>	0.002	0.003	0.005	0.066	0.017	0	0.012	0	0.001
<i>Limanda ferruginea</i>	0	0	0	0	0.015	0	0	0.098	0
<i>Reinhardtius hippoglossoides</i>	9.194	2.754	6.027	29.711	15.383	26.999	19.973	15.031	5.566
<i>Hippoglossus hippoglossus</i>	0	0	0.001	0	0.175	0	0.03	0	0
<i>Pseudopleuronectes americanus</i>	0	0	0	0.001	0	0	0	0	0
Bothidae	0	0	0	0	0	0	0	0	0
<i>Paralichthys sp.</i>	0	0	0	0	0	0	0	0.001	0
<i>Hippoglossina oblonga</i>	0	0	0	0	0	0	0	0.002	0
<i>Scophthalmus aquosus</i>	0	0	0	0	0	0	0	0	0
<i>Aluterus scriptus</i>	0	0	0	0	0	0	0	0	0
<i>Lophius americanus</i>	0	0	0	0	0	0	0	0	0
Ceratiidae	0	0	0	0	0	0	0	0	0
<i>Ceratias holboellii</i>	0	0	0	0	0	0	0	0	0
<i>Cryptopsaras coeuesii</i>	0	0	0	0	0	0	0	0	0
<i>Linophryne coronata</i>	0	0	0	0	0	0	0	0	0
<i>Himantolophus groenlandicus</i>	0	0	0	0	0	0	0	0	0
Unidentified Fish	0	0	0	0	0.23	0	0.001	0.124	0.018
Other Invertebrates	Total Catch Weight (tonnes)								
Invertebrata	0.005	0.015	0	0	0.102	0.077	0	0	0
Cnidaria	0.045	0	0.162	0.01	0.616	0.124	0.043	0.04	0.007
Scyphozoa	0.044	0.016	0.005	0	0.244	0.123	0	0.124	0
Actiniaria	0	0	0	0	0	0	0	0.026	0.139
Ctenophora	0	0	0	0	0	0	0	0	0
Chaetognatha	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0
Buccinidae	0	0	0.003	0.002	0.003	0	0.001	0	0.002
Bivalvia	0	0	0	0	0	0	0	0.001	0
Pectinidae	0	0	0	0	0	0	0	0	0
<i>Chlamys islandica</i>	0	0	0.001	0	0.001	0.003	0.001	0	0
Cephalopoda	0	0	0	0	0	0	0	0	0
Sepiolidae	0	0	0.012	0	0	0.008	0	0.003	0.001
Rossinae	0	0	0.001	0	0	0	0	0	0
<i>Rossia sp.</i>	0.029	0	0	0	0	0.002	0.029	0.031	0.01
Heteroteuthis dispar	0	0	0	0	0	0	0	0	0
Teuthida	0.473	0.038	0.069	0.356	0.327	0.919	0.218	0.185	0.132
Loliginidae	0	0.008	0.01	0.006	0.031	0.028	0	0.002	0
<i>Loligo sp.</i>	0	0	0	0	0	0.027	0	0	0
<i>Loligo pealeii</i>	0	0	0	0.039	0	0	0	0	0
<i>Sepioteuthis sepioidea</i>	0	0	0.043	0	0	0	0	0	0
<i>Illex sp.</i>	0	0	0	0.001	0	0	0	0	0
<i>Illex illecebrosus</i>	0.071	0.065	0.186	0.293	0	0.097	0.027	0.076	0.002
<i>Ommastrephes bartramii</i>	0	0	0	0	0	0	0	0	0
<i>Gonatus fabricii</i>	0.017	0	0	0	0	0	0	0	0
Octopoda	0.097	0.015	0.037	0.091	0.144	0.038	0.047	0.022	0.031
<i>Cirrotheuthis mulleri</i>	0	0	0	0	0	0	0	0	0
Incirrina	0	0	0	0	0.022	0	0	0	0
Bolitaenidae	0	0	0	0	0.001	0	0	0	0
Octopodidae	0	0	0	0	0	0	0	0	0
<i>Bathypolypus arcticus</i>	0.009	0	0	0	0	0	0	0	0
<i>Octopus sp.</i>	0	0	0	0.068	0	0	0	0	0
<i>Octopus burryi</i>	0	0	0	0	0.017	0	0	0	0
Tremoctopodidae	0	0	0	0	0	0	0	0	0
Pycnogonida	0	0	0	0	0	0	0	0	0
Crustacea	0.001	0	0	0	0	0.003	0	0	0
Lophogastrida	0	0	0	0	0	0	0.01	0.001	0
Euphausiacea	0	0	0	0	0	0	0	0	0
<i>Euphausia sp.</i>	0	0	0	0	0	0	0	0	0
Decapoda	0	0	0	0	0.189	0.002	0.002	0.001	0.001

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Dendrobranchiata	0	0	0	0	0	0	0	0	0
Sergestidae	0	0	0.01	0	0	0	0	0	0
<i>Sergestes arcticus</i>	0	0	0.08	0.089	0	0.001	0.521	0.001	0.003
<i>AcanthePHYra sp.</i>	0	0	0	0	0	0	0	0	0
<i>AcanthePHYra pelagica</i>	0	0	0	0	0	0	0	0	0
Pasiphaeidae	0	0	0	0	0	0	0	0	0
<i>Pasiphaea sp.</i>	0	0	0	0	0	0	0	0	0
<i>Pasiphaea tarda</i>	0.06	0	0	0	0	0	0	0	0
<i>Pasiphaea multidentata</i>	0	0	0.06	0	0	0	0.01	0.004	0
<i>Eualus fabricii</i>	0	0	0	0	0	0	0	0	0
<i>Eualus macilentus</i>	0	0	0	0.026	0	0	0.002	0	0
<i>Eualus gaimardii</i>	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii gaimardii</i>	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii belcherii</i>	0	0	0	0	0	0	0	0	0
<i>SpirotoCARIS sp.</i>	0	0	0	0	0	0	0	0	0
<i>SpirotoCARIS spinus</i>	0	0	0	0	0	0	0	0	0
<i>SpirotoCARIS phippsii</i>	0	0	0	0	0	0	0	0	0
<i>SpirotoCARIS lilljeborgii</i>	0	0	0.001	0	0	0	0	0	0
<i>Lebbeus sp.</i>	0	0	0	0	0	0.002	0.009	0	0
<i>Lebbeus groenlandicus</i>	0	0	0	0	0	0	0	0	0
<i>Lebbeus polaris</i>	0.003	0	0	0	0	0	0	0.003	0
<i>Lebbeus microceros</i>	0	0	0	0	0	0	0	0	0
<i>Lebbeus microceros</i>	0	0	0	0	0	0	0	0	0
<i>Caridion gordonii</i>	0	0	0	0	0	0	0	0	0
<i>Dichelopandalus leptocerus</i>	0	0	0	0	0	0	0	0	0
<i>Pandalus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Atlantopandalus propinquus</i>	0	0	0	0	0	0	0	0	0
Crangonidae	0.002	0	0	0	0	0	0	0	0
<i>Sclerocrangon boreas</i>	0	0	0	0	0.042	0	0	0	0
<i>Sclerocrangon ferox</i>	0	0	0	0	0	0	0	0.01	0
<i>Crangon</i>	0	0	0	0	0	0	0	0	0
<i>Crangon septemspinosa</i>	0	0	0	0	0	0	0	0	0
<i>Sabinea sp.</i>	0.01	0	0	0	0	0.106	0	0	0
<i>Sabinea septemcarinata</i>	0	0	0	0.006	0	0	0	0	0
<i>Sabinea sarsii</i>	0	0	0.105	0	0	0	0	0.017	0
<i>Pontophilus norvegicus</i>	0	0	0.002	0	0	0	0	0	0
<i>Argis dentata</i>	0	0	0	0.031	0	0.132	0.002	0	0
Pleocyemata	0	0	0	0	0	0	0	0	0
<i>Polycheles sculptus</i>	0	0	0	0	0	0	0	0	0
<i>Homarus americanus</i>	0	0	0	0	0	0	0	0	0
Galatheidae	0	0	0	0	0	0	0	0	0
<i>Munida tenuimana</i>	0	0	0	0	0	0	0	0	0
Paguridae	0	0	0	0	0	0	0	0	0
<i>Pagurus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Pagurus pubescens</i>	0	0	0	0	0	0	0	0	0
<i>Parapagurus pilosimanus</i>	0	0	0	0	0	0	0	0	0
Lithodidae	0.001	0	0.006	0	0	0	0	0	0
<i>Lithodes sp.</i>	0	0	0	0	0	0	0	0	0
<i>Lithodes maja</i>	0.009	0	0.072	0.014	0.058	0.067	0.063	0.008	0.034
<i>Neolithodes sp.</i>	0	0	0	0	0	0	0	0	0
<i>Neolithodes grimaldii</i>	0	0.097	0	0.017	0.031	0.001	0.002	0	0
Brachyura	0	0	0	0	0	0	0	0	0
Cancriidae	0	0	0	0	0	0	0	0	0
<i>Cancer irroratus</i>	0	0	0	0	0	0	0	0	0
<i>Cancer borealis</i>	0	0	0	0	0	0	0	0	0
Majidae	0	0	0	0	0	0	0	0	0

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Number of Sets Observed	866	438	973	1639	1505	1940	996	729	353
Other Invertebrates cont'd	Total Catch Weight (tonnes)								
<i>Chionoecetes sp.</i>	0	0	0	0	0	0	0	0	0
<i>Chionoecetes opilio</i>	0	0.007	0.001	0	0.001	0	0.001	0	0.001
<i>Hyas araneus</i>	0	0	0	0	0	0	0	0	0
<i>Hyas coarctatus</i>	0	0	0	0	0.004	0	0	0	0
<i>Chaceon quinquedens</i>	0	0	0	0	0	0	0	0	0
Holothuroidea	0.001	0	0.012	0	0	0	0.001	0.002	0.019
<i>Psolus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Psolus fabricii</i>	0	0	0	0	0	0	0	0	0
Echinoidea	0	0	0	0	0	0.002	0	0.001	0
<i>Strongylocentrotus droebachiensis</i>	0.002	0	0.007	0	0.002	0	0	0	0
Astroidea	0.017	0	0.095	0.06	0.067	0.154	0.078	0.008	0.017
Solasteridae	0	0	0	0	0	0	0	0	0
<i>Asterias sp.</i>	0	0	0	0	0	0	0	0	0
Marine Mammals	Total Catch Weight (tonnes)								
Caniformia	0	0	0	0	0	0	0	0	0
<i>Pagophilus groenlandicus</i>	0	0	0	0	0	0	0	0	0
<i>Halichoerus grypus</i>	0	0	0	0	0	0	0	0	0
<i>Cystophora cristata</i>	0	0	0	0	0	0	0	0	0
Other	Total Catch Weight (tonnes)								
Unidentified Material	0	0	0	0	0	1.6	0	0	0
Stone	0	0	0	0	0	0.005	0	0	0
Unidentified Eggs	0	0.006	0	0	0	0	0	0	0
Plant Material	0	0	0	0	0.001	0	0	0	0

Table 3. Shrimp Fishing Area 1 – Greenland Halibut by-catch showing the estimated number caught during a management year. Only years in which the species was measured are included. See Table 2 for other years where only weights were recorded.

Management Year	Greenland Halibut										
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Observed Shrimp Catch(t)	520	873	2,098	1676	3,540	6,472	6,983	7,179	4,930	3,589	2,024
CAGR Shrimp Catch(t)	58	933	2,046	1,530	3,625	6,247	6,592	7,021	6,921	4,127	1,945
Number of Observed Sets	202	415	866	438	973	1,639	1,505	1,940	996	729	353
Number of Sets with Species	196	408	853	427	896	1,579	1,470	1,844	981	715	340
Percent of Sets with Species	97.0	98.3	98.5	97.5	92.1	96.3	97.7	95.1	98.5	98.1	96.3
Number of sets with 1kg recorded	1	3	200	62	242	195	145	216	84	124	9
Percent of Sets with 1kg	0.5	0.7	23.1	14.2	24.9	11.9	9.6	11.1	8.4	17.0	2.5
Total Weight of Bycatch Species (kg)	4,198	14,173	9,194	2,754	6,027	29,711	15,383	26,999	19,973	16,031	5,566
Number of sets sampled	13	35	59	49	47	166	196	163	106	139	92
Percent of sets sampled	6.4	8.4	6.8	11.2	4.8	9.5	13.0	8.4	10.6	19.1	26.1
Number of fish measured	1,095	4,723	2,389	276	259	5,990	2,306	8,307	1,322	2,154	843
Total Weight of Measured Sample (kg)	112	96	72	6	6	177	49	233	41	58	27
Length (cm)	Estimated total number caught by length										
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	128	0	0	1,343	628	0	0	0	0
6	0	0	128	0	0	12,757	942	0	0	14,772	0
7	112	2,215	5,491	0	0	3,189	4,081	1,506	974	10,625	0
8	1,874	23,031	12,386	1,377	0	2,014	57,765	12,283	9,743	15,549	0
9	1,912	6,201	766	2,236	0	3,357	88,217	34,183	3,410	8,034	0
10	187	0	1,022	5,049	3,014	7,218	50,858	39,398	5,359	14,254	0
11	0	2,657	1,788	5,049	6,027	17,289	41,754	23,291	15,589	16,845	618
12	37	21,260	4,597	11,016	21,095	37,433	50,230	19,815	26,793	29,544	7,834
13	187	16,189	1,216	33,507	40,180	64,290	60,276	38,239	30,690	64,270	34,427
14	375	228,244	46,864	34,425	49,221	126,901	68,753	85,980	48,715	70,749	51,949
15	1,199	178,786	82,491	17,442	46,207	199,584	79,118	147,162	96,942	85,780	36,901
16	1,050	68,355	71,764	4,131	28,126	197,738	92,298	198,379	151,503	62,197	15,049
17	1,687	15,206	26,305	5,508	20,090	128,916	61,532	153,999	120,812	54,941	5,360
18	1,612	4,724	7,662	2,754	14,063	61,268	32,650	93,975	58,458	36,282	825
19	2,399	4,429	4,725	0	8,036	35,922	8,162	37,544	22,409	24,620	1,237
20	2,624	2,805	4,342	0	9,041	24,507	3,189	19,815	6,333	11,662	2,061
21	3,523	4,724	6,002	0	2,009	21,989	1,884	10,661	7,307	7,775	2,268
22	2,474	3,839	3,959	1,377	3,014	20,647	2,512	7,300	5,359	4,146	4,535
23	2,324	2,510	4,342	459	3,014	18,464	7,221	8,922	6,333	5,183	1,855
24	2,211	2,805	4,597	459	2,009	9,064	3,453	8,459	8,281	5,961	2,474
25	1,837	2,657	1,915	459	3,014	3,189	2,512	5,562	9,256	3,887	2,061
26	2,249	1,919	1,149	459	2,009	2,182	2,825	3,245	1,949	3,887	1,649
27	1,799	1,329	766	459	0	1,175	942	4,287	1,461	2,332	825
28	1,574	1,476	511	0	0	1,175	628	3,476	0	1,555	206
29	1,687	738	383	459	0	1,343	942	1,970	1,949	777	206
30	1,649	443	128	0	0	671	0	811	1,461	777	412
31	1,349	148	128	0	0	0	0	348	0	777	0
32	862	148	128	0	0	504	0	116	487	0	618
33	750	148	128	0	0	336	314	464	0	259	206
34	450	148	0	0	0	168	0	464	487	518	206
35	225	0	0	0	0	168	314	232	487	0	0
36	262	148	255	0	0	168	0	464	974	0	0
37	225	0	0	0	0	0	0	116	0	259	0
38	225	0	0	0	0	504	0	116	487	0	0
39	75	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0
44	37	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0
Total Number Captured	41,042	697,282	305,066	126,684	260,169	1,005,473	723,945	962,582	644,008	558,217	173,782

Table 4. Shrimp Fishing Area 1 – Redfish by-catch showing the estimated number caught during a management year. Only years in which the species was measured are included. See Table 2 for other years where only weights were recorded.

Management Year	Redfish										
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Observed Shrimp Catch (t)	520	873	2,098	1,676	3,540	6,472	6,983	7,179	4,930	3,589	2,024
CAQR Shrimp Catch (t)	518	933	2,046	1,590	3,625	6,247	6,592	7,021	6,921	4,127	1,945
Number of Observed Sets	202	415	866	438	973	1,639	1,505	1,940	996	729	353
Number of Sets with Species	201	413	861	438	937	1,618	1,497	1,875	984	726	340
Percent of Sets with Species	99.5	99.5	99.4	100.0	96.3	98.7	99.5	96.6	98.8	99.6	96.3
Number of sets with 1kg recorded	0	0	3	1	5	75	23	55	16	20	5
Percent of Sets with 1kg	0.0	0.0	0.3	0.2	0.5	4.6	1.5	2.8	1.6	2.7	1.4
Total Weight of By-catch Species (kg)	48,870	106,986	74,914	13,614	44,149	135,194	207,291	97,367	80,796	114,205	24,140
Number of sets sampled	13	35	59	49	47	156	196	163	106	139	92
Percent of sets sampled	6.4	8.4	6.8	11.2	4.8	9.5	13.0	8.4	10.6	19.1	26.1
Number of fish measured	3,182	6,069	12,653	4,325	12,150	26,605	19,887	20,278	11,105	8,000	963
Total Weight of Measured Sample (kg)	54	134	209	84	186	396	354	343	162	146	26
Length (cm)	Estimated total number caught by length										
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	586	0	0	0	0
5	32,580	0	0	0	712	683	43,332	3,974	4,489	3,129	0
6	66,970	8,782	0	0	2,848	4,097	156,932	26,968	24,937	10,951	0
7	147,515	3,194	1,075	10,697	37,028	41,309	269,947	112,412	180,045	48,498	1,857
8	142,085	51,098	34,052	92,219	143,603	317,501	936,323	424,952	335,154	200,250	10,213
9	235,300	356,886	514,003	159,316	585,805	1,503,180	2,029,578	735,788	717,688	424,749	64,064
10	775,585	658,682	2,002,247	69,529	1,036,315	3,351,172	2,505,645	1,525,795	1,446,348	1,112,325	76,134
11	478,745	537,325	1,086,791	65,153	488,487	2,695,345	2,140,250	1,335,035	1,480,263	2,031,441	129,056
12	436,210	1,140,119	225,100	162,396	125,326	602,911	956,232	617,131	511,209	971,525	320,319
13	287,790	1,303,792	225,817	93,191	154,759	264,243	947,449	338,655	344,630	700,875	185,692
14	90,500	451,896	119,002	16,693	129,599	171,724	1,028,257	312,540	240,892	403,629	50,137
15	85,070	199,601	128,680	10,697	54,830	65,890	499,489	142,502	133,663	158,792	20,426
16	66,065	62,275	116,852	7,131	52,457	17,411	73,782	88,283	69,325	74,311	21,355
17	20,815	43,114	50,540	6,483	46,523	14,680	31,035	49,109	29,426	40,676	10,213
18	9,955	17,565	21,148	4,538	16,378	9,901	11,126	22,142	13,466	35,200	1,857
19	2,715	7,186	5,377	1,945	4,272	7,169	4,099	12,490	499	10,169	2,785
20	905	2,395	1,434	486	1,187	9,218	5,270	5,677	1,995	7,822	0
21	905	798	717	162	949	5,804	2,928	1,703	499	12,516	0
22	0	798	1,434	162	949	341	1,171	284	1,995	4,693	0
23	0	0	0	162	949	341	1,171	284	0	3,911	0
24	0	0	717	0	949	0	0	284	997	1,564	0
25	0	0	0	0	0	0	0	0	499	0	0
26	0	0	0	0	0	0	0	0	0	782	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	586	284	0	0	0
29	0	0	358	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	499	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0
Total Number Captured	2,879,710	4,845,506	4,535,344	700,960	2,883,925	9,082,920	11,645,188	5,756,292	5,538,518	6,257,808	894,108

Table 5. Shrimp Fishing Area 1 – Atlantic Cod by-catch showing the estimated number caught during a management year. Only years in which the species was measured are included. See Table 2 for other years where only weights were recorded.

Management Year	Atlantic Cod							
	1999	2000	2001	2003	2004	2005	2006	2007
Total Observed Shrimp Catch (t)	2,098	1,676	3,540	6,983	7,179	4,930	3,589	2,024
CAQR Shrimp Catch (t)	2,046	1,590	3,625	6,592	7,021	6,921	4,127	1,945
Number of Observed Sets	866	438	973	1,505	1,940	996	729	353
Number of Sets with Species	14	89	90	230	137	134	239	178
Percent of Sets with Species	1.6	20.3	9.2	15.3	7.1	13.5	32.8	50.4
Number of sets with 1kg recorded	14	70	54	141	64	104	154	108
Percent of Sets with 1kg	1.6	16.0	5.5	9.4	3.3	10.4	21.1	30.6
Total Weight of By-catch Species (kg)	14	125	163	463	357	220	845	460
Number of sets sampled	59	49	47	196	163	106	139	92
Percent of sets sampled	6.8	11.2	4.8	13.0	8.4	10.6	19.1	26.1
Number of fish measured	7	377	6	114	58	264	1,070	573
Total Weight of Measured Sample (kg)	7	40	2	45	26	56	83	86
Length (cm)	Estimated total number caught by length							
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	41	11
14	0	0	0	0	0	43	183	16
15	0	0	0	10	0	28	774	27
16	0	0	0	10	0	24	1,150	32
17	2	0	0	0	0	35	1,191	27
18	0	3	0	0	0	39	611	32
19	0	9	0	0	0	12	295	16
20	0	16	0	31	0	12	214	11
21	0	59	0	31	14	8	234	37
22	0	59	0	31	82	16	285	128
23	2	103	0	51	82	8	204	230
24	0	172	0	123	137	31	224	423
25	0	156	0	154	110	31	265	487
26	4	128	82	185	55	90	336	497
27	0	144	0	185	14	141	428	385
28	0	125	82	134	69	106	417	294
29	2	84	0	144	14	106	478	171
30	0	44	82	41	41	118	560	107
31	0	34	0	10	27	67	356	86
32	2	13	0	10	27	43	458	5
33	0	9	163	0	0	35	224	16
34	2	3	82	0	27	24	295	16
35	0	0	0	10	0	12	193	11
36	0	0	0	0	0	4	92	0
37	0	6	0	0	14	4	61	0
38	0	0	0	10	27	0	71	0
39	0	0	0	0	14	0	112	0
40	0	3	0	0	14	0	92	0
41	0	3	0	0	14	0	193	0
42	0	0	0	0	0	0	204	0
43	0	3	0	0	0	0	204	0
44	0	0	0	0	0	0	173	0
45	0	0	0	0	14	0	163	0
46	0	0	0	0	0	0	71	0
47	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	20	0
49	0	0	0	0	0	0	20	0
50	0	0	0	0	0	0	0	0
Total Number Captured	14	1,176	491	1,180	796	1,037	10,892	3,065

Table 6. Shrimp Fishing Area 1 – American Plaice by-catch showing the estimated number caught during a management year. Only years in which the species was measured are included. See Table 2 for other years where only weights were recorded.

Management Year	American Plaice								
	1997	1999	2001	2002	2003	2004	2005	2006	2007
Total Observed Shrimp Catch (t)	520	2,098	3,540	6,472	6,983	7,179	4,930	3,589	2,024
CAQR Shrimp Catch (t)	518	2,046	3,625	6,247	6,592	7,021	6,921	4,127	1,945
Number of Observed Sets	202	866	973	1,639	1,505	1,940	996	729	353
Number of Sets with Species	168	637	705	1,064	1,188	1,345	863	643	251
Percent of Sets with Species	83.2	73.6	72.5	64.9	78.9	69.3	86.6	88.2	71.1
Number of sets with 1kg recorded	13	434	329	251	257	362	270	206	54
Percent of Sets with 1kg	6.4	50.1	33.8	15.3	17.1	18.7	27.1	28.3	15.3
Total Weight of By-catch Species (kg)	1,888	1,071	3,105	5,649	8,824	7,138	4,524	6,404	1,728
Number of sets sampled	13	59	47	156	196	163	106	139	92
Percent of sets sampled	6.4	6.8	4.8	9.5	13.0	8.4	10.6	19.1	26.1
Number of fish measured	391	12	69	1,238	1,415	3,217	1,868	1,591	944
Total Weight of Measured Sample (kg)	15	2	3	32	37	82	56	47	23
Length (cm)	Estimated total number caught by length								
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	238	0	0	0	0
6	0	0	0	530	2,385	0	0	409	0
7	0	0	0	2,648	1,908	348	162	6,268	0
8	126	0	0	1,942	10,970	2,263	162	16,351	376
9	252	536	0	4,943	27,903	6,703	646	17,986	3,155
10	378	536	3,105	10,415	31,003	28,465	2,908	15,261	10,218
11	2,517	0	3,105	21,007	41,020	44,917	5,332	18,394	15,176
12	4,531	0	8,280	32,658	41,735	46,049	13,976	16,214	7,288
13	6,419	1,071	4,140	35,483	35,773	36,038	20,600	19,212	5,860
14	5,790	1,607	11,385	33,011	25,995	29,248	23,024	17,304	6,010
15	5,916	536	10,350	21,537	18,840	21,240	20,035	13,489	7,363
16	4,909	0	6,210	13,769	18,363	13,493	17,207	16,078	4,132
17	4,531	0	5,175	10,062	20,271	7,225	12,360	12,808	2,780
18	2,769	0	3,105	6,532	14,786	7,225	8,644	10,628	1,878
19	2,643	0	3,105	4,237	13,355	5,745	7,271	6,677	977
20	1,762	1,071	3,105	4,060	10,255	5,049	4,524	4,633	1,653
21	881	536	1,035	3,707	6,916	4,091	3,878	2,998	1,202
22	1,133	0	1,035	3,178	7,632	2,873	2,020	3,951	601
23	378	0	3,105	2,295	2,862	3,656	2,020	3,406	1,052
24	629	0	0	1,765	1,431	3,482	1,454	3,270	150
25	1,007	0	2,070	1,589	1,908	2,263	1,373	2,725	451
26	252	0	1,035	706	238	2,002	889	2,180	0
27	881	536	0	530	238	1,654	565	2,180	225
28	503	0	1,035	883	238	1,219	727	1,090	75
29	378	0	0	353	477	696	404	1,908	150
30	378	0	1,035	177	0	870	242	545	0
31	0	0	0	177	477	435	323	136	0
32	126	0	0	353	0	261	0	273	0
33	126	0	0	0	238	696	162	273	75
34	0	0	0	0	0	696	0	0	75
35	0	0	0	0	0	435	0	0	0
36	0	0	0	0	0	174	0	136	0
37	0	0	0	0	0	435	0	0	0
38	0	0	0	0	0	87	0	0	0
39	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0
Total Number Captured	49,215	6,429	71,415	218,547	337,455	280,033	150,908	216,783	70,922

Table 7. Shrimp Fishing Area 1 - Northern, Striped and Spotted wolffishes by-catch showing the estimated number of each species caught during a management year. Only years in which the species were measured are included. See Table 2 for other years where only weights were recorded.

Management Year	Northern Wolffish				Striped Wolffish						Spotted Wolffish					
	2002	2004	2005	2006	2002	2003	2004	2005	2006	2007	2002	2003	2004	2005	2006	2007
Total Observed Shrimp Catch (t)	6,472	7,179	4,930	3,589	6,472	6,983	7,179	4,930	3,589	2,024	6,472	6,983	7,179	4,930	3,589	2,024
CAQR Shrimp Catch (t)	6,247	7,021	6,921	4,127	6,247	6,592	7,021	6,921	4,127	1,945	6,247	6,592	7,021	6,921	4,127	1,945
Number of Observed Sets	1,639	1,940	996	729	1,639	1,505	1,940	996	729	353	1,639	1,505	1,940	996	729	353
Number of Sets with Species	2	38	2	2	173	377	266	316	99	81	46	245	145	181	46	40
Percent of Sets with Species	0.1	2.0	0.2	0.3	10.6	25.0	13.7	31.7	13.6	22.9	2.8	16.3	7.5	18.2	6.3	11.3
Number of sets with 1kg recorded	0	9	2	2	160	282	221	279	88	76	44	141	124	167	44	40
Percent of Sets with 1kg	0.0	0.5	0.2	0.3	9.8	18.7	11.4	28.0	12.1	21.5	2.7	9.4	6.4	16.8	6.0	11.3
Total Weight of By-catch Species (kg)	2	38	2	2	46	245	145	181	46	40	46	245	145	181	46	40
Number of sets sampled	156	163	106	139	156	196	163	106	139	92	156	196	163	106	139	92
Percent of sets sampled	9.5	8.4	10.6	19.1	9.5	13.0	8.4	10.6	19.1	26.1	9.5	13.0	8.4	10.6	19.1	26.1
Number of fish measured	0	37	1	1	56	491	152	70	73	91	99	31	26	50	57	26
Total Weight of Measured Sample (kg)	2	5	1	1	25	101	41	16	28	19	31	26	10	11	22	11
Length (cm)	Estimated total number caught by length															
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
6	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
7	0	0	0	0	0	0	11	0	3	0	3	0	0	0	0	0
8	0	0	0	0	2	7	18	11	0	0	10	0	29	16	0	0
9	0	0	0	0	0	17	14	113	2	6	31	0	29	49	0	0
10	0	46	0	0	4	10	60	45	5	0	37	0	73	33	2	0
11	0	61	0	0	7	10	28	0	0	0	7	19	15	16	0	15
12	0	30	0	0	4	5	50	23	2	2	13	9	29	82	4	18
13	0	76	0	2	2	46	32	0	0	6	4	38	58	49	2	11
14	0	53	0	0	4	73	60	0	3	2	4	9	15	115	10	11
15	0	0	0	0	4	104	39	11	7	11	10	9	15	115	6	4
16	0	15	0	0	4	95	18	0	7	23	3	38	15	49	10	0
17	0	0	0	0	9	49	28	68	3	15	4	9	15	33	13	0
18	0	0	0	0	4	102	32	57	0	21	1	57	0	49	10	4
19	0	0	0	0	9	70	28	113	2	8	6	19	0	33	17	4
20	0	0	0	0	13	68	18	68	7	23	6	0	15	66	13	0
21	0	0	0	0	2	68	11	23	8	6	0	9	0	0	4	0
22	0	0	0	0	7	61	11	68	15	4	1	9	15	33	4	4
23	0	0	0	0	6	36	0	45	13	2	0	28	15	0	4	11
24	0	0	0	0	4	24	14	57	3	8	0	19	0	16	0	4
25	0	0	2	0	6	19	14	23	10	6	0	0	0	33	8	7
26	0	0	0	0	7	46	4	34	5	11	0	9	0	16	2	0
27	0	0	0	0	4	44	4	11	5	6	0	0	15	16	0	0
28	0	0	0	0	4	39	7	11	3	8	0	0	0	0	0	0
29	0	0	0	0	0	34	7	0	5	6	0	0	0	0	2	0
30	0	0	0	0	0	29	0	0	3	6	0	0	0	0	2	0
31	0	0	0	0	0	27	14	0	3	6	0	0	0	0	0	0
32	0	0	0	0	0	27	11	0	3	0	0	0	0	0	0	0
33	0	0	0	0	0	27	4	0	2	0	0	9	0	0	0	0
34	0	0	0	0	0	12	0	0	0	0	0	0	15	0	0	4
35	0	0	0	0	0	24	0	0	0	0	0	0	15	0	2	0
36	0	0	0	0	0	10	4	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	7	0	0	0	0	0	0	0	0	2	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
45	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Number Captured	1	281	2	2	106	1,192	541	792	121	188	143	290	383	819	117	97

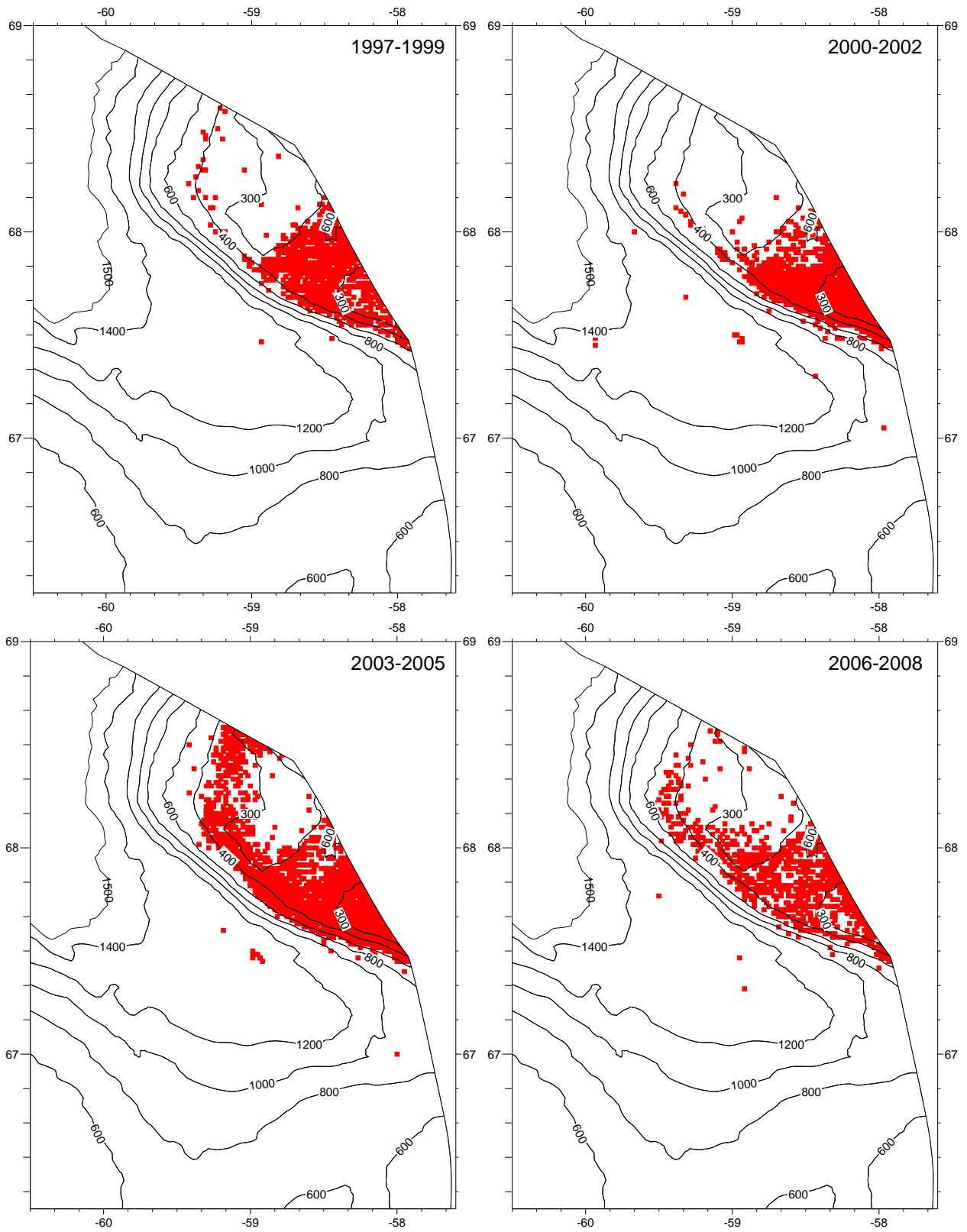


Figure 2. Shrimp Fishing Area 1 – All fishing set locations recorded by the observer program from 1997 through 2008 management years.

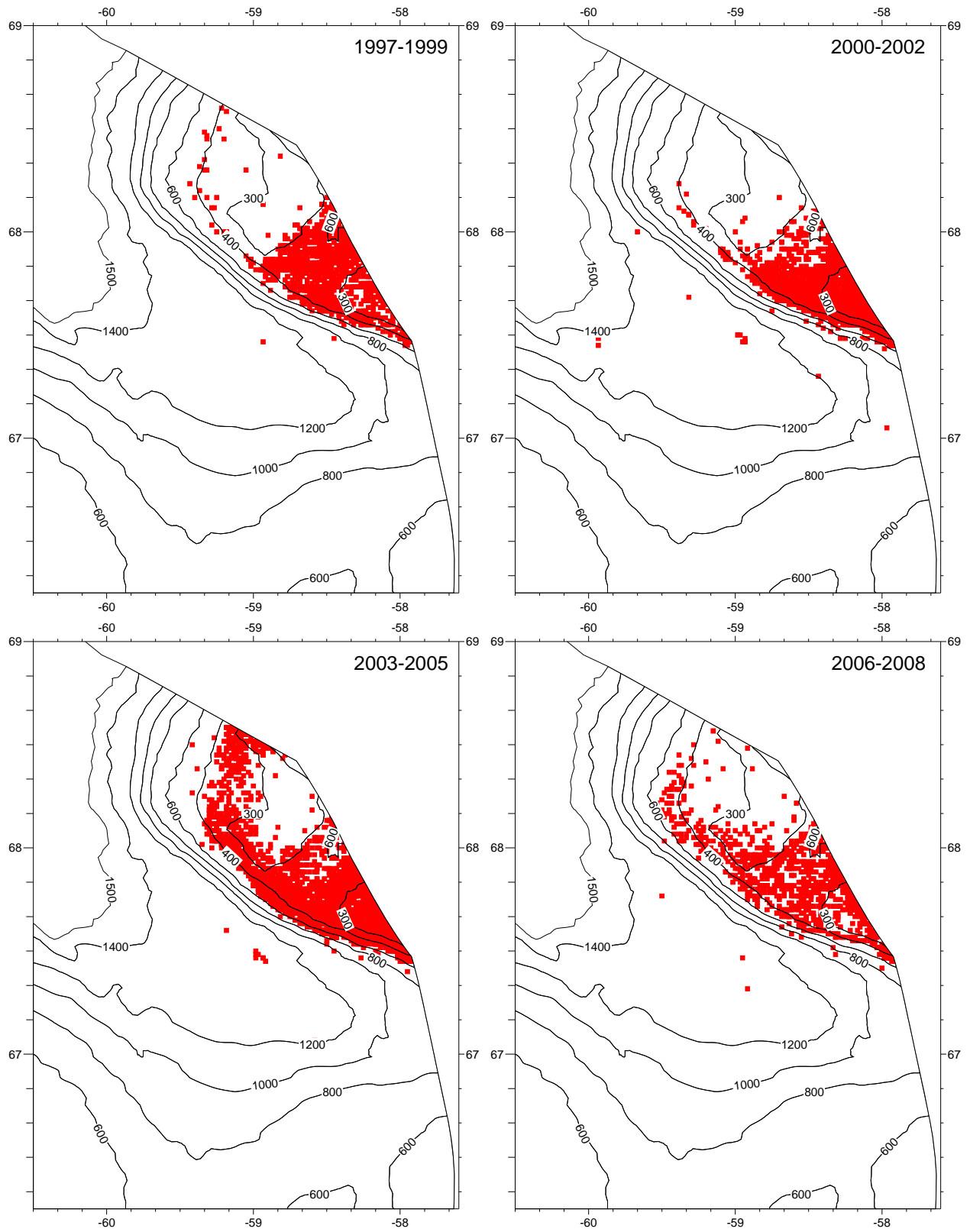


Figure 3. Shrimp Fishing Area 1 – Greenland Halibut (*Reinhardtius hippoglossoides*) locations recorded by the observer program from 1997 through 2008 management years.

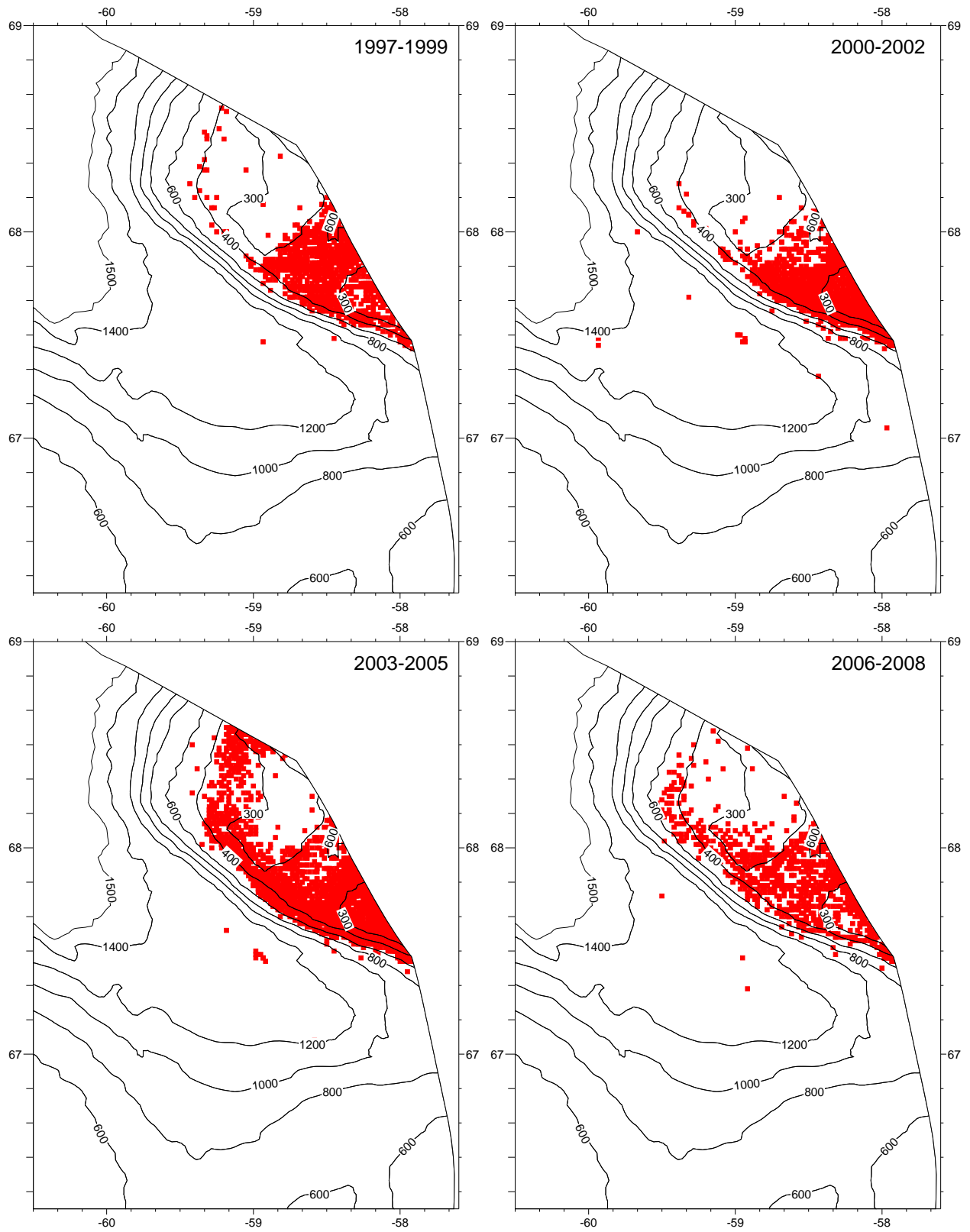


Figure 4. Shrimp Fishing Area 1 – Redfish (*Sebastes* sp.) locations recorded by the observer program from 1997 through 2008 management years.

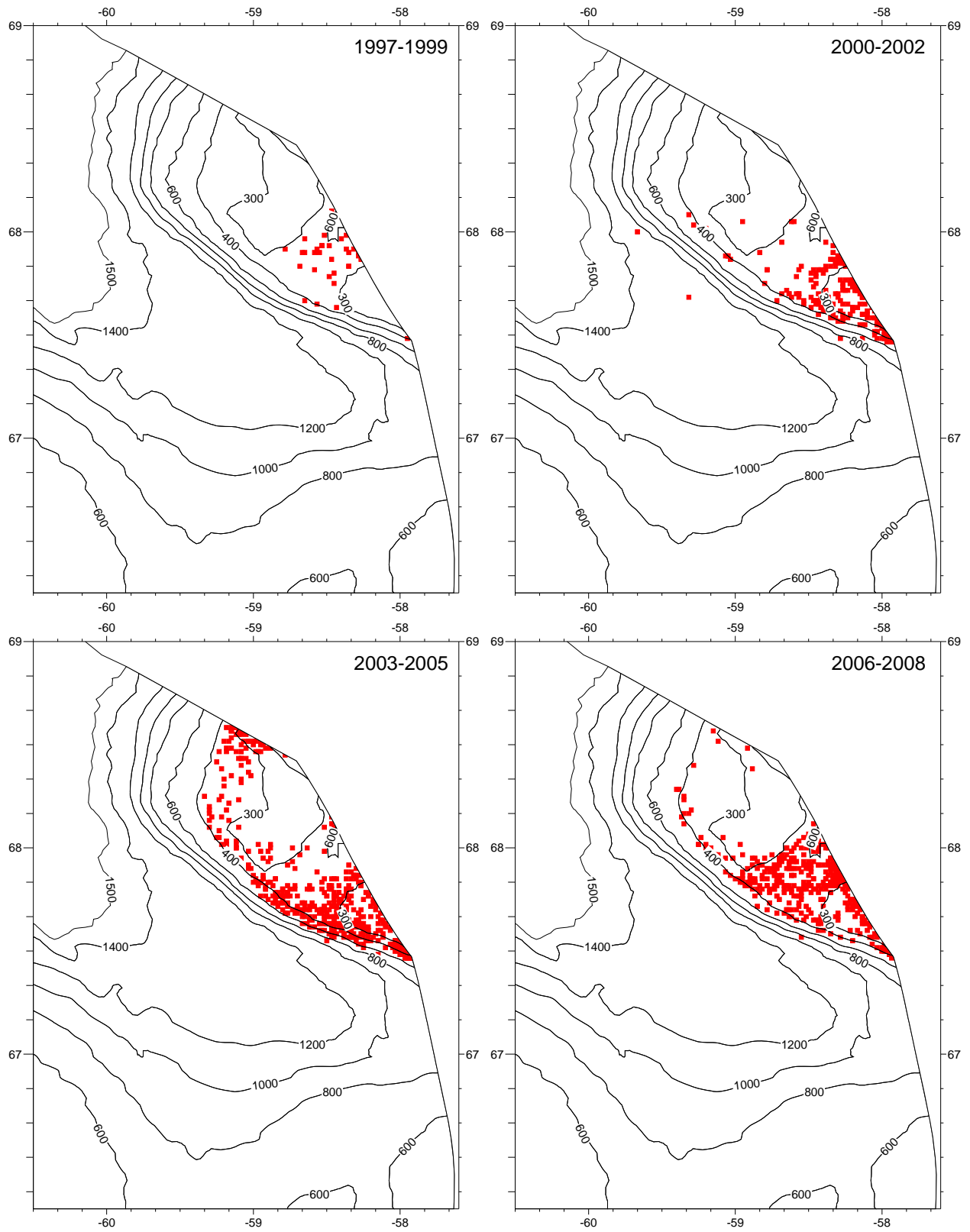


Figure 5. Shrimp Fishing Area 1 – Atlantic Cod (*Gadus morhua*) locations recorded by the observer program from 1997 through 2008 management years.

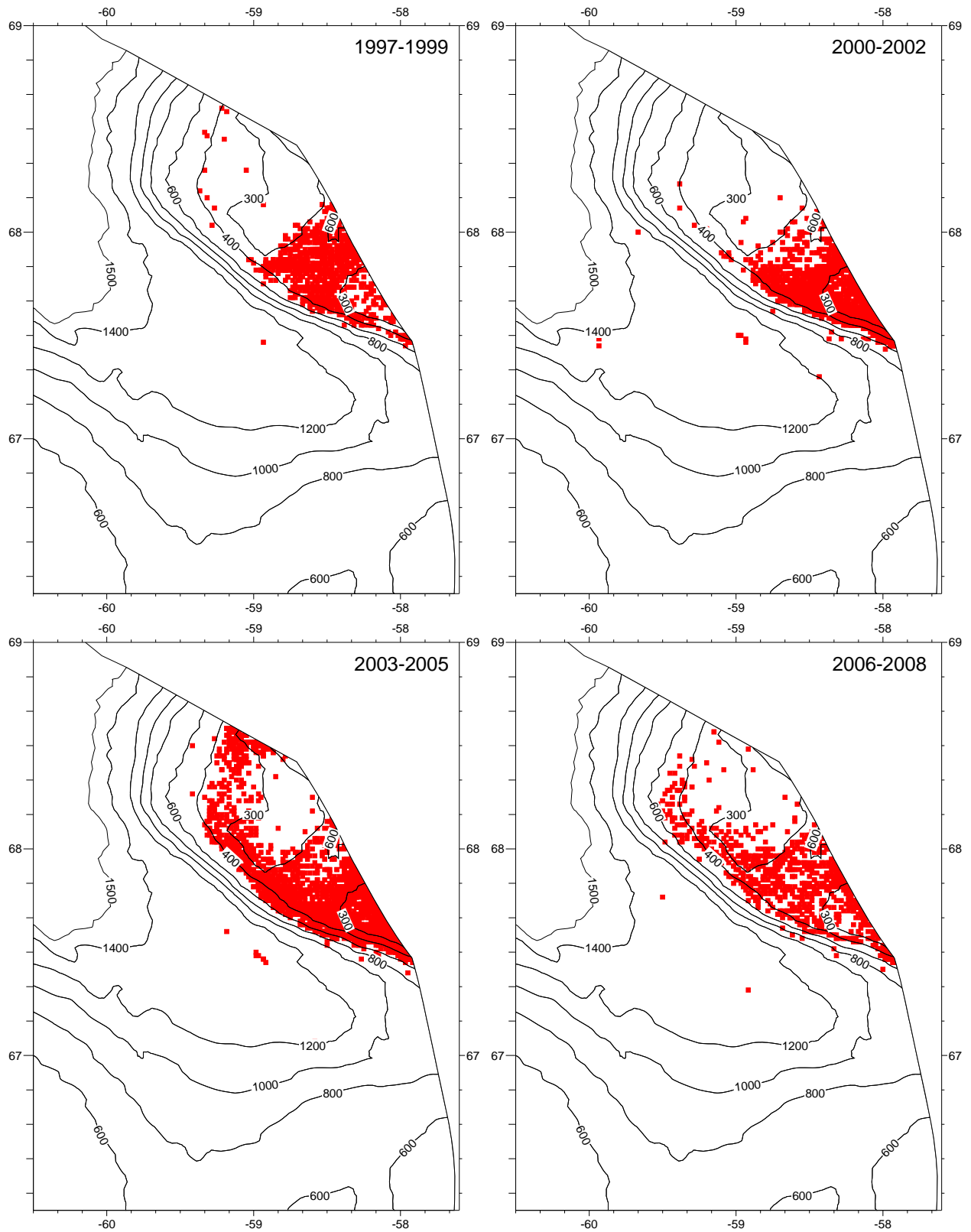


Figure 6. Shrimp Fishing Area 1 – American Plaice (*Hippoglossoides platessoides*) locations recorded by the observer program from 1997 through 2008 management years.

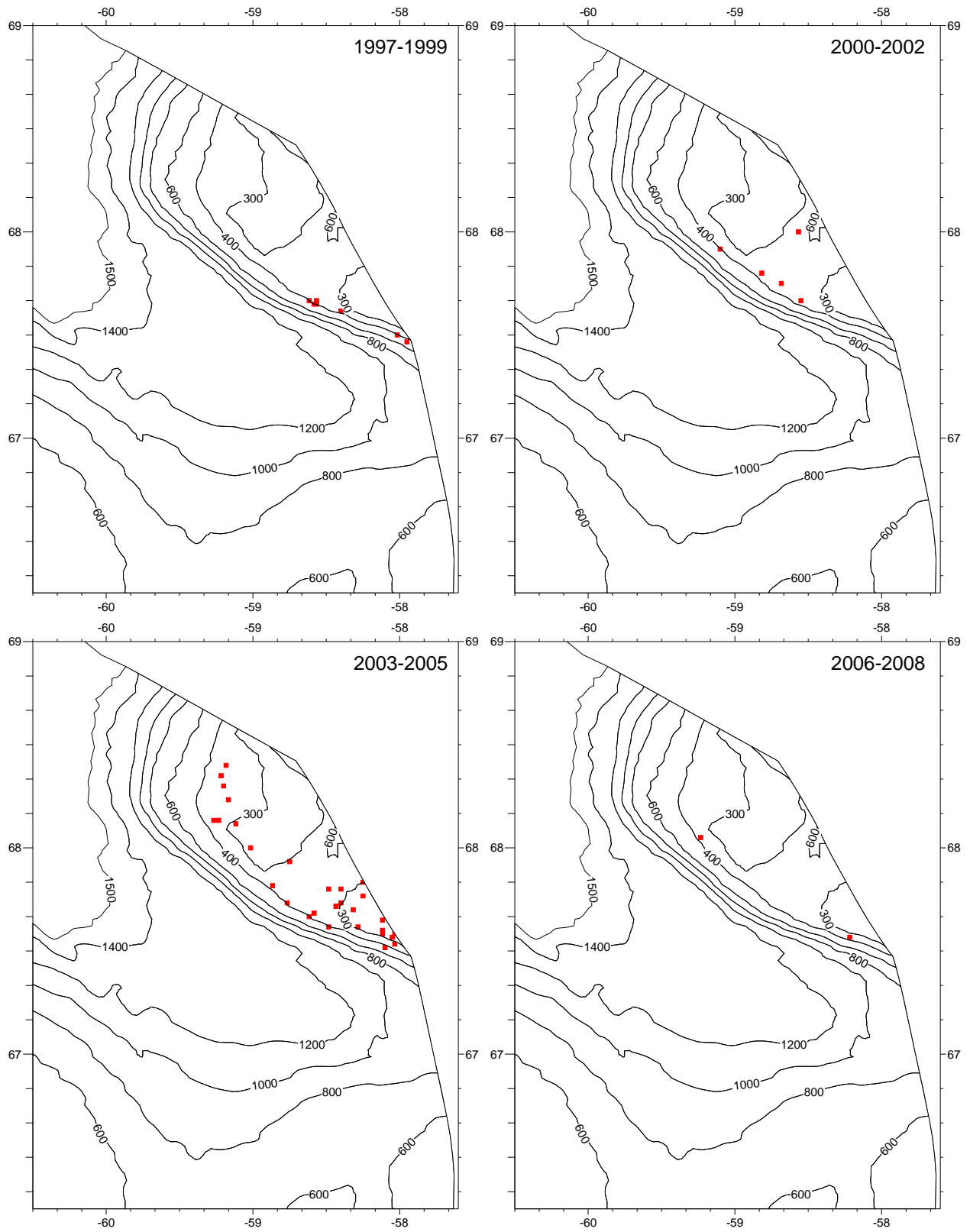


Figure 7. Shrimp Fishing Area 1 – Northern Wolffish (*Anarhichas denticulatus*) locations recorded by the observer program from 1997 through 2008 management years.

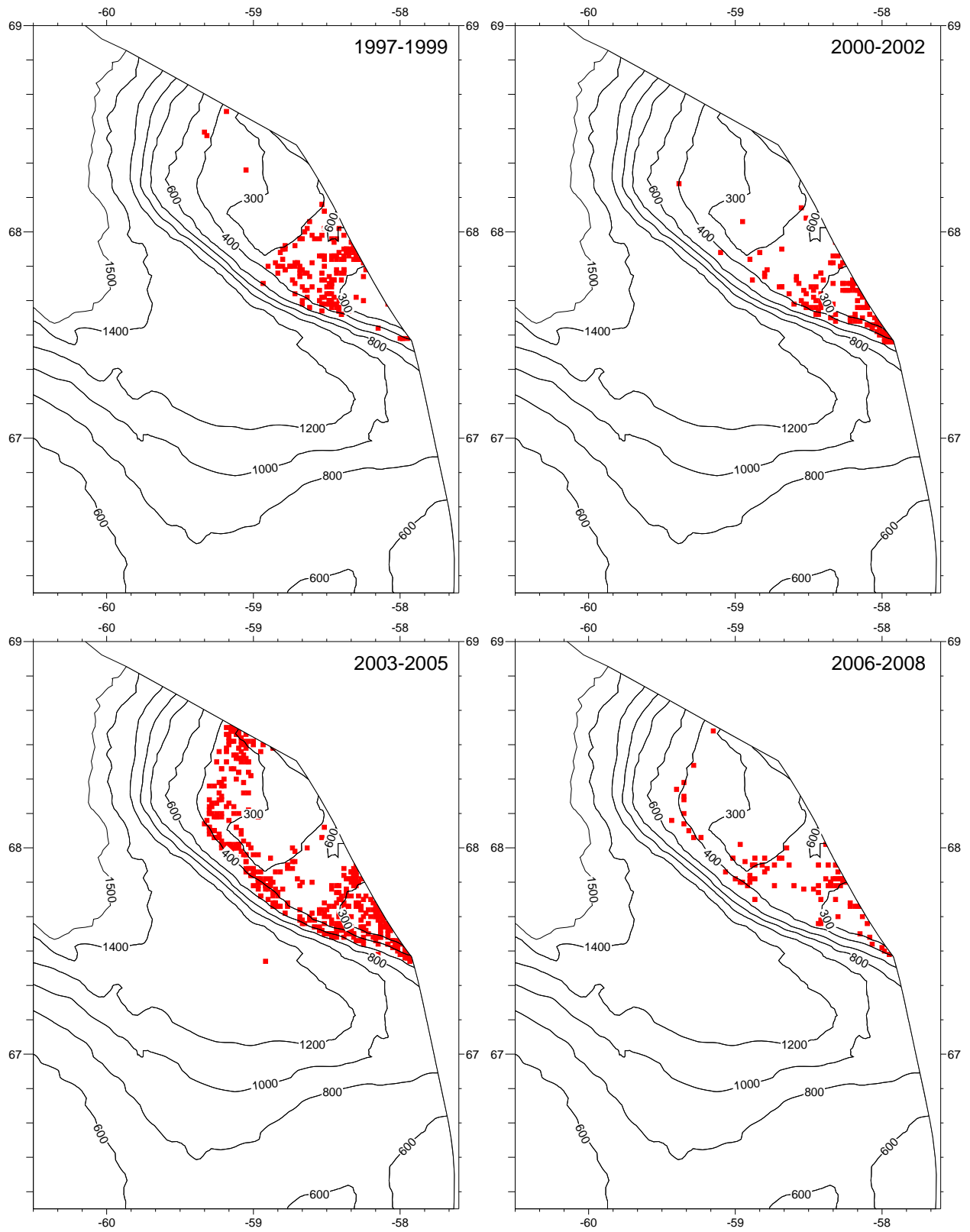


Figure 8. Shrimp Fishing Area 1 – Spotted Wolffish (*Anarhichas minor*) locations recorded by the observer program from 1997 through 2008 management years

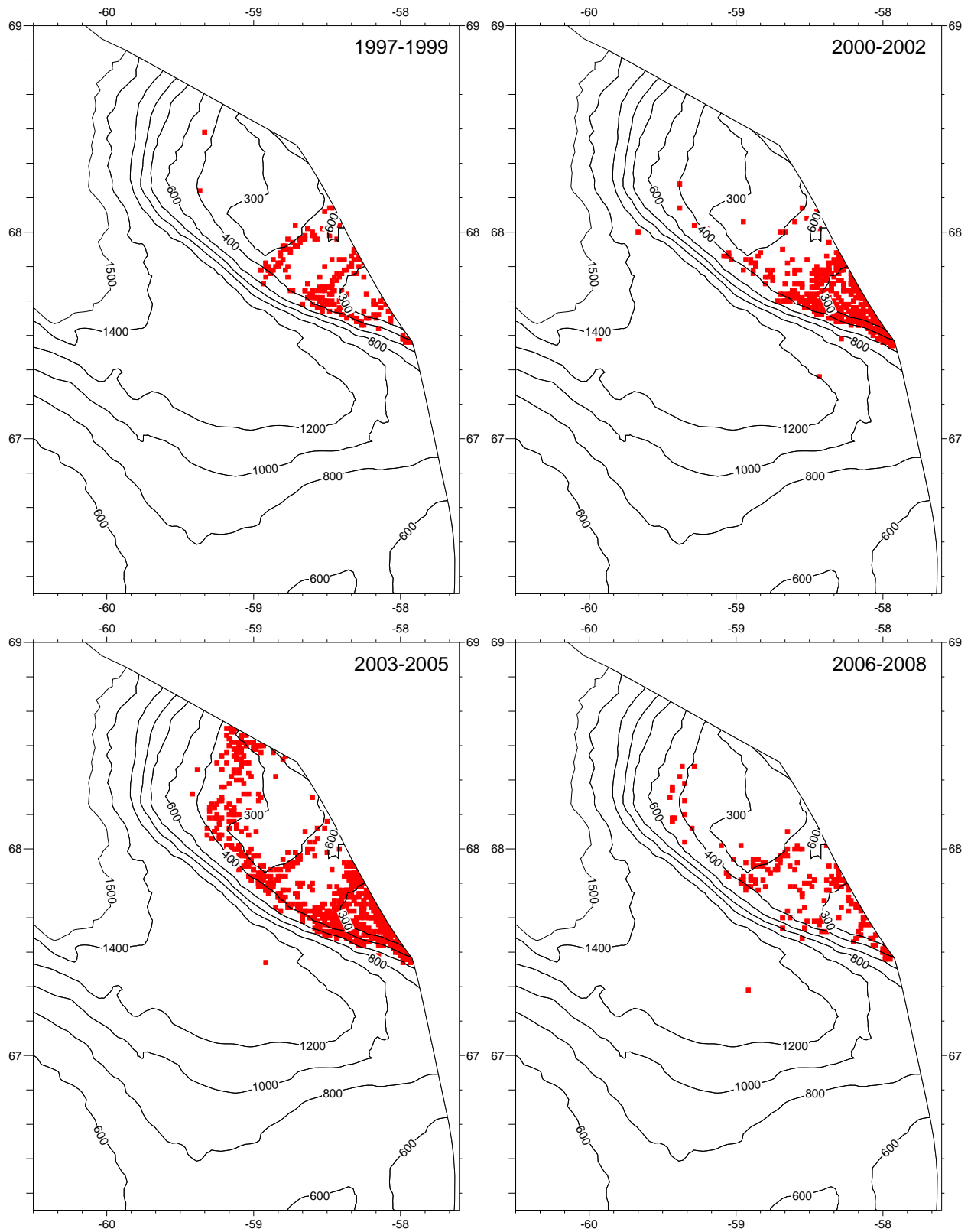


Figure 9. Shrimp Fishing Area 1 – Striped Wolffish (*Anarhichas lupus*) locations recorded by the observer program from 1997 through 2008 management years.

Table 8. Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1990. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1985	1986	1987	1988	1989	1990
Number of Sets Observed	2	373	3	18	18	6	37	2	1309	2622	957
Commercial Shrimp Species	Total Catch Weight (tonnes)										
<i>Pandalus borealis</i>	0.625	378.03	0.879	46.49	21.135	0.079	49.576	0.015	2873.425	3130.449	1633.757
<i>Pandalus montagui</i>	0	0	0	0	0	0	0.002	0	2	0.004	0.014
Total Shrimp	0.625	378.03	0.879	46.49	21.135	0.079	49.578	0.015	2875.425	3130.453	1633.771
By-Catch Species	Total Catch Weight (tonnes)										
Total By-catch	123	61869	0.25	0.88	146	0.54	4.043	0.085	364.588	590.503	412.224
Percent By-catch in Total Catch	66.3	14.1	22.1	1.9	6.5	87.2	7.5	85.0	11.3	15.9	20.1
SARA Species	Total Catch Weight (tonnes)										
Anarhichadidae	0	8.252	0	0	0	0	0	0	0.54	0	0
<i>Anarhichas denticulatus</i>	0	0.371	0	0	0	0	0.01	0	0.175	0.287	0
<i>Anarhichas lupus</i>	0	3.374	0	0	0.081	0	0.129	0	0.021	0.038	0.02
<i>Anarhichas minor</i>	0.05	0.715	0	0.15	0	0	0.238	0.005	0.305	0.388	0.254
Other Fish	Total Catch Weight (tonnes)										
Myxinidae	0	0	0	0	0	0	0	0	0.002	0	0
<i>Myxine glutinosa</i>	0	0	0	0	0	0	0	0	0	0	0.008
<i>Somniosus microcephalus</i>	0	0.159	0	0	0	0.35	0	0	17.1864	183.157	149.145
<i>Squalus acanthias</i>	0	0	0	0	0	0	0	0	0	0.001	0
<i>Centroscyllium fabricii</i>	0	0	0	0	0	0	0	0	0	0.003	0.003
<i>Cetorhinus maximus</i>	0	0	0	0	0	0	0	0	0	0	12
<i>Lamna nasus</i>	0	0	0	0	0	0	0	0	0	0.18	0.3
Rajiformes	0	15.15	0	0	0	0	0	0	0.01	0	0
Rajidae	0	15.15	0	0.5	0	0.005	0.258	0.01	10.694	24.667	7.666
<i>Raja sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Amblyraja radiata</i>	0	2.839	0	0	0.085	0	0.015	0	1.826	9.825	2.82
<i>Malacoraja senta</i>	0	0	0	0	0	0	0	0	0.002	0.029	0.001
<i>Rajella bathyphila</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Leucoraja erinacea</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Rajella fyllae</i>	0	0.119	0	0	0	0	0	0	0.692	0.22	1.04
<i>Amblyraja hyperborea</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Amblyraja jenseni</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Dipturus laevis</i>	0	0.633	0	0	0	0	0	0	0	0.013	0
<i>Dipturus linteus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Malacoraja spinacidervis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Leucoraja ocellata</i>	0	0	0	0	0	0	0	0	0	0.009	0.144
<i>Bathyraja spinicauda</i>	0	0	0	0	0	0	0	0	2.066	0.039	0.076
<i>Raja eglanteria</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Torpedo nobiliana</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Acipenser oxyrinchus</i>	0	0	0	0	0	0	0	0	0	0	0.017
Clupeidae	0	0	0	0	0	0	0	0	0	0.001	0
<i>Clupea harengus</i>	0	0	0	0	0.001	0	0	0	0.002	0.001	0.011
<i>Alosa pseudoharengus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Alosa aestivalis</i>	0	0	0	0	0	0	0	0	0	0	0
Alepocephalidae	0	0	0	0	0	0	0	0	0	0	0
<i>Bathytroctes sp.</i>	0	0	0	0	0	0	0	0	0	0.001	0
<i>Xenodermichthys copei</i>	0	0	0	0	0	0	0	0	0.003	0.001	0.006
<i>Salvelinus alpinus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Mallothus villosus</i>	0	0.001	0	0	0	0	0.239	0	0.091	0.081	0.026
<i>Osmerus mordax</i>	0	0	0	0	0	0	0	0	0	0	0
Argentinidae	0	0	0	0	0	0	0	0	0	0	0
<i>Argentina silus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Argentina striata</i>	0	0	0	0	0	0	0	0	0	0.001	0
<i>Nansenia groenlandica</i>	0	0	0	0	0	0	0	0	0	0	0.001
<i>Bathylagus euryops</i>	0	0	0	0	0	0	0	0	0	0	0
Gonostomatidae	0	0	0	0	0	0	0	0	0	0	0
<i>Cyclothone sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Cyclothone microdon</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Gonostoma sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Gonostoma elongatum</i>	0	0	0	0	0	0	0	0	0	0	0
Sternoptychidae	0	0	0	0	0	0	0	0	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1990. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1985	1986	1987	1988	1989	1990
Number of Sets Observed	2	373	3	18	18	6	37	2	1309	2622	957
Other Fish cont'd	Total Catch Weight (tonnes)										
<i>Argyropelecus aculeatus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Polyipnus asteroides</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Sternoptyx diaphana</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Chauliodontinae</i>	0	0	0	0	0	0	0	0	0.001	0.002	0
<i>Chauliodus sloani</i>	0	0	0	0	0	0	0	0	0.152	0.065	0.006
Stomiinae	0	0	0	0	0	0	0	0	0	0	0
<i>Stomias boa ferax</i>	0	0	0	0	0	0	0	0	0.003	0.057	0.031
Astronesthinae	0	0	0	0	0	0	0	0	0	0	0
<i>Astronesthes</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Anopterus pharao</i>	0	0	0	0	0	0	0	0	0	0.001	0
Myctophidae	0	0	0	0	0	0	0	0	1.592	0.505	0.096
<i>Notoscopelus</i> sp.	0	0	0	0	0	0	0	0	0	0.002	0
<i>Notoscopelus elongatus kroyeri</i>	0	0	0	0	0	0	0	0	0.199	0.138	0.01
<i>Protomyctophum arcticum</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Myctophum</i> sp.	0	0	0	0	0	0	0	0	0.142	0	0
<i>Myctophum punctatum</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Myctophum affine</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Diaphus metopoclampus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Bentho sema glaciale</i>	0	0	0	0	0	0	0	0	0	0	1.201
<i>Symbolophorus veranyi</i>	0	0	0	0	0	0	0	0	0	0	0
Malacosteinae	0	0	0	0	0	0	0	0	0	0.002	0
<i>Malacosteus niger</i>	0	0	0	0	0	0	0	0	0.001	0.001	0.007
<i>Synodus foetens</i>	0	0	0	0	0	0	0	0	0	0	0
Paralepididae	0	0	0	0	0	0	0	0	0	0	0
<i>Paralepis</i> sp.	0	0	0	0	0	0	0	0	0.019	0	0
<i>Magnisudis atlantica</i>	0	0	0	0	0	0	0	0	0.001	0	0
<i>Paralepis coregonoides borealis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0	0.004	0	0	0	0	0	0	0	0.005	0.011
Alepisauridae	0	0	0	0	0	0	0	0	0	0	0
Anguilliformes	0	0	0	0	0	0	0	0	0	0	0
Anguillidae	0	0	0	0	0	0	0	0	0	0	0
<i>Anguilla rostrata</i>	0	0	0	0	0	0	0	0	0	0	0.001
Ophichthidae	0	0	0	0	0	0	0	0	0	0	0
<i>Ophichthus cruentifer</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Simenchelys parasitica</i>	0	0	0	0	0	0	0	0	0	0	0
Congridae	0	0	0	0	0	0	0	0	0	0	0
Nemichthyidae	0	0	0	0	0	0	0	0	0.068	0	0
<i>Nemichthys scolopaceus</i>	0	0	0	0	0	0	0	0	0.01	0	0
<i>Serrivomer beanii</i>	0	0	0	0	0	0	0	0	0	0.004	0.004
<i>Serrivomer lanceolatooides</i>	0	0	0	0	0	0	0	0	0	0	0
Synphobranchidae	0	0	0	0	0	0	0	0	0	0	0
<i>Synphobranchus kaupii</i>	0	0	0	0	0	0	0	0	0	0	0
Notacanthidae	0	0	0	0	0	0	0	0	0	0	0
<i>Notacanthus chemnitzii</i>	0	0	0	0	0	0	0	0	0.003	0.003	0.001
Scomberesocidae	0	0	0	0	0	0	0	0	0	0	0
<i>Scomberesox saurus</i>	0	0	0	0	0	0	0	0	0	0	0
Gadiformes	0	0	0	0	0	0	0	0	0	0	0
<i>Antimora rostrata</i>	0	0	0	0	0	0	0	0	0.002	0.127	0
<i>Halargyreus johnsonii</i>	0	0	0	0	0	0	0	0	0.001	0	0
Gadidae	0	0	0	0	0	0	0	0	0	0	0
<i>Gadus</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Gadus morhua</i>	0	4.973	0	0.015	0.011	0	0.037	0	2.722	7.391	1.04
<i>Gadus ogac</i>	0	0.206	0	0	0	0	0	0	0	0	0.008
<i>Micromesistius poutassou</i>	0	0.026	0	0	0	0	0	0	0	0.001	0
<i>Melanogrammus aeglefinus</i>	0	0.006	0	0	0	0	0	0	0	0	0
<i>Pollachius virens</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Phycis chesteri</i>	0	0	0	0	0	0	0	0	0.001	0	0
<i>Urophycis chuss</i>	0	0	0	0	0	0	0	0	0.528	0.342	0
<i>Urophycis regia</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Urophycis tenuis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Merluccius bilinearis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Merluccius</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Boreogadus saida</i>	0	0	0	0	0	0.02	0.005	0	2.704	9.527	2.034
<i>Arctogadus glacialis</i>	0	0	0	0	0	0	0	0	0.019	0.269	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1990. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1985	1986	1987	1988	1989	1990
Number of Sets Observed	2	373	3	18	18	6	37	2	1309	2622	957
Other Fish cont'd	Total Catch Weight (tonnes)										
<i>Gaidropsarus</i>	0	0	0	0	0	0	0	0	0.171	0.689	0.169
<i>Gaidropsarus ensis</i>	0	0	0	0	0	0	0	0.005	1.138	1.504	0.626
<i>Gaidropsarus argentatus</i>	0	0	0	0	0	0	0	0	3.923	1.179	0.412
<i>Molva dypterygia</i>	0	0.012	0	0	0	0	0	0	0	0.001	0
<i>Brosme brosme</i>	0	0	0	0	0	0	0	0	0	0.001	0.005
<i>Enchelyopus cimbrius</i>	0	0	0	0	0	0	0	0	0.027	0.08	0.011
<i>Laemonema barbatulum</i>	0	0	0	0	0	0	0	0	0	0.703	0
<i>Urophycis sp.</i>	0	0	0	0	0	0	0	0	0	0	0.014
Gadiformes	0	0	0	0	0	0	0	0	0	0	0
Macrouridae	0	0	0	0	0	0	0	0	0	0.008	0.001
<i>Macrurus sp.</i>	0	0	0	0	0	0	0	0	0	0.064	0.134
<i>Macrurus berglax</i>	0	0.175	0	0	0	0	0	0	0.583	1.155	0.366
<i>Nezumia sp.</i>	0	0	0	0	0	0	0	0	0.04	0	0.05
<i>Nezumia bairdii</i>	0	0	0	0	0	0	0	0	0.009	0.164	0.093
<i>Coryphaenoides rupestris</i>	0	0.006	0	0	0	0	0	0	0.002	0.346	0.076
<i>Trachyrincus murrayi</i>	0	0	0	0	0	0	0	0	0.017	0	0
<i>Malacocephalus occidentalis</i>	0	0	0	0	0	0	0	0	0	0	0.018
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0	0	0	0	0.001	0
Polymixiidae	0	0	0	0	0	0	0	0	0	0	0
<i>Polymixia lowei</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Diretmus argenteus</i>	0	0	0	0	0	0	0	0	0	0	0
Trachichthyidae	0	0	0	0	0	0	0	0	0	0.001	0
<i>Aphanopus carbo</i>	0	0	0	0	0	0	0	0	0	0.003	0
<i>Benthodesmus simonyi</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Nesiarichus nasutus</i>	0	0	0	0	0	0	0	0	0	0	0
Scombridae	0	0	0	0	0	0	0	0	0	0	0
<i>Lepidocybium flavobrunneum</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Auxis thazard</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Makaira nigricans</i>	0	0	0	0	0	0	0	0	0	0	0
Xiphiidae	0	0.1	0	0	0	0	0	0	0	0	0
<i>Lopholatilus chamaeleonticeps</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Chiasmodon niger</i>	0	0	0	0	0	0	0	0	0.002	0	0
Trachinoidei	0	0	0	0	0	0	0	0	0	0	0
Ammodytidae	0	0	0	0	0	0	0	0	0	0	0
<i>Ammodytes dubius</i>	0	0	0	0	0	0	0	0	0	0.003	0.06
Blennioidei	0	0	0	0	0	0	0	0	0	0	0
<i>Pholis gunnellus</i>	0	0	0	0	0	0	0	0	0	0	0
Stichaeidae	0	0	0	0	0	0	0	0	0	0	0
<i>Eumesogrammus praecisus</i>	0	0	0	0	0	0	0.002	0	0	0	0
Lumpenus	0	0	0	0	0	0	0	0	0	0	0
<i>Lumpenus fabricii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lumpenus lampretaeformis</i>	0	0	0	0	0	0	0	0	0	0.003	0
<i>Leptoclinus maculatus</i>	0	0	0	0	0	0	0	0	0.001	0.004	0.001
<i>Anisarchus medius</i>	0	0	0	0	0	0	0	0	0	0.01	0
<i>Cryptacanthodes maculatus</i>	0	0	0	0	0	0	0	0	0	0	0
Zoarcidae	0	0.001	0	0.035	0.004	0	0	0	6.429	6.994	0.793
<i>Lycodes sp.</i>	0	0	0	0	0	0	0	0	0	1.74	0.55
<i>Lycodes esmarkii</i>	0	0	0	0	0	0	0	0	0.2	0.175	0.009
<i>Lycodes lavalaei</i>	0	0	0	0	0	0	0	0	0.007	0.018	0.048
<i>Lycodes reticulatus</i>	0	0	0	0	0	0	0	0	0.184	0.028	0.041
<i>Lycodes vahlii</i>	0.01	0.348	0	0	0	0	0	0	0.151	0.357	0.315
<i>Lycodes turneri</i>	0	0	0	0	0	0	0	0	0.005	0.035	0.413
<i>Lycodes terraenovae</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lycodes eudipleurostictus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lycodes pallidus</i>	0	0	0	0	0	0	0	0	0.102	0.378	0.022
<i>Zoarces americanus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Melanostigma atlanticum</i>	0	0	0	0	0	0	0	0	0	0.004	0
<i>Gymnelus viridis</i>	0	0	0	0	0	0	0	0	0.001	0.306	0.02
<i>Lycenchelys sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lycenchelys paxillus</i>	0	0	0	0	0	0	0	0	0.108	0.316	0.03
<i>Lycenchelys sarsii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lycenchelys verrillii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Peprilus triacanthus</i>	0	0	0	0	0	0	0	0	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1990. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1985	1986	1987	1988	1989	1990
Number of Sets Observed	2	373	3	18	18	6	37	2	1309	2622	957
Other Fish cont'd	Total Catch Weight (tonnes)										
<i>Sebastes</i> sp.	1	23.795	0.21	0.07	106	0.077	2.188	0.03	73.784	193.763	163.588
<i>Prionotus alatus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Peristedion gracile</i>	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0	0	0	0	0.021	0.005	0.128	0	8.602	21.347	4.586
<i>Hemirhamphus americanus</i>	0	0	0	0	0	0	0	0	0	0	0
Arteidiellus	0	0	0	0	0	0	0	0	0.009	0	0.433
<i>Arteidiellus atlanticus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Arteidiellus uncinatus</i>	0	0.002	0	0	0	0	0	0	0.228	1.155	1.701
<i>Triglops</i> sp.	0	0	0	0	0	0	0	0	0	0	0.798
<i>Triglops murrayi</i>	0	0.002	0	0	0	0	0	0	0.701	1.652	6.17
<i>Triglops nybelini</i>	0	0	0	0	0	0	0	0	0	0.004	6.776
<i>Triglops pingelii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus aeneus</i>	0	0	0	0	0	0	0	0	10.16	0.432	0.427
<i>Myoxocephalus scorpius</i>	0	0.027	0	0	0	0	0	0	0.009	0	0
<i>Myoxocephalus octodecemspinosus</i>	0	0.342	0	0	0	0	0	0	0.205	1.549	0.04
<i>Myoxocephalus quadricornis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus scorpioides</i>	0	0	0	0	0	0	0	0	0	0.001	0.01
<i>Gymnocanthus tricuspis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Cottunculus</i> sp.	0	0	0	0	0	0.005	0	0	0	0	0
<i>Cottunculus thomsonii</i>	0	0	0	0	0	0	0	0	0	0	0.001
<i>Cottunculus microps</i>	0	0.005	0	0	0	0	0	0	0.05	0.136	0.035
<i>Icelus</i> sp.	0	0	0	0	0	0	0	0	0	0	0.16
<i>Icelus bicornis</i>	0	0	0	0	0	0	0	0	0.672	0.849	1.57
<i>Icelus spatula</i>	0	0	0	0	0	0	0	0	0	0.4	0
Agonidae	0	0	0	0	0	0	0	0	0.265	0.484	0.103
<i>Leptagonus decagonus</i>	0	0	0	0	0	0	0	0	0.601	0.807	0.309
<i>Ulcina olrikii</i>	0	0	0	0	0	0	0	0	0.046	0	0
<i>Aspidophoroides monopterygius</i>	0	0	0	0	0	0	0	0	0.014	0.347	0.043
Cyclopteridae	0	0	0	0	0	0	0	0	0	0.029	0
<i>Eumicrotremus</i> sp.	0	0	0	0	0	0	0	0	0	0.01	0
<i>Eumicrotremus spinosus</i>	0	0	0	0	0	0	0	0	0.005	0.001	0.115
<i>Eumicrotremus derjugini</i>	0.02	0	0	0	0	0	0	0	0	0.024	0.096
<i>Cyclopterus lumpus</i>	0.05	0.03	0	0	0	0	0	0	0	0.001	0.016
<i>Cyclopteroopsis mcalpini</i>	0	0	0	0	0	0	0	0	0	0	0
Liparidae	0	0	0	0	0	0	0	0	0.697	0.01	6.06
<i>Paraliparis</i> sp.	0	0	0	0	0	0	0	0.005	0.511	3.798	0.224
<i>Paraliparis bathybius</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Paraliparis copei</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis</i> sp.	0	0	0	0	0	0	0	0	0.014	1.86	1.405
<i>Liparis atlanticus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis fabricii</i>	0	0	0	0	0	0	0	0	0.985	0.826	1.304
<i>Liparis liparis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis tunicatus</i>	0	0	0	0	0	0	0	0	0.003	0.071	1.452
<i>Liparis gibbus</i>	0	0	0	0	0	0	0	0	0	0	0
Careproctus	0	0	0	0	0	0	0	0	0	0	0
<i>Careproctus longipinnis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Careproctus reinhardti</i>	0	0	0	0	0	0	0	0	0.185	0.067	0.023
<i>Careproctus ranula</i>	0	0	0	0	0	0	0	0	0	0	0
Batrachoidiformes	0	0	0	0	0	0	0	0	0	0	0
Pleuronectiformes	0	0.545	0	0	0	0	0	0	0	0	0.001
<i>Hippoglossoides platessoides</i>	0	4.833	0.015	0.09	0.159	0	0.186	0	2.875	5.066	1.291
<i>Glyptocephalus cynoglossus</i>	0	0.103	0	0	0	0	0	0	0	0.002	0
<i>Limanda ferruginea</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Reinhardtius hippoglossoides</i>	0	5.043	0.025	0	0.038	0.078	0.607	0.03	62.143	89.648	27.079
<i>Hippoglossus hippoglossus</i>	0.1	0.9	0	0.02	0	0	0	0	0.209	0.773	0.011
<i>Pseudopleuronectes americanus</i>	0	0.02	0	0	0	0	0	0	0.04	0	0

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Management Year	1979	1980	1981	1982	1983	1985	1986	1987	1988	1989	1990
Number of Sets Observed	2	373	3	18	18	6	37	2	1309	2622	957
Other Fish cont'd	Total Catch Weight (tonnes)										
Bothidae	0	0.551	0	0	0	0	0	0	0	0	0
<i>Paralichthys sp.</i>	0	0	0	0	0	0	0	0	0	0.677	0
Tetraodontidae	0	0	0	0	0	0	0	0	0	0	0
Lophiiformes	0	0	0	0	0	0	0	0	0	0	0
<i>Lophius americanus</i>	0	0.05	0	0	0	0	0	0	0	0.005	0
<i>Dibranchius atlanticus</i>	0	0	0	0	0	0	0	0	0	0	0
Ceratiidae	0	0	0	0	0	0	0	0	0	0	0
<i>Ceratias holboelli</i>	0	0	0	0	0	0	0	0	0	0.001	0
<i>Cryptosaras couesii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Himantolophus groenlandicus</i>	0	0	0	0	0	0	0	0	0	0	0
Unidentified Fish	0	0	0	0	0	0	0	0	0.11	0.642	0.35
Sponge	Total Catch Weight (tonnes)										
Porifera	0	0	0	0	0	0	0	0	0	195	0.615
Hard Coral	Total Catch Weight (tonnes)										
<i>Primnoa resedaeiformis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Acanthogorgia armata</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Acanella arbuscula</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Desmophyllum dianthus</i>	0	0	0	0	0	0	0	0	0	0	0
Soft Coral	Total Catch Weight (tonnes)										
Anthozoa	0	0	0	0	0	0	0	0	0	0	0
<i>Gersemia rubiformis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Duva florida</i>	0	0	0	0	0	0	0	0	0	0	0
Other Invertebrates	Total Catch Weight (tonnes)										
Invertebrata	0	0	0	0	0	0	0	0	0	0	0
Cnidaria	0	0	0	0	0	0	0	0	0	0	0
Scyphozoa	0	0.271	0	0	0	0	0	0	0	6.135	2.267
Anthozoa	0	0	0	0	0	0	0	0	0	0	0
Actinaria	0	0	0	0	0	0	0	0	0	0	0
Ctenophora	0	0	0	0	0	0	0	0	0	0	0
Invertebrata	0	0	0	0	0	0	0	0	0	0	0
Mollusca	0	0	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0	0	0
<i>Calliostoma sp.</i>	0	0	0	0	0	0	0	0	0	0	0
Buccinidae	0	0	0	0	0	0	0	0	0	0	0
<i>Buccinum sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Chlamys islandica</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Placopecten magellanicus</i>	0	0	0	0	0	0	0	0	0	0	0
Cephalopoda	0	0	0	0	0	0	0	0	0	0.003	0
Invertebrata	0	0	0	0	0	0	0	0	0	0	0
Sepiolidae	0	0	0	0	0	0	0	0	0	0	0
Rossinae	0	0	0	0	0	0	0	0	0	0	0.005
<i>Rossia sp.</i>	0	0	0	0	0	0	0	0	0	0	0.002
Teuthida	0	0	0	0	0	0	0	0	0	0	0
Loliginidae	0	0	0	0	0	0	0	0	0	0.011	0
<i>Sepioteuthis sepioidea</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Pterygoteuthis giardi</i>	0	0	0	0	0	0	0	0	0	0	0
Octopoteuthidae	0	0	0	0	0	0	0	0	0	0	0
<i>Illex sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Illex illecebrosus</i>	0	0	0	0	0	0	0	0	0.789	0.996	0.271
<i>Gonatus fabricii</i>	0	0	0	0	0	0	0	0	0.046	0	0
Octopoda	0	0	0	0	0	0	0	0	0.016	0.42	0.114
<i>Cirroteuthis mulleri</i>	0	0	0	0	0	0	0	0	0.033	0	0
<i>Stauroteuthis syrtensis</i>	0	0	0	0	0	0	0	0	0	0	0
Bolitaenidae	0	0	0	0	0	0	0	0	0	0	0
Invertebrata	0	0	0	0	0	0	0	0	0	0	0
<i>Octopus sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Octopus burryi</i>	0	0	0	0	0	0	0	0	0	0	0
Vampyroteuthidae	0	0	0	0	0	0	0	0	0	0	0

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Number of Sets Observed	2	373	3	18	18	6	37	2	1309	2622	957
Other Invertebrates cont'd	Total Catch Weight (tonnes)										
Annelida	0	0	0	0	0	0	0	0	0	0	0
Pycnogonida	0	0	0	0	0	0	0	0	0	0.002	0
Crustacea	0	0	0	0	0	0	0	0	0	0.007	0
Cirripedia	0	0	0	0	0	0	0	0	0	0	0
Amphipoda	0	0	0	0	0	0	0	0	0	0	0
Lophogastrida	0	0	0	0	0	0	0	0	0	0	0
<i>Euphausia</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Thysanoessa</i> sp.	0	0	0	0	0	0	0	0	0	0	0
Decapoda	0	0	0	0	0	0	0	0	0	0	0.004
Dendrobranchiata	0	0	0	0	0	0	0	0	0	0	0
Dendrobranchiata	0	0	0	0	0	0	0	0	0	0	0
Sergestidae	0	0	0	0	0	0	0	0	0	0	0
<i>Sergestes arcticus</i>	0	0	0	0	0	0	0	0	0	0	0
Caridea	0	0	0	0	0	0	0	0	0	0	0
<i>Acanthephyra</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Acanthephyra pelagica</i>	0	0	0	0	0	0	0	0	0	0.001	0.001
Pasiphaeidae	0	0	0	0	0	0	0	0	0	0	0
<i>Pasiphaea</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Pasiphaea tarda</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Pasiphaea multidentata</i>	0	0	0	0	0	0	0	0	0.002	0.008	0
Hippolytidae	0	0	0	0	0	0	0	0	0	0	0
<i>Eualus macilentus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii</i>	0	0	0	0	0	0	0	0	0	0.001	0
<i>Spiroto caris</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Spiroto caris lilljeborgii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lebbeus groenlandicus</i>	0	0	0	0	0	0	0	0	0.006	0	0
<i>Lebbeus polaris</i>	0	0	0	0	0	0	0	0	0.006	0	0
<i>Caridion gordonii</i>	0	0	0	0	0	0	0	0	0	0	0
Pandalidae	0	0	0	0	0	0	0	0	0	0	0
<i>Dichelopandalus leptocerus</i>	0	0	0	0	0	0	0	0	0.007	0.01	0
<i>Pandalus</i> sp.	0	0	0	0	0	0	0	0	0	0.001	0.011
<i>Atlantopandalus propinquus</i>	0	0	0	0	0	0	0	0	0.01	0.002	0
Crangonidae	0	0	0	0	0	0	0	0	0	0	0
<i>Sclerocrangon</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Sclerocrangon boreas</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Sclerocrangon ferox</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Crangon</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Sabinea</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Sabinea septemcarinata</i>	0	0	0	0	0	0	0	0	0	0	0.005
<i>Sabinea sarsii</i>	0	0	0	0	0	0	0	0	0.001	0.007	0
<i>Pontophilus norvegicus</i>	0	0	0	0	0	0	0	0	0.001	0.004	0.001
<i>Argis dentata</i>	0	0	0	0	0	0	0	0	0	0.001	0
Pleocyemata	0	0	0	0	0	0	0	0	0	0	0
<i>Polycheles sculptus</i>	0	0	0	0	0	0	0	0	0	0	0
Paguridae	0	0	0	0	0	0	0	0	0	0.001	0
<i>Pagurus</i> sp.	0	0	0	0	0	0	0	0	0	0	0
Lithodidae	0	0	0	0	0	0	0	0	0	0.006	0
<i>Lithodes</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Lithodes maja</i>	0	0	0	0	0	0	0.001	0	0	0.012	0
<i>Neolithodes</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Neolithodes grimaldii</i>	0	0	0	0	0	0	0	0	0	0.009	0
Brachyura	0	0	0	0	0	0	0	0	0	0.001	0
<i>Cancer</i> sp.	0	0	0	0	0	0	0	0	0	0	0
Majidae	0	0	0	0	0	0	0	0	0	0	0
<i>Chionoecetes opilio</i>	0	0	0	0	0	0	0	0	0	0	0.001
<i>Hyas</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Hyas araneus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Hyas coarctatus</i>	0	0	0	0	0	0	0	0	0	0	0.001

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1990. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1982	1983	1985	1986	1987	1988	1989	1990
Number of Sets Observed	2	373	3	18	18	6	37	2	1309	2622	957
Other Invertebrates cont'd	Total Catch Weight (tonnes)										
Holothuroidea	0	0	0	0	0	0	0	0	0	0	0
<i>Psolus fabricii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Cucumaria frondosa</i>	0	0	0	0	0	0	0	0	0	0	0
Echinoidea	0	0	0	0	0	0	0	0	0	0	0
<i>Strongylocentrotus sp.</i>	0	0	0	0	0	0	0	0	0	0	0.01
<i>Strongylocentrotus droebachiensis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Strongylocentrotus pallidus</i>	0	0	0	0	0	0	0	0	0	0	0
Asteroidea	0	0	0	0	0	0	0	0	0	0	0.011
Solasteridae	0	0	0	0	0	0	0	0	0	0	0
Asteriidae	0	0	0	0	0	0	0	0	0	0	0
<i>Pedicellaster typicus</i>	0	0	0	0	0	0	0	0	0	0	0
Ophiuroidea	0	0	0	0	0	0	0	0	0	0	0
Gorgonocephalidae	0	0	0	0	0	0	0	0	0	0	0
Gorgonocephalus	0	0	0	0	0	0	0	0	0	0	0
Ophiura	0	0	0	0	0	0	0	0	0	0	0
Marine Mammals	Total Catch Weight (tonnes)										
Caniformia	0	0	0	0	0	0	0	0	0	0.075	0
<i>Phoca sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Pagophilus groenlandicus</i>	0	0	0	0	0	0	0	0	0.13	0	0
<i>Halichoerus grypus</i>	0	0	0	0	0	0	0	0	0	0	0
Other	Total Catch Weight (tonnes)										
Stone	0	0	0	0	0	0	0	0	0	0.775	0.449
Fish Eggs	0	0	0	0	0	0	0	0	0	0	0
Plant Material	0	0	0	0	0	0	0	0	0	0	0.014

Table 8. Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1991 to 1999. Missing years indicate that no fishing occurred in the area that year.

Management Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of Sets Observed	1213	1057	131	425	1063	2384	3204	1953	2708
Commercial Shrimp Species Total Catch Weight (tonnes)									
<i>Pandalus borealis</i>	1145.272	1210.04	65.609	450.979	1336.784	3249.53	5445.467	4792.35	5607.033
<i>Pandalus montagui</i>	0	0.042	0	0.601	1480.232	3051.93	2994.058	2708.05	3765.204
Total Shrimp	1145.272	1210.082	65.609	451.58	2817.016	6301.45	8439.525	7500.4	9372.237
By-Catch Species Total Catch Weight (tonnes)									
Total By-catch	395.893	412.049	28.794	82.185	163.288	432.294	346.664	140.537	185.871
Percent By-catch in Total Catch	25.7	25.4	30.5	15.4	5.5	6.4	3.9	1.8	1.9
SARA Species Total Catch Weight (tonnes)									
Anarhichadidae	0	0	0	0	0	0	0	0	0
<i>Anarhichas denticulatus</i>	0.017	0.006	0.001	0.033	0.021	0.043	0	0	0.011
<i>Anarhichas lupus</i>	0.01	0.171	0.009	0.016	0.034	0.155	0.125	0.039	0.376
<i>Anarhichas minor</i>	0.339	0.337	0.015	0.089	0.768	4.058	0.301	0.026	0.042
Other Fish Total Catch Weight (tonnes)									
Myxinidae	0	0	0	0	0	0	0	0	0
<i>Myxine glutinosa</i>	0	0	0	0	0	0.002	0	0	0.001
<i>Somniosus microcephalus</i>	142.376	68.166	11.74	6.229	8.892	4.867	0	0.05	0
<i>Squalus acanthias</i>	0	0.004	0	0	0	0	0	0	0
<i>Centroscyllium fabricii</i>	0.001	0.011	0	0	0	0	0.001	0	0
<i>Cetorhinus maximus</i>	0.1	0	0	0	0	0	0	0	0
<i>Lamna nasus</i>	0	0	0	0	0	0	0	0	0
Rajiformes	0.17	0	0	0	0	0	0	0	0
Rajidae	9.276	2.677	0.198	1.74	0.104	0	0.149	0.214	0.051
<i>Raja sp.</i>	0.627	0.819	0	0	0.461	0.005	0.493	0.696	0.916
<i>Amblyraja radiata</i>	5.274	3.521	0.65	2.201	6.373	18.443	6.193	3.509	4.621
<i>Malacoraja senta</i>	0.046	0.023	0	0	0.028	0.008	0	0.002	0
<i>Rajella bathyphila</i>	0	0	0	0	0	0	0	0	0
<i>Leucoraja erinacea</i>	0	0.007	0	0.013	0	0	0	0	0.001
<i>Rajella fyllae</i>	0	0.014	0.001	0.015	0.017	0.199	0.702	0	0
<i>Amblyraja hyperborea</i>	0	0	0	0	0.006	0	0.041	0	0
<i>Amblyraja jenseni</i>	0	0.004	0	0	0	0	0	0	0
<i>Dipturus laevis</i>	0	0	0	0	0	0	0	0	0
<i>Dipturus linteus</i>	0	0	0	0	0	0	0	0	0
<i>Malacoraja spinacidermis</i>	0.005	0.015	0	0	0	0	0	0	0
<i>Leucoraja ocellata</i>	0	0	0	0.126	0	1.369	0	0.631	0.003
<i>Bathyraja spinicauda</i>	0.354	1.136	0.03	0.57	1.277	0.212	0.202	0.75	0.446
<i>Raja eglanteria</i>	0	0	0	0	0	0	0	0	0
<i>Torpedo nobiliana</i>	0.003	0	0	0	0	0	0	0	0
<i>Acipenser oxyrinchus</i>	0	0	0	0	0	0	0	0	0
Clupeidae	0	0	0	0	0	0	0	0	0
<i>Clupea harengus</i>	0.009	0.005	0	0.001	0.021	0.006	0	0.007	0.015
<i>Alosa pseudo-harengus</i>	0	0	0	0	0	0.002	0	0	0
<i>Alosa aestivalis</i>	0	0	0	0	0	0	0	0	0.001
Alepocephalidae	0.042	0.002	0	0.001	0	0	0	0	0
<i>Bathytroctes sp.</i>	0.008	0.001	0.003	0.003	0	0.011	0	0.001	0
<i>Xenodermichthys copei</i>	0.059	0.009	0	0	0	0	0	0.113	0.407
<i>Salvelinus alpinus</i>	0	0	0	0	0	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0.011	0.001	0	0	0	0	0
<i>Mallothus villosus</i>	0.011	0.028	0	0.006	0.027	0.034	0.001	0.318	0.297
<i>Osmerus mordax</i>	0	0	0	0	0	0	0	0	0
Argentinidae	0	0	0	0	0	0	0	0	0
<i>Argentina silus</i>	0	0	0	0	0	0	0	0	0.069
<i>Argentina striata</i>	0	0	0	0	0	0	0	0	0
<i>Nansenia groenlandica</i>	0	0	0	0	0	0	0	0	0
<i>Bathylagus euryops</i>	0	0	0	0	0.002	0.107	0.007	0	0.001
Gonostomatidae	0	0	0	0	0	0	0	0	0
<i>Cyclothone sp.</i>	0	0	0	0	0	0	0	0	0
<i>Cyclothone microdon</i>	0	0	0	0.002	0	0	0	0	0
<i>Gonostoma sp.</i>	0	0	0	0	0	0.023	0	0	0
<i>Gonostoma elongatum</i>	0	0.018	0	0	0	0	0	0	0
Sternoptychidae	0	0	0	0	0.002	0.006	0.002	0	0.005

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1991 to 1999. Missing years indicate that no fishing occurred in the area that year.

Management Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of Sets Observed	1213	1057	131	425	1063	2384	3204	1953	2708
Other Fish cont'd	Total Catch Weight (tonnes)								
<i>Argyropelecus aculeatus</i>	0	0	0	0	0.001	0.005	0.002	0.003	0.014
<i>Polyipnus asteroides</i>	0.001	0	0	0.001	0	0.001	0	0.001	0
<i>Sternoptyx diaphana</i>	0	0	0	0	0	0	0	0	0
<i>Chauliodontinae</i>	0	0	0	0.003	0	0	0	0	0
<i>Chauliodus sloani</i>	0.026	0.133	0	0.025	0.006	0.21	0.011	0.066	0.029
<i>Stomiinae</i>	0	0	0	0	0	0.012	0	0	0
<i>Stomias boa ferox</i>	0.005	0.007	0	0.002	0.005	0.018	0.007	0.006	0.026
<i>Astronesthininae</i>	0	0	0	0	0	0	0	0	0
<i>Astronesthes</i> sp.	0	0	0	0	0	0	0	0	0
<i>Anotopterus pharao</i>	0.006	0	0	0	0.01	0	0	0	0
<i>Myctophidae</i>	0.478	0.36	0.017	0.2	0.781	2.007	6.917	2.923	7.389
<i>Notoscopelus</i> sp.	0	0	0	0	0.014	0	0	0	0.031
<i>Notoscopelus elongatus kroyeri</i>	0.007	0.135	0.015	0.003	0	0.02	0.032	0	2.098
<i>Protomyctophum arcticum</i>	0	0	0	0	0.004	0	0	0	0.001
<i>Myctophum</i> sp.	0	0	0	0	0	0	0	0	0
<i>Myctophum punctatum</i>	0.01	0	0	0	0	0.558	0.006	0	0.024
<i>Myctophum affine</i>	0	0	0	0	0.001	0	0	0	0
<i>Diaphus metopoclampus</i>	0	0	0	0	0	0	0	0.018	0
<i>Benthosema glaciale</i>	0	0	0.006	0.051	0	0	0	0	0.001
<i>Symbolophorus veranyi</i>	0	0	0	0	0	0	0	0	0.003
<i>Malacosteinae</i>	0.001	0	0	1.843	0	0	0	0	0.005
<i>Malacosteus niger</i>	0.001	0.004	0	0.002	0	0	0	0.001	0.001
<i>Synodus foetens</i>	0	0	0	0.002	0	0	0	0	0
<i>Paralepididae</i>	0	0	0	0.001	0.021	0	0.031	0	0.021
<i>Paralepis</i> sp.	0	0.002	0	0.013	0.026	0	0.004	0.051	0.991
<i>Magnisudis atlantica</i>	0	0	0	0.155	0.001	0	0.01	0.008	0
<i>Paralepis coregonoides borealis</i>	0.01	0	0	0	0	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0.007	0.094	0.009	0.013	0.007	0.518	0.308	0.151	0.314
<i>Alepisauridae</i>	0.001	0	0	0	0	0	0	0	0
<i>Anguilliformes</i>	0	0	0	0.006	0.002	0	0	0	0
<i>Anguillidae</i>	0	0	0	0	0	0	0.005	0	0.001
<i>Anguilla rostrata</i>	0	0	0	0	0	0	0	0	0
<i>Ophichthidae</i>	0	0	0	0	0	0	0	0	0
<i>Ophichthus cruentifer</i>	0	0	0	0	0	0	0	0	0
<i>Simenchelys parasitica</i>	0	0	0	0	0	0	0	0	0
<i>Congridae</i>	0.001	0	0	0	0	0	0	0	0
<i>Nemichthyidae</i>	0	0	0	0	0.002	0.001	0	0	0.001
<i>Nemichthys scolopaceus</i>	0.005	0	0	0	0.003	0.001	0	0.001	0.005
<i>Serrivomer beanii</i>	0.001	0.002	0	0.003	0.004	0.013	0.009	0.019	0.004
<i>Serrivomer lanceolatioides</i>	0	0	0	0	0	0	0	0	0
<i>Synaphobranchidae</i>	0	0	0	0	0	0	0	0	0
<i>Synaphobranchus kaupii</i>	0.052	0	0	0	0.002	0	0	0	0.014
<i>Notacanthidae</i>	0.001	0	0	0	0.002	0.003	0	0	0
<i>Notacanthus chemnitzii</i>	0.002	0	0	0	0.005	0	0	0	0
<i>Scomberesocidae</i>	0	0	0	0	0	0	0	0.001	0.006
<i>Scomberesox saurus</i>	0	0	0	0	0.004	0	0.026	0.002	0
<i>Gadiformes</i>	0	0.002	0	0	0	0	0	0	0
<i>Antimora rostrata</i>	0	0.001	0	0	0	0	0	0	0
<i>Halargyreus johnsonii</i>	0	0	0	0	0	0	0	0	0
<i>Gadidae</i>	0	0	0	0	0	0	0	0	0
<i>Gadus</i> sp.	0	0	0	0	0	0	0	0	0
<i>Gadus morhua</i>	0.414	0.654	0.01	0.006	0.022	0.135	0.005	0.002	0.046
<i>Gadus ogac</i>	0	0	0	0	0	0.374	0	0	0.015
<i>Micromesistius poutassou</i>	0	0	0	0	0.001	0.001	0	0	0.011
<i>Melanogrammus aeglefinus</i>	0	0	0	0	0	0	0	0	0.001
<i>Pollachius virens</i>	0	0	0	0	0	0	0	0	0
<i>Phycis chesteri</i>	0	0	0	0	0	0	0	0	0
<i>Urophycis chuss</i>	0.07	0	0	0.012	0	0	0	0.003	0.002
<i>Urophycis regia</i>	0	0	0	0	0	0	0	0	0
<i>Urophycis tenuis</i>	0	0	0.002	0	0	0	0	0.001	0.133
<i>Merluccius bilinearis</i>	0	0	0	0	0	0	0	0	0.003
<i>Merluccius</i> sp.	0	0	0	0	0	0.015	0	0	0
<i>Boreogadus saida</i>	5.708	2.329	0.357	2.278	2.328	3.556	1.971	0.627	4.116
<i>Arctogadus glacialis</i>	0	0	0	0	0	0	0	0.186	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1991 to 1999. Missing years indicate that no fishing occurred in the area that year.

Management Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of Sets Observed	1213	1057	131	425	1063	2384	3204	1953	2708
Other Fish cont'd	Total Catch Weight (tonnes)								
<i>Gaidropsarus</i>	0.096	0	0	0.194	0.055	0	0.099	0.001	0
<i>Gaidropsarus ensis</i>	0.104	0.469	0.019	0.322	1.022	2.677	8.269	2.101	0.506
<i>Gaidropsarus argentatus</i>	0.175	0.142	0.009	0.02	0.04	0.377	0.816	0.329	0.204
<i>Molva dypterygia</i>	0	0	0	0	0	0	0	0	0
<i>Brosme brosme</i>	0.03	0.022	0	0	0.003	0.001	0	0	0
<i>Enchelyopus cimbrius</i>	0	0	0	0.002	0.001	0.003	0.003	0.003	0.007
<i>Laemonema barbatulum</i>	0	0.12	0	0	0	0	0	0	0
<i>Urophycis</i> sp.	0	0.002	0	0	0	0	0	0	0
Gadiformes	0	0	0	0	0	0	0.002	0.003	0
Macrouridae	0	0.028	0	0	0.001	0	0	0	0
<i>Macrourus</i> sp.	0.023	0.005	0.004	0.002	0.049	0	0	0	0.001
<i>Macrourus berglax</i>	0.188	0.566	0.019	0.02	0.149	0.054	0.019	0.002	0
<i>Nezumia</i> sp.	0	0	0	0	0	0	0	0	0
<i>Nezumia bairdii</i>	0.047	0.04	0	0.01	0.342	0.102	0.001	0.005	0.017
<i>Coryphaenoides rupestris</i>	0.073	0.127	0.003	0.001	0	0.059	0	0	0.003
<i>Trachyrincus murrayi</i>	0	0	0	0	0.007	0	0	0	0
<i>Malacocephalus occidentalis</i>	0	0	0.012	0	0	0	0	0	0
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0	0	0	0
Polymixidae	0	0	0	0.002	0	0	0	0	0
<i>Polymixia lowei</i>	0	0	0	0	0	0	0	0.05	0
<i>Anoplogaster cornuta</i>	0	0	0.022	0	0	0	0	0	0
<i>Diretmus argenteus</i>	0	0	0	0	0	0.002	0.001	0	0
Trachichthyidae	0	0	0	0	0	0	0	0	0
<i>Aphanopus carbo</i>	0	0	0	0	0	0	0	0	0
<i>Benthodesmus simonyi</i>	0	0	0	0	0	0	0.007	0	0
<i>Nesiarchus nasutus</i>	0	0	0	0	0	0	0	0	0
Scombridae	0	0	0	0	0	0	0	0	0.01
<i>Lepidocybium flavobrunneum</i>	0	0	0	0	0	0.001	0	0	0
<i>Auxis thazard</i>	0	0	0	0	0	0	0	0	0
<i>Makaira nigricans</i>	0	0	0	0	0	0	0	0	0
Xiphiidae	0	0	0	0	0	0	0	0	0
<i>Lopholatilus chamaeleonticeps</i>	0	0	0	0	0	0	0	0	0
<i>Chiasmodon niger</i>	0	0	0.002	0.009	0.008	0	0	0	0
Trachinoidei	0.008	0	0	0	0.002	0	0	0	0
Ammodytidae	0	0	0	0	0.011	0	0	0	0
<i>Ammodytes dubius</i>	0.007	0.002	0.003	0	0.024	0.135	0	0.033	0.019
Blennioidei	0	0	0	0	0	0	0	0	0.076
<i>Pholis gunnellus</i>	0	0	0.002	0	0	0.004	0	0	0
Stichaeidae	0	0	0	0	0	0	0	0	0
<i>Eumesogrammus praecisus</i>	0	0	0	0	0	0	0	0	0.001
Lumpenus	0.241	0	0	0	0	0	0.002	0	0
<i>Lumpenus fabricii</i>	0	0	0	0	0	0	0	0	0
<i>Lumpenus lamprataeiformis</i>	0.005	0.011	0.002	0.001	0.087	0.244	0.984	0.145	0.135
<i>Leptoclinus maculatus</i>	0	0	0.002	0	0	0.032	0.001	0.244	0.036
<i>Anisarchus medius</i>	0.02	0	0.009	0	0	0.068	0.948	0.004	0.668
<i>Cryptacanthodes maculatus</i>	0	0	0	0	0	0	0	0	0
Zoarcidae	0.931	0.067	0.004	0.185	1.615	3.381	9.991	4.612	2.349
<i>Lycodes</i> sp.	0.873	0.639	0.038	0.42	0.689	0.896	5.78	0.622	0.339
<i>Lycodes esmarkii</i>	0.066	0.175	0.008	0.095	0.066	0.491	0.761	0.082	0.253
<i>Lycodes lavalaei</i>	0	0.003	0.008	0.058	0	0.09	0.01	0	0.01
<i>Lycodes reticulatus</i>	0.042	0.509	0.014	0.111	0.687	1.256	0.462	1.051	0.282
<i>Lycodes vahlii</i>	0.172	0.564	0.02	0.27	0.153	0.8	1.894	0.883	0.683
<i>Lycodes turneri</i>	0.055	0.025	0.01	0.378	0.08	0.021	0.203	0	0.068
<i>Lycodes terraenovae</i>	0.007	0	0	0	0.055	0	0	0.178	0
<i>Lycodes eudipleurostictus</i>	0.001	0	0	0.005	0	0	0	0	0.215
<i>Lycodes pallidus</i>	0.091	0.04	0	0.025	0.001	0.007	0	0	0.129
<i>Zoarces americanus</i>	0	0.035	0	0.001	0	0	0	0.023	0.165
<i>Melanostigma atlanticum</i>	0	0	0	0	0	0	0.001	0.067	0.076
<i>Gymnelus viridis</i>	0	0.026	0.005	0.001	0.005	0.073	0.014	0	0.062
<i>Lycenchelys</i> sp.	0	0	0	0	0.035	0.212	0.065	0	0
<i>Lycenchelys paxillus</i>	0.021	0.001	0.012	0.269	0	0.038	0.481	0	0.257
<i>Lycenchelys sarsii</i>	0	0	0	0	0.029	0	0	0	0
<i>Lycenchelys verrillii</i>	0	0	0	0	0	0	0	0	0.002
<i>Peprilus triacanthus</i>	0	0	0	0	0	0.014	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1991 to 1999. Missing years indicate that no fishing occurred in the area that year.

Management Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of Sets Observed	1213	1057	131	425	1063	2384	3204	1953	2708
Other Fish cont'd	Total Catch Weight (tonnes)								
<i>Sebastes</i> sp.	162.069	258.724	12.063	42.432	78.872	219.556	136.595	63.315	111.199
<i>Prionotus alatus</i>	0	0	0	0	0	0	0.496	1513	0.636
<i>Peristedion gracile</i>	0	0	0	0	0	0	0	0.035	0
Cottidae	4.665	1376	0.116	0.714	2.656	2.856	8.561	7.508	5.254
<i>Hemitripterus americanus</i>	0.006	0	0	0	0	0	0	0	0
<i>Arteidiellus</i>	0.01	1.729	0.018	1.13	1.304	5.04	5.604	0.592	0.37
<i>Arteidiellus atlanticus</i>	0.39	0.015	0.055	0.106	1.941	2.892	1.48	0.872	0.819
<i>Arteidiellus uncinatus</i>	0.935	1.424	0.025	0.634	0.051	3.274	2.17	2.322	2.191
<i>Triglops</i> sp.	0	0.15	0.016	2.695	2.534	18.888	19.353	4.441	9.242
<i>Triglops murrayi</i>	3.249	5.642	0.099	0.966	9.167	12.991	18.199	5.366	15.599
<i>Triglops nybelini</i>	0.847	0.342	0.09	3.258	0.641	2.444	0.006	1.119	1.962
<i>Triglops pingelii</i>	0	0	0.003	0	1.186	2.141	0.093	0	0.399
<i>Myoxocephalus</i>	0.444	0.479	0	0	0.714	1.706	0.671	1.78	0.352
<i>Myoxocephalus aeneus</i>	0.003	0	0.014	0	0.545	8.81	0	0.351	1.041
<i>Myoxocephalus scorpius</i>	0.002	0.056	0.012	0	0.119	0.003	10.349	0.228	0.071
<i>Myoxocephalus octodecemspinosus</i>	0.152	0.707	0	0.013	0.046	0	0.504	1.062	0.076
<i>Myoxocephalus quadricornis</i>	0	0.004	0	0.002	0	0.244	0.006	0	0.188
<i>Myoxocephalus scorpioides</i>	0.6	0.325	0.055	0	0.017	1.748	1.928	0.16	2.252
<i>Gymnocanthus tricuspis</i>	0	0	0.005	0	0.005	0.019	0.005	0.003	0.081
<i>Cottunculus</i> sp.	0.034	0	0.003	0	0.012	0	0	0	0
<i>Cottunculus thomsonii</i>	0	0	0	0	0	0.05	0.166	0	0
<i>Cottunculus microps</i>	0.336	1.344	0.024	0.049	0.034	3.194	0.967	0.792	0.25
<i>Icelus</i> sp.	0.044	0	0.001	0	0	0.015	0.01	0	0.001
<i>Icelus bicornis</i>	0.005	0.022	0	0.523	0.023	0.208	0	0.278	0.515
<i>Icelus spatula</i>	0.074	0.19	0	0	0.013	1.389	0	0	0.128
Agonidae	0.038	0.049	0.003	0.013	0.007	0.27	0.567	0.175	0.303
<i>Leptagonus decagonus</i>	0.428	0.271	0.027	0.217	0.232	0.982	10.164	1.919	0.762
<i>Ulcina olrikii</i>	0	0	0	0.02	0	0	0	0.038	0.117
<i>Aspidophoroides monopterygius</i>	0.425	0.321	0.005	0.142	0.259	0.283	8.066	0.926	0.835
Cyclopteridae	0.154	0	0	0	0.001	0	0	0	0
<i>Eumicrotremus</i> sp.	0.002	0	0	0	0.001	0	0.362	0	0
<i>Eumicrotremus spinosus</i>	0.769	0.451	0.052	0.027	0.472	1.42	1.819	0.924	0.688
<i>Eumicrotremus derjugini</i>	1.475	0	0.009	0.099	0.237	2.037	2.018	1.273	1.204
<i>Cyclopterus lumpus</i>	0.001	0.159	0.025	0	0.005	0.001	0	0.145	0.094
<i>Cyclopteroopsis mcalpini</i>	0	0	0	0	0.02	0.635	0	0	0
Liparidae	1.948	0.046	0.028	0.114	0.72	10.454	9.234	1.257	0.738
<i>Paraliparis</i> sp.	0.057	0.081	0	0.005	0.673	0.232	4.228	1.039	0.228
<i>Paraliparis bathybius</i>	0	0	0	0	1.639	0	0	0	0
<i>Paraliparis copei</i>	0	0	0	0	0	0	0.077	0	0.006
<i>Liparis</i> sp.	0.039	0.013	0.003	0.276	2.498	1.852	1.569	0	0.068
<i>Liparis atlanticus</i>	0	0	0	0	0.023	0	0	0	0
<i>Liparis fabricii</i>	0.425	0.275	0.043	0.288	0.366	3.022	2.077	0.43	0.535
<i>Liparis liparis</i>	0	0.002	0	0	0.002	0.005	0	0	0
<i>Liparis tunicatus</i>	0.041	0.07	0.001	0.007	0.042	0.999	0.826	0	0.11
<i>Liparis gibbus</i>	0.034	0.51	0.005	0.057	1.479	3.656	1.5	0.357	0.507
<i>Careproctus</i>	0	0	0	0.044	0.064	0	0.422	0.156	0.058
<i>Careproctus longipinnis</i>	0	0	0	0	0	0	0.002	0	0
<i>Careproctus reinhardti</i>	0.04	0.143	0	0	0.048	0	0	0	0.002
<i>Careproctus ranula</i>	0.009	0	0	0.005	0	0.684	0.578	0.122	0.394
Batrachoidiformes	0	0	0	0	0	0	0	0	0
Pleuronectiformes	0.08	0	0	0	0.008	0	0	0	0
<i>Hippoglossoides platessoides</i>	1.034	2.135	0.083	0.582	0.85	1.356	0.108	0.154	0.888
<i>Glyptocephalus cynoglossus</i>	0.04	0	0	0	0	0.004	0.091	0	0.02
<i>Limanda ferruginea</i>	0.06	0	0	0	0	0.03	0	0	0
<i>Reinhardtius hippoglossoides</i>	41908	42.631	1.767	8.562	20.141	56.121	45.325	16.111	8.531
<i>Hippoglossus hippoglossus</i>	0.115	0.152	0	0	0.011	0.716	0.02	0.005	0.002
<i>Pseudopleuronectes americanus</i>	0.008	0	0	0	0	0.008	0	0	0

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Management Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of Sets Observed	1213	1057	131	425	1063	2384	3204	1953	2708
Other Fish cont'd	Total Catch Weight (tonnes)								
Bothidae	0	0	0	0	0	0	0	0	0
<i>Paralichthys sp.</i>	0	0	0	0	0.009	0	0.001	0	0
Tetraodontidae	0	0	0	0	0	0	0	0	0
Lophiiformes	0.001	0.001	0	0	0	0	0	0	0
<i>Lophius americanus</i>	0.005	0	0	0	0	0	0	0	0
<i>Dibranchius atlanticus</i>	0	0	0	0	0	0	0	0	0
Ceratiidae	0.006	0.002	0	0.001	0	0.001	0	0.002	0
<i>Ceratias holboelli</i>	0.001	0.004	0	0	0	0.001	0	0	0
<i>Cryptosaras couesii</i>	0	0	0	0	0	0.009	0	0	0
<i>Himantolophus groenlandicus</i>	0	0.002	0	0	0	0.001	0	0	0
Unidentified Fish	0.004	2.683	0.026	0.589	0.323	1.367	1.15	0.743	0.047
Sponge	Total Catch Weight (tonnes)								
Porifera	0	1.12	0	0.008	3.229	0.04	0.113	0.681	0.407
Hard Coral	Total Catch Weight (tonnes)								
<i>Primnoa resedaeiformis</i>	0	0	0	0	0	0	0	0	0
<i>Acanthogorgia armata</i>	0	0	0	0	0	0	0	0	0
<i>Acanella arbuscula</i>	0	0	0	0	0	0	0	0	0
<i>Desmophyllum dianthus</i>	0	0	0	0	0	0	0	0	0
Soft Coral	Total Catch Weight (tonnes)								
Anthozoa	0	0	0	0	0	0	0	0	0
<i>Gersemia rubiformis</i>	0	0	0	0	0	0	0	0	0
<i>Duva florida</i>	0	0	0	0	0	0	0	0	0
Other Invertebrates	Total Catch Weight (tonnes)								
Invertebrata	0	0.756	0.03	0	0	0.418	0.194	0	0
Cnidaria	0	0	0	0.158	0	2.634	0.05	0.018	0.23
Scyphozoa	3.198	2.645	0.458	0.46	2.576	5.913	0.064	0.146	0.198
Anthozoa	0	0	0	0	0.153	0.003	0	0.064	0.036
Actinaria	0	0	0	0	0	0	0	0	0
Ctenophora	0	0	0	0	0	0	0	0	0
Invertebrata	0	0	0	0.003	0	0	0	0	0
Mollusca	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0.006	0	0
<i>Calliostoma sp.</i>	0	0	0	0	0	0	0	0	0
Buccinidae	0	0	0	0.004	0	0	0.002	0.029	0.004
<i>Buccinum sp.</i>	0	0	0	0	0.001	0	0	0	0
<i>Chlamys islandica</i>	0	0	0	0	0	0	0	0.005	0.002
<i>Placopecten magellanicus</i>	0	0	0	0	0.001	0	0	0.001	0
Cephalopoda	0	0	0.01	0.006	0	0.001	0.003	0	0
Invertebrata	0.001	0	0	0	0	0	0	0	0
Sepiidae	0	0	0	0.008	0	0	0	0	0
Rossinae	0	0	0	0	0	0	0	0	0
<i>Rossia sp.</i>	0	0	0	0	0.007	0.063	0	0.012	0.011
Teuthida	0	0.047	0.003	0.053	0.123	0.135	0.099	0.214	0.44
Loliginidae	0.002	0.028	0	0.01	0.039	0.004	0	0.008	0.012
<i>Sepioteuthis sepioidea</i>	0	0	0	0	0	0	0	0	0
<i>Pterygoteuthis giardi</i>	0	0	0	0	0	0	0	0	0.001
Octopoteuthidae	0	0	0	0	0	0	0	0	0.004
<i>Illex sp.</i>	0	0.043	0	0	0	0	0.001	0	0
<i>Illex illecebrosus</i>	0.624	0.181	0.014	0.064	0.017	0.008	0.06	0.052	0.043
<i>Gonatus fabricii</i>	0	0	0	0	0	0	0	0	0
Octopoda	0.029	0.016	0.009	0.042	0.082	0.238	0.183	0.292	0.199
<i>Cirroteuthis mulleri</i>	0	0	0	0	0	0	0	0	0
<i>Stauroteuthis syrtensis</i>	0	0	0	0	0	0.007	0	0	0
Bolitaenidae	0	0	0	0	0	0	0	0	0
Invertebrata	0	0	0	0	0	0	0.001	0	0
<i>Octopus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Octopus burryi</i>	0	0	0	0	0	0	0	0	0
Vampyroteuthidae	0	0	0	0	0	0	0	0	0

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Number of Sets Observed	1213	1057	131	425	1063	2384	3204	1953	2708
Other Invertebrates cont'd	Total Catch Weight (tonnes)								
Annelida	0	0	0	0	0	0	0	0.003	0
Pycnogonida	0	0	0	0.001	0	0.002	0	0	0.008
Crustacea	0	0	0	0	0	0	0	0	0.001
Cirripedia	0	0	0	0	0	0	0	0.025	0
Amphipoda	0	0	0	0	0	0	0	0	0.002
Lophogastrida	0	0	0	0	0	0	0	0	0
<i>Euphausia sp.</i>	0	0	0	0	0	0	0	0	0
<i>Thysanoessa sp.</i>	0	0	0	0	0	0	0	0	0
Decapoda	0.002	0.006	0	0	0.013	0	0.042	0	0.04
Dendrobranchiata	0.002	0	0.044	0.003	0.06	0	0	0.019	0.001
Dendrobranchiata	0	0	0	0	0	0	0	0	0
Sergestidae	0	0	0	0	0	0	0	0	0
<i>Sergestes arcticus</i>	0	0	0	0	0	0	0	0	0
Caridea	0	0	0	0	0	0	0	0	0
<i>Acanthephyra sp.</i>	0	0	0	0.006	0	0	0.005	0	0
<i>Acanthephyra pelagica</i>	0	0	0	0	0.064	0	0	0	0
Pasiphaeidae	0	0	0	0	0	0	0	0	0
<i>Pasiphaea sp.</i>	0	0	0	0	0	0	0	0	0.002
<i>Pasiphaea tarda</i>	0	0	0	0	0	0	0	0	0
<i>Pasiphaea multidentata</i>	0	0	0	0	0	0.014	0	0	0.001
Hippolytidae	0	0	0	0	0	0	0	0	0
<i>Eualus macilentus</i>	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii</i>	0	0	0	0	0	0	0	0	0
<i>Spiroto caris sp.</i>	0	0	0	0	0	0	0	0	0
<i>Spiroto caris lilljeborgii</i>	0	0	0	0	0	0.002	0	0	0
<i>Lebbeus groenlandicus</i>	0	0	0	0.001	0	0	0	0	0
<i>Lebbeus polaris</i>	0	0	0	0	0.001	0.014	0.016	0.001	0
<i>Caridion gordonii</i>	0	0	0.248	0.109	0	0	0	0	0
Pandalidae	0	0	0	0	0	0	0	0	0.002
<i>Dichelopandalus leptocerus</i>	0	0	0	0	0	0	0	0	0
<i>Pandalus sp.</i>	0	0	0	0	0	0	0	0	0
<i>Atlantopandalus propinquus</i>	0	0	0	0	0	0.025	0	0	0
Crangonidae	0	0	0	0	0	0	0.021	0	0.005
<i>Sclerocrangon sp.</i>	0	0	0	0	0	0	0.001	0	0.001
<i>Sclerocrangon boreas</i>	0	0	0	0	0.001	0.035	0.031	0.001	0.028
<i>Sclerocrangon ferox</i>	0	0	0	0	0	0	0	0.001	0
<i>Crangon sp.</i>	0	0.001	0	0	0	0	0	0	0
<i>Sabinea sp.</i>	0	0	0	0.006	0	0	0	0	0
<i>Sabinea septemcarinata</i>	0	0	0	0	0	0.049	0	0	0
<i>Sabinea sarsii</i>	0	0	0	0	0	0	0	0.019	0
<i>Pontophilus norvegicus</i>	0	0	0	0	0	0	0	0	0
<i>Argis dentata</i>	0	0	0	0	0.017	0.044	0	0	0
Pleocyemata	0.006	0	0	0	0	0	0	0	0
<i>Polycheles sculptus</i>	0	0	0	0	0.006	0	0	0	0
Paguridae	0	0	0	0.001	0	0	0	0.002	0
<i>Pagurus sp.</i>	0	0	0	0	0	0.001	0	0	0
Lithodidae	0	0	0	0	0	0	0	0	0
<i>Lithodes sp.</i>	0	0	0	0	0	0	0	0	0
<i>Lithodes maja</i>	0.005	0.004	0	0.004	0.002	0.016	0.007	0.004	0.004
<i>Neolithodes sp.</i>	0.015	0	0	0	0	0	0	0	0
<i>Neolithodes grimaldii</i>	0.006	0	0	0	0.019	0.003	0	0	0
Brachyura	0.001	0	0	0	0	0	0	0.005	0
<i>Cancer sp.</i>	0	0	0	0	0	0	0	0	0
Majidae	0	0	0	0	0	0.008	0	0.012	0.001
<i>Chionoecetes opilio</i>	0.009	0.002	0	0	0.002	0	0.005	0	0.001
<i>Hyas sp.</i>	0	0	0	0	0.001	0	0	0	0
<i>Hyas araneus</i>	0.001	0	0	0	0	0	0.001	0	0.001
<i>Hyas coarctatus</i>	0	0	0	0	0	0	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1991 to 1999. Missing years indicate that no fishing occurred in the area that year.

Management Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of Sets Observed	1213	1057	131	425	1063	2384	3204	1953	2708
Other Invertebrates cont'd	Total Catch Weight (tonnes)								
Holothuroidea	0	0	0	0	0	0	0	0	0.002
<i>Psolus fabricii</i>	0	0	0	0	0.257	0.474	0	0.058	0
<i>Cucumaria frondosa</i>	0	0	0.001	0	0	0	0	0	0
Echinoidea	0	0	0	0	0	0	0.004	0.01	0
<i>Strongylocentrotus sp.</i>	0	0.005	0	0	0	0	0	0	0.004
<i>Strongylocentrotus droebachiensis</i>	0	0	0	0	0	0.004	0	0.044	0.111
<i>Strongylocentrotus pallidus</i>	0	0	0	0	0	0	0	0	0
Asteroidea	0	0	0	0	0.011	0.469	0.013	0.059	0.197
Solasteridae	0	0	0	0	0	0.013	0	0	0
Asteriidae	0	0	0	0	0	0.006	0	0	0.007
<i>Pedicellaster typicus</i>	0	0	0	0	0	0	0	0	0
Ophiuroidea	0	0	0	0	0	0	0	0	0
Gorgonocephalidae	0	0	0	0	0	0.001	0	0	0
Gorgonocephalus	0	0	0	0	0	0	0	0	0
Ophiura	0	0	0	0	0	0	0	0	0
Marine Mammals	Total Catch Weight (tonnes)								
Caniformia	0.1	0.06	0	0	0	0	0	0	0
<i>Phoca sp.</i>	0.07	0	0	0	0	0	0	0	0
<i>Pagophilus groenlandicus</i>	0	0	0	0.168	0	0	0	0	0
<i>Halichoerus grypus</i>	0	0.2	0	0	0	0	0	0	0
Other	Total Catch Weight (tonnes)								
Stone	0	0.09	0	0	0.095	0	0	0.375	0
Fish Eggs	0	0	0	0	0	0	0	0	0
Plant Material	0	0	0	0	0	0	0	0	0

Table 8. Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 2000 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Number of Sets Observed	2536	2230	2125	1585	1963	1184	1473	1463	1076
Commercial Shrimp Species	Total Catch Weight (tonnes)								
<i>Pandalus borealis</i>	5690.61	5552.134	5683.31	5613.62	5856.864	4804.4	6026.537	6358.59	5221.276
<i>Pandalus montagui</i>	4045.482	3172.976	3077.67	1211.79	2301.324	1089.8	924.732	1832.29	805.417
Total Shrimp	9736.092	8725.11	8760.98	6825.4	8158.188	5894.19	6951.269	8190.88	6026.693
By-Catch Species	Total Catch Weight (tonnes)								
Total By-catch	122.973	90.862	109.958	76.749	159.996	197.248	142.793	112.439	120.687
Percent By-catch in Total Catch	1.2	1.0	1.2	1.1	1.9	3.2	2.0	1.4	2.0
SARA Species	Total Catch Weight (tonnes)								
Anarhichadidae	0	0	0	0	0	0	0	0	0
<i>Anarhichas denticulatus</i>	0.043	0.011	0.008	0.021	0.137	0.017	0.013	0.004	0
<i>Anarhichas lupus</i>	0.46	0.677	0.434	0.123	0.319	0.326	0.146	0.237	0.305
<i>Anarhichas minor</i>	0.089	0.06	0.063	0.054	0.133	0.141	0.074	0.081	0.038
Other Fish	Total Catch Weight (tonnes)								
Myxinidae	0	0.004	0	0	0	0	0	0	0
<i>Myxine glutinosa</i>	0.002	0.001	0	0	0.001	0.002	0	0	0.004
<i>Somniosus microcephalus</i>	0	0.32	0	0	0	0	0.815	0.125	0.65
<i>Squalus acanthias</i>	0	0	0	0	0	0	0	0	0
<i>Centroscyllium fabricii</i>	0	0	0	0	0.002	0	0	0	0
<i>Cetorhinus maximus</i>	0	0	0	0	0	0	0	0	0
<i>Lamna nasus</i>	0	0	0	0	0	0	0	0	0
Rajiformes	0	0	0	0	0	0	0	0	0
Rajidae	0.147	0.525	1.038	0.477	0.404	0.164	1.184	0.415	4.975
<i>Raja sp.</i>	0.255	0.423	1.681	0.039	0.205	0.118	0	0.034	0.011
<i>Amblyraja radiata</i>	5.799	5.329	3.336	2.376	1.881	1.919	3.801	4.027	0.625
<i>Malacoraja senta</i>	0.011	0	0	0.001	0	0	0	0	0
<i>Rajella bathyphila</i>	0	0	0.206	0	0	0	0	0	0
<i>Leucoraja erinacea</i>	0.001	0	0.087	0.152	0	0.023	0.051	0.234	0.002
<i>Rajella fyllae</i>	0.004	0.009	0	0	0.001	0	0.003	0.001	0
<i>Amblyraja hyperborea</i>	0	0.006	0.027	0.01	0	0.031	0.01	0.008	0
<i>Amblyraja jenseni</i>	0	0	0.038	0.002	0	0	0.001	0	0
<i>Dipturus laevis</i>	0	0	0	0	0	0	0	0	0
<i>Dipturus linteus</i>	0	0	0.006	0.001	0	0.002	0.009	0	0
<i>Malacoraja spinacidermis</i>	0.001	0	0	0	0	0	0	0	0
<i>Leucoraja ocellata</i>	0.482	0.033	0	0.45	0.155	0.037	0.012	0.052	0
<i>Bathyraja spinicauda</i>	0.312	0.073	0.005	0.12	0.015	0.005	0	0	0
<i>Raja eglanteria</i>	0	0	0.004	0	0	0	0	0	0
<i>Torpedo nobiliana</i>	0	0	0	0	0	0	0	0	0
<i>Acipenser oxyrinchus</i>	0	0	0	0	0	0	0	0	0
Clupeidae	0	0	0	0	0	0	0	0	0
<i>Clupea harengus</i>	0.018	0.022	0.007	0.006	3.762	0.698	0.513	0.052	0.018
<i>Alosa pseudo-harengus</i>	0	0.002	0	0	0	0	0	0	0
<i>Alosa aestivalis</i>	0	0	0	0	0	0	0	0	0
Alepocephalidae	0	0.005	0	0	0	0	0	0	0
<i>Bathytroctes sp.</i>	0.028	0	0	0	0	0	0	0	0
<i>Xenodermichthys copei</i>	0	0	0.002	0	0	0	0	0	0
<i>Salvelinus alpinus</i>	0	0.002	0	0	0	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0	0	0	0	0	0	0
<i>Mallotus villosus</i>	0.059	0.029	0.007	0.222	0.534	0.041	2.325	0.022	0.271
<i>Osmerus mordax</i>	0	0	0	0	0	0.002	0	0	0
Argentinidae	0	0	0	0	0	0	0.002	0	0
<i>Argentina silus</i>	0	0	0.001	0.001	0	0	0	0	0
<i>Argentina striata</i>	0	0	0	0	0	0	0	0	0
<i>Nansenia groenlandica</i>	0	0	0	0	0	0	0	0	0
<i>Bathylagus euryops</i>	0.005	0	0	0	0	0	0	0.001	0
Gonostomatidae	0	0	0	0	0	0	0	0	0.001
<i>Cyclothone sp.</i>	0	0	0	0.011	0	0	0	0	0
<i>Cyclothone microdon</i>	0	0	0	0	0	0	0	0	0
<i>Gonostoma sp.</i>	0	0	0	0	0	0	0	0.02	0
<i>Gonostoma elongatum</i>	0.001	0.001	0	0	0	0	0	0	0
Sternoptychidae	0	0	0.001	0.002	0.001	0	0.002	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 2000 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Number of Sets Observed	2536	2230	2125	1585	1963	1184	1473	1463	1076
Other Fish cont'd	Total Catch Weight (tonnes)								
Argyrolepecus aculeatus	0.014	0.007	0.001	0.008	0.003	0.001	0.005	0	0
Polyipnus asteroides	0	0	0.002	0	0	0	0.001	0	0
Sternoptyx diaphana	0	0	0	0	0	0	0	0.001	0
Chauliodontinae	0	0.001	0	0	0	0	0.009	0	0
Chauliodus sloani	0.085	0.217	0.009	0.044	0.081	0.055	0.003	0.005	0.003
Stomiinae	0	0	0	0	0	0	0	0.005	0
Stomias boa ferox	0.039	0.004	0.005	0.017	0.008	0.005	0.004	0.008	0
Astronesthinae	0	0	0	0.002	0	0	0	0	0
Astronesthes sp.	0	0	0	0	0.001	0	0.003	0	0
Anopterus pharao	0	0	0	0	0	0	0	0	0
Myctophidae	2.148	5.419	0.756	0.687	1.04	0.468	0.945	0.448	0.223
Notoscopelus sp.	0.01	0.02	0.071	0.21	0	0	0.305	0	0
Notoscopelus elongatus kroyeri	0.493	0.498	0.002	0.003	0.015	0	0	0	0
Protomyctophum arcticum	0	0	0	0	0	0	0	0	0
Myctophum sp.	0	0	0	0	0	0	0	0	0
Myctophum punctatum	0	0	0	0	0	0	0	0	0
Myctophum affine	0	0	0	0	0	0	0	0	0
Diaphus metopoclampus	0	0	0	0	0	0	0	0	0
Bentho sema glaciale	0	0	0	0	0	0	0	0	0
Symbolophorus veranyi	0	0	0	0	0	0	0	0	0
Malacosteinae	0	0.002	0	0	0	0	0	0	0
Malacosteus niger	0.006	0.001	0.001	0	0	0	0.002	0	0.001
Synodus foetens	0	0	0	0	0	0	0	0	0
Paralepididae	0.089	0.134	0.041	0.09	0.13	0.021	0.077	0.047	0.052
Paralepis sp.	0	0.051	0.087	0.068	0.057	0	0.03	0.009	0
Magnisudis atlantica	0	0.049	0	0.015	0	0	0.003	0	0
Paralepis coregonoides borealis	0	0	0.13	0.001	0	0	0	0	0
Arctozenus risso kroyeri	0.551	0.158	0.21	0.186	0.151	0.136	0.091	0.152	0.027
Alepisauridae	0	0	0	0	0	0	0	0	0
Anguilliformes	0	0.001	0	0	0	0	0	0	0
Anguillidae	0	0.007	0.013	0.081	0.066	0	0.156	0	0.018
Anguilla rostrata	0	0	0	0	0	0	0	0	0
Ophichthidae	0	0	0	0	0	0	0	0.035	0
Ophichthus cruentifer	0	0.035	0.078	0	0.032	0	0	0	0
Simenchelys parasitica	0.04	0	0	0	0	0	0	0	0
Congridae	0	0	0	0	0	0	0	0	0
Nemichthyidae	0	0.006	0.001	0	0	0.008	0.001	0	0
Nemichthys scolopaceus	0	0	0	0.005	0.001	0.077	0	0.007	0
Serrivomer beanii	0.029	0.003	0	0.001	0.002	0	0.001	0.007	0
Serrivomer lanceolatooides	0	0.005	0	0	0	0	0	0	0
Synaphobranchidae	0	0	0	0	0	0	0	0.003	0
Synaphobranchus kaupii	0.003	0.033	0.024	0.002	0.008	0.004	0.004	0.065	0
Notacanthidae	0	0	0	0	0	0	0	0	0.003
Notacanthus chemnitzii	0	0	0	0.007	0	0.013	0	0	0
Scomberesocidae	0	0	0	0	0	0	0	0	0
Scomberesox saurus	0	0	0	0	0	0	0	0	0
Gadiformes	0	0	0	0	0	0	0	0	0
Antimora rostrata	0	0	0.003	0.001	0.008	0	0	0	0
Halargyreus johnsonii	0	0	0	0	0	0	0	0	0
Gadidae	0	0	0	0	7.721	0	0	0	0
Gadus sp.	0.001	0	0	0	0	0	0	0	0
Gadus morhua	0.001	0.001	0.029	0.005	0.023	0.018	0.023	0.024	0
Gadus ogac	0	0	0	0	0.008	0	0	0	0
Micromesistius poutassou	0.001	0.001	0	0	0	0.001	0	0	0
Melanogrammus aeglefinus	0	0	0	0	0	0	0	0	0
Pollachius virens	0.002	0	0	0	0	0	0	0	0
Phycis chesteri	0.006	0	0	0	0	0	0	0	0
Urophycis chuss	0	0.017	0	0	0.118	0	0	0	0
Urophycis regia	0	0	0	0	0	0	0	0.001	0
Urophycis tenuis	0.164	0	0.004	0.003	0	0	0.009	0.003	0.022
Merluccius bilinearis	0	0	0.001	0	0.169	0	0	0.001	0.003
Merluccius sp.	0	0	0	0	0	0	0.215	0	0
Boreogadus saida	5.563	3.214	17.54	3.243	30.636	8.755	4.806	6.726	5.563
Arctogadus glacialis	0	0	0	0	0	0	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 2000 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Number of Sets Observed	2536	2230	2125	1585	1963	1184	1473	1463	1076
Other Fish cont'd	Total Catch Weight (tonnes)								
Gaidropsarus	0.006	0.094	0.093	0.077	0.046	0.055	1.149	0.042	0.002
Gaidropsarus ensis	0.405	0.955	0.569	0.619	1.044	0.536	0.664	0.169	0.175
Gaidropsarus argentatus	0.645	0.122	0.111	0.223	0.163	0.328	0.053	0.09	0.007
Molva dypterygia	0	0	0	0	0	0	0	0	0
Brosme brosme	0	0	0	0	0.001	0.056	0.002	0.002	0.003
Enchelyopus cimbrius	0.001	0	0.023	0	0	0	0	0.002	0.06
Laemonema barbatulum	0	0	0.005	0	0	0	0	0	0
Urophycis sp.	0	0	0	0	0	0	0	0	0
Gadiformes	0.001	0.008	0.019	0.093	0.352	0.005	0.125	0.304	0.026
Macrouridae	0	0	0.033	0	0.001	0	0.008	0	0
Macrourus sp.	0	0.029	0.029	0.003	0.001	0	0	0	0
Macrourus berglax	0.054	0.121	0.087	0.043	0.038	0.02	0.08	0.105	0
Nezumia sp.	0	0	0	0	0	0	0	0	0
Nezumia bairdii	0.071	0.022	0.058	0.001	0	0.002	0	0.012	0.001
Coryphaenoides rupestris	0.03	0.019	0.021	0.024	0.001	0.033	0.004	0.002	0
Trachyrincus murrayi	0	0	0	0	0	0	0.016	0	0
Malacocephalus occidentalis	0	0	0	0.002	0	0	0	0	0
Anoplogaster comuta	0	0	0	0	0	0	0	0	0
Polymixiidae	0	0	0	0	0	0	0	0	0
Polymixia lowei	0	0	0	0	0	0	0	0	0
Anoplogaster comuta	0	0	0	0	0	0	0	0	0
Diretmus argenteus	0	0	0	0.001	0	0	0	0.001	0
Trachichthyidae	0	0	0	0	0	0	0	0	0
Aphanopus carbo	0	0	0	0	0	0	0	0	0
Bentho desmus simonyi	0	0	0	0.091	0.005	0	0	0	0
Nesiarchus nasutus	0	0.001	0	0	0	0	0	0	0
Scombridae	0	0	0	0	0	0	0	0	0
Lepidocybium flavobrunneum	0	0	0	0	0	0	0	0	0
Axius thazard	0	0	0	0	0	0.187	0	0	0
Makaira nigricans	0	0	0.005	0	0	0	0	0	0
Xiphiidae	0	0	0	0	0	0	0	0	0
Lopholatilus chamaeleonticeps	0.002	0	0	0	0	0	0	0	0
Chiasmodon niger	0.001	0	0	0	0	0	0	0	0
Trachinoidei	0	0	0	0	0	0	0	0.013	0
Ammodytidae	0	0	0	0	0	0	0	0	0
Ammodytes dubius	0.014	0.153	0.04	0.007	0.002	0.033	0.005	0.005	0
Blennioidei	0	0	0	0	0	0	0	0	0
Pholis gunnellus	0	0	0.016	0	0	0	0	0	0
Stichaeidae	0	0	0	0	0	0	0	0	0.012
Eumesogrammus praecisus	0.001	0	0	0	0	0	0	0.003	0.006
Lumpenus	0.001	0.061	0	0	0.062	0	0.045	0.003	0.001
Lumpenus fabricii	0	0	0.001	0	0	0	0	0	0
Lumpenus lampretaeiformis	0.018	0.02	0.253	0.379	0.136	0.326	0.122	0.077	0.251
Leptoclinus maculatus	0.016	0	0.012	0.018	0.057	0.011	0.026	0.027	0.054
Anisarchus medius	0.044	0.096	0.073	0.008	0	0.029	0.001	0	0
Cryptacanthodes maculatus	0	0.001	0	0	0	0	0	0	0.001
Zoarcidae	4.002	6.039	3.545	1.688	2.516	2.557	3.153	1.903	1.467
Lycodes sp.	0.197	0.113	0.097	0	0.002	0	0.483	0.109	0.122
Lycodes esmarkii	0.176	0.131	0.169	0.033	0.039	0.847	0.198	0.02	0.033
Lycodes lavalaei	0.049	0	0.004	0.002	0.095	0	0.049	0	0
Lycodes reticulatus	0.222	0.04	0.403	0.066	0.01	0.18	0.092	0.126	0
Lycodes vahlii	0.728	0.321	0.415	0.526	0.197	0.161	0.196	0.115	0
Lycodes turneri	0.459	0.045	0.089	0.204	0.018	0.172	0.228	0	0
Lycodes terraenovae	0.203	0.036	0.263	0.064	0.386	0.019	0	0.01	0.07
Lycodes eudipleurostictus	0.432	2.071	0	0	1.497	0	0	0	0
Lycodes pallidus	0	0.001	0.04	0	0	0	0.03	0	0
Zoarces americanus	0.509	0.006	0.008	0.417	0	0.089	0.095	0.343	0
Melano stigma atlanticum	0.072	0	0.31	0.053	0	0	0.048	0	0.001
Gymnelus viridis	0.42	0	0.02	0.189	0.304	0.343	0.13	0.055	0.01
Lycenchelys sp.	0.168	0.107	0.035	0.181	0.154	0.009	0.066	0	0.008
Lycenchelys paxillus	0.183	0.043	0.01	0.058	0.039	0.19	0.046	0	0
Lycenchelys sarsii	0	0	0	0	0	0	0	0	0
Lycenchelys verrillii	0.13	0	0	0	0	0	0.001	0	0
Peprilus triacanthus	0	0	0	0	0	0	0	0	0

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Number of Sets Observed	2536	2230	2125	1585	1963	1184	1473	1463	1076
Other Fish cont'd	Total Catch Weight (tonnes)								
Sebastes sp.	39.615	12.708	35.645	15.706	47.283	148.802	77.075	58.772	87.467
Prionotus alatus	0	0	0	0	0	0	0	0	0
Peristedion gracile	0	0	0	0	0	0	0	0	0
Cottidae	2.207	4.346	9.302	0.863	20.487	1425	9.654	3.888	0.956
Hemirhamphus americanus	0	0	0.007	0	0.003	0.04	0	0	0
Arctiellus	0.599	2.263	1.516	0.697	0.101	0.311	2.55	0.453	0.783
Arctiellus atlanticus	2.156	0.334	0.116	0.272	0.607	0.177	0.378	0.604	0.235
Arctiellus uncinatus	2.529	0.687	1.484	0.356	0.55	0.684	0.299	0.303	0.187
Triglops sp.	10.526	6.446	3.63	1.301	8.738	3.927	2.711	3.109	2.296
Triglops murrayi	4.507	1.256	0.328	3.841	0.269	2.128	5.964	2.24	0.03
Triglops nybelini	0.601	9.818	1.204	2.311	0.683	0.097	0.052	2.089	0.13
Triglops pingelii	0.038	0	0.037	0.174	3.65	0.1	0.866	1.319	1.098
Myoxocephalus	0.647	0.438	0.188	0.075	0.674	0.127	0.02	0.124	0.308
Myoxocephalus aeneus	1.029	0.117	0.025	0.011	0.09	0.088	0.002	0	0
Myoxocephalus scorpius	0	0	0	0	0	0	0	0.002	0
Myoxocephalus octodecemspinosus	0.393	0	0.108	0.446	0	0.572	0.231	0.262	0
Myoxocephalus quadricornis	0	0	0	0	0	0	0	0.005	0
Myoxocephalus scorpioides	6.125	0.346	0.454	1.084	0.013	0	0.242	0.056	0.065
Gymnocanthus tricuspis	0	0	0	0	0	0	0	0.003	0
Cottunculus sp.	0	0	0	0	0	0	0	0	0
Cottunculus thomsonii	0.009	0	0.018	0.324	0	0.003	0.001	0.001	0
Cottunculus microps	1.353	1.407	0.194	0.024	1.848	0.119	0.244	0.393	0.077
Icelus sp.	0.005	0.114	0	0	0.251	0.011	0.249	0	0
Icelus bicornis	0.511	0	0.067	0.014	0.005	0.028	0.055	0.019	0.033
Icelus spatula	0.049	0.066	0.131	0.053	0.036	1.1	0.085	0	0
Agonidae	0.413	0.163	1.383	1.049	1.136	0.278	0.224	0.227	0.079
Leptagonus decagonus	0.791	4.083	2.036	0.886	0.602	1.189	0.76	0.174	1
Ulcina olrikii	0.068	0.405	0.489	0	0.255	0	0	0.311	0
Aspidophoroides monopterygius	0.405	0.406	0.608	0.168	0.649	0.305	0.572	0.109	0.828
Cyclopteridae	0	0	0	0	0	0.056	0	0	0.004
Eumicrotremus sp.	0	0	0	0	0	0	0	0	0
Eumicrotremus spinosus	1.036	0.281	0.421	0.262	0.271	0.003	0.167	0.202	0.024
Eumicrotremus derjugini	1.045	0.624	0.427	0.147	0.291	0.297	0.18	0.122	0.033
Cyclopterus lumpus	0	0.004	0.034	0.038	0.001	0.001	0.002	0	0.001
Cyclopteroopsis mcalpini	0.023	0	0	0	0	0	0	0	0
Liparidae	1.079	1.599	0.758	2.124	0.258	0.492	1.118	0.17	1.115
Paraliparis sp.	0.622	0.045	0.503	0.102	0.026	0.002	0.013	0.287	0.006
Paraliparis bathybius	0	0	0	0	0	0	0	0	0
Paraliparis copei	0	0	0	0	0	0	0	0	0
Liparis sp.	0.027	0.555	0.024	0	0.236	0	0.005	0.038	0.002
Liparis atlanticus	0.014	0	0.002	0	0.012	0.037	0	0	0
Liparis fabricii	1.668	0.556	0.112	0.238	0.388	0.079	0.322	0.097	0.007
Liparis liparis	0.004	0	0.003	0	0	0.001	0	0.001	0
Liparis tunicatus	0.094	0.02	0.05	0	0.021	0.083	0.001	0	0
Liparis gibbus	0.958	0.625	0.119	2.609	0.331	4.653	0.768	0.16	0.006
Careproctus	0	0.002	0	0.838	0	0	0.008	0	0
Careproctus longipinnis	0	0.011	0	0	0.005	0	0	0	0
Careproctus reinhardti	0	0	0	0	0	0	0	0	0
Careproctus ranula	0.208	0.029	0.006	0.014	0.005	0.049	0.05	0.018	0.073
Batrachoidiformes	0	0	0	0	0.003	0	0	0	0
Pleuronectiformes	0	0	0	0	0	0	0	0	0
Hippoglossoides platessoides	0.277	0.528	0.378	0.163	0.455	0.615	0.529	0.351	0.168
Glyptocephalus cynoglossus	0	0	0	0.006	0.326	0	0.046	0	0
Limanda ferruginea	0	0	0	0.001	0.001	0	0	0	0
Reinhardtius hippoglossoides	11.893	8.075	13.73	22.151	11.587	8.506	13.77	10.462	7.03
Hippoglossus hippoglossus	0	0	0	0.009	0	0	0	0	0.005
Pseudopleuronectes americanus	0.002	0	0	0	0	0	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 2000 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Number of Sets Observed	2536	2230	2125	1585	1963	1184	1473	1463	1076
Other Fish cont'd	Total Catch Weight (tonnes)								
Bothidae	0	0	0	0	0	0	0	0	0
Paralichthys sp.	0	0	0	0	0	0	0	0	0.001
Tetraodontidae	0	0	0	0	0	0	0.003	0	0
Lophiiformes	0	0	0	0	0	0	0	0	0
Lophius americanus	0	0	0.011	0	0	0	0	0	0
Dibranchius atlanticus	0	0	0	0	0	0.002	0	0	0
Ceratiidae	0	0	0	0	0	0	0	0	0
Ceratias holboelli	0	0	0	0	0	0.001	0	0	0
Cryptoparas couesii	0	0	0	0	0	0	0	0	0
Himantolophus groenlandicus	0	0	0	0	0	0	0	0	0
Unidentified Fish	0.009	1.086	0.005	1.769	0.25	0.156	0.223	1.739	0.512
Sponge	Total Catch Weight (tonnes)								
Porifera	1.698	1.877	0.277	0.878	1.266	0.205	0.158	1.219	0.15
Hard Coral	Total Catch Weight (tonnes)								
Primnoa resedaeformis	0	0	0	0	0	0.004	0	0	0
Acanthogorgia armata	0	0	0	0	0	0	0	0.001	0
Acanella arbuscula	0	0	0	0	0	0	0	0	0.001
Desmophyllum dianthus	0	0	0	0	0	0	0	0	0.001
Soft Coral	Total Catch Weight (tonnes)								
Anthozoa	0	0	0	0	0	0	0.018	0.002	0
Gersemia rubiformis	0	0	0	0	0	0	0.001	0.004	0
Duva florida	0	0	0	0	0	0	0	0.006	0.006
Other Invertebrates	Total Catch Weight (tonnes)								
Invertebrata	0.008	0.037	0.002	0.236	0	0	0.031	0.381	0.059
Cnidaria	0.11	0.06	0.069	0.184	0.075	0.096	0.012	0.203	0.002
Scyphozoa	0.13	0.152	0.131	0.062	0.175	0	0.051	0.043	0.02
Anthozoa	0.097	0.068	0.041	0.007	0.014	0.077	0.009	0.004	0.375
Actiniaria	0	0	0	0	0	0	0.014	0.017	0.002
Ctenophora	0	0	0	0	0.015	0	0	0	0
Invertebrata	0	0	0	0	0	0	0	0	0
Mollusca	0	0	0	0.001	0	0	0	0	0
Gastropoda	0	0.002	0	0	0	0	0	0	0
Calliostoma sp.	0	0	0.002	0	0	0	0	0	0
Buccinidae	0.011	0.004	0.019	0.011	0.003	0.014	0.004	0.002	0.001
Buccinum sp.	0	0	0	0	0	0	0	0	0
Chlamys islandica	0.006	0	0.002	0.001	0.001	0.002	0	0	0.002
Placopecten magellanicus	0	0.002	0	0	0	0	0	0	0
Cephalopoda	0	0	0	0	0.002	0	0	0	0
Invertebrata	0	0	0	0	0	0	0	0	0
Sepiolidae	0	0.017	0.012	0.001	0	0	0.005	0.008	0.007
Rossinae	0	0	0	0	0	0	0	0	0
Rossia sp.	0.18	0	0	0.006	0.001	0.015	0.005	0	0.003
Teuthida	0.101	0.234	0.168	0.289	0.252	0.26	0.038	0.036	0.019
Loliginidae	0.022	0.007	0.033	0.016	0.008	0	0.001	0.002	0.001
Sepioteuthis sepioidea	0	0.018	0.003	0	0.012	0	0	0	0
Pterygioteuthis giardi	0	0.006	0	0	0	0	0	0	0
Octopoteuthidae	0	0	0.023	0	0	0	0	0	0
Illex sp.	0.001	0	0	0	0	0	0	0.002	0
Illex illecebrosus	0.12	0.128	0.292	0.102	0.122	0.037	0.029	0.024	0.013
Gonatus fabricii	0	0	0	0.004	0	0	0	0	0
Octopoda	0.396	0.192	0.158	0.185	0.171	0.184	0.086	0.048	0.01
Cirroteuthis mulleri	0	0	0	0	0	0	0	0	0
Stauroteuthis syrtensis	0	0	0	0	0	0	0	0	0
Bolitaenidae	0	0	0	0.003	0.003	0	0.01	0	0
Invertebrata	0	0	0	0	0	0	0	0	0
Octopus sp.	0	0	0.003	0	0	0	0	0	0
Octopus burryi	0	0	0	0.051	0	0	0	0	0
Vampyroteuthidae	0	0	0	0.003	0	0	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 2000 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Number of Sets Observed	2536	2230	2125	1585	1963	1184	1473	1463	1076
Other Invertebrates cont'd	Total Catch Weight (tonnes)								
Annelida	0	0	0	0	0	0	0	0	0
Pycnogonida	0	0	0	0	0	0	0	0	0
Crustacea	0.019	0	0.009	0	0.101	0	0	0.001	0
Cirripedia	0	0	0	0	0	0	0	0	0
Amphipoda	0	0	0	0	0	0	0	0	0
Lophogastrida	0	0	0	0	0	0	0.005	0	0
Euphausia sp.	0.003	0	0	0	0	0	0	0	0
Thysanessa sp.	0	0	0	0	0	0	0.001	0	0
Decapoda	0.015	0.003	0	0.003	0.003	0.016	0.001	0.001	0.011
Dendrobranchiata	0.029	0.093	0.003	0.39	0.076	0.054	0.014	0.009	0
Dendrobranchiata	0	0	0	0	0	0	0	0.001	0.014
Sergestidae	0	0.001	0	0	0	0	0	0	0
Sergestes arcticus	0.006	0.018	0.009	0.054	0.005	0	0.009	0.016	0.203
Caridea	0	0	0	0	0	0	0	0.001	0
AcanthePHYra sp.	0	0	0	0	0	0	0	0	0
AcanthePHYra pelagica	0	0	0	0	0	0	0	0	0
Pasiphaeidae	0	0.001	0	0	0	0	0	0	0
Pasiphaea sp.	0	0	0	0	0	0	0	0	0
Pasiphaea tarda	0	0.008	0	0	0	0	0	0	0
Pasiphaea multidentata	0.001	0.068	0.005	0.036	0.121	0	0.006	0.018	0.001
Hippolytidae	0	0.001	0	0	0	0	0	0	0
Eualus macilentus	0	0	0.115	0	0	0.005	0	0.001	0
Eualus gaimardii	0	0	0	0	0	0	0	0	0
Spirotoncaris sp.	0	0.002	0	0	0	0	0	0	0
Spirotoncaris lilljeborgii	0	0	0	0	0	0	0	0	0
Lebbeus groenlandicus	0	0	0	0	0	0	0	0	0
Lebbeus polaris	0.009	0.001	0.001	0	0	0	0	0	0.002
Caridion gordonii	0	0	0	0	0	0	0	0	0
Pandalidae	0	0	0	0	0	0	0	0.25	0
Dichelopandalus leptocerus	0	0	0	0	0	0	0	0	0
Pandalus sp.	0	0	0	0	0	0.002	0	5.451	0
Atlantopandalus propinquus	0.008	0	0	0.01	0	0	0	0	0.001
Crangonidae	0	0	0	0	0	0	0	0	0
Sclerocrangon sp.	0.001	0	0	0	0	0	0	0.002	0
Sclerocrangon boreas	0	0.042	0.002	0	0	0.017	0	0	0
Sclerocrangon ferox	0.01	0	0	0	0.001	0	0.001	0	0
Crangon sp.	0	0	0	0	0	0	0	0.001	0
Sabinea sp.	0.001	0.002	0	0.036	0.002	0	0	0	0
Sabinea septemcarinata	0	0	0.001	0	0	0	0	0	0
Sabinea sarsii	0	0	0	0	0	0	0	0	0
Pontophilus norvegicus	0	0	0	0	0	0	0	0	0
Argis dentata	0	0.001	0	0	0.001	0	0	0.008	0
Pleocyemata	0	0	0	0	0	0	0	0	0
Polycheles sculptus	0	0	0	0	0	0	0	0	0
Paguridae	0	0	0.001	0.006	0	0	0	0	0
Pagurus sp.	0	0	0.001	0.005	0.002	0.002	0.001	0.001	0.001
Lithodidae	0	0.003	0	0	0	0	0.001	0	0
Lithodes sp.	0	0.018	0	0	0.003	0	0	0	0
Lithodes maja	0.101	0.015	0.038	0.012	0.023	0.058	0.007	0.018	0.004
Neolithodes sp.	0	0	0	0	0	0.019	0	0	0
Neolithodes grimaldii	0.004	0	0.02	0.042	0	0.002	0	0.001	0
Brachyura	0	0	0	0.001	0.002	0	0	0	0
Cancer sp.	0	0.003	0	0	0	0	0	0	0
Majidae	0.005	0.001	0	0	0.001	0	0	0	0
Chionoecetes opilio	0.001	0	0	0.001	0	0.007	0	0	0
Hyas sp.	0	0	0.001	0	0.003	0	0	0	0.001
Hyas araneus	0	0	0	0.003	0	0	0	0.001	0
Hyas coarctatus	0	0.001	0	0.001	0	0	0	0	0

Table 8. Cont'd Shrimp Fishing Area 2 - by-catch from the shrimp fishery for all years with records included in the Observer database from 2000 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Number of Sets Observed	2536	2230	2125	1585	1963	1184	1473	1463	1076
Other Invertebrates cont'd	Total Catch Weight (tonnes)								
Holothuroidea	0	0.001	0	0	0	0	0.006	0.034	0.025
Psolus fabricii	0	0.02	0	0	0	0	0	0	0
Cucumaria frondosa	0	0	0	0	0	0	0	0	0
Echinoidea	0	0.02	0	0	0.005	0.022	0.002	0	0
Strongylocentrotus sp.	0.003	0.015	0	0	0.002	0	0.001	0.001	0
Strongylocentrotus droebachiensis	0.038	0.029	0.013	0.016	0	0.047	0.002	0.003	0
Strongylocentrotus pallidus	0	0	0.006	0	0	0	0	0	0
Asteroidea	0.011	0.075	0.031	0.11	0.092	0.283	0.054	0.103	0.067
Solasteridae	0	0	0	0	0	0	0	0	0
Asteriidae	0.088	0.078	0.049	0.04	0.007	0	0.002	0.004	0
Pedicellaster typicus	0	0	0.007	0	0	0	0	0	0
Ophiuroidea	0	0	0.04	0	0	0	0	0	0
Gorgonocephalidae	0	0	0	0	0	0	0	0	0
Gorgonocephalus	0	0	0.002	0	0	0	0	0	0.001
Ophiura	0	0	0.001	0	0	0	0	0	0
Marine Mammals	Total Catch Weight (tonnes)								
Caniformia	0	0	0	0	0	0	0	0	0
Phoca sp.	0	0	0	0	0	0	0	0	0
Pagophilus groenlandicus	0	0	0	0	0	0	0	0	0
Halichoerus grypus	0	0	0	0	0	0	0	0	0
Other	Total Catch Weight (tonnes)								
Stone	0	0	0	0	0.035	0.035	0	0	0
Fish Eggs	0	0.001	0	0	0	0	0	0	0
Plant Material	0	0.023	0	0	0	0	0	0.003	0

Table 9. Shrimp Fishing Area 2 – Greenland Halibut by-catch showing the estimated number caught during a management year. Only years in which the species was measured are included. See Table 8 for other years where only weights were recorded.

Management Year	Greenland Halibut										
	1997	1998	1999	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08
Total Observed Shrimp Catch (t)	8440	7500	9372	9736	8725	8761	6825	8158	5894	6951	8191
Number of Observed Sets	3204	1953	2708	2536	2230	2125	1585	1963	1184	1473	1463
Number of Sets with Species	2,602	1,670	2,038	2,003	1,871	1,806	1,358	1,632	1,071	1,382	1,374
Percent of Sets with Species	81.2	85.5	75.3	79.0	83.9	85.0	85.7	83.1	90.5	93.8	93.9
Number of sets with 1kg recorded	248	174	657	589	546	393	182	290	199	217	194
Percent of Sets with 1kg	7.7	8.9	24.3	23.2	24.5	18.5	11.5	14.8	16.8	14.7	13.3
Total Weight of By-catch Species (kg)	45,325	16,111	8,531	11,893	8,075	13,730	22,151	11,587	8,506	13,770	10,462
Number of sets sampled	47	40	82	47	43	36	53	94	40	56	42
Percent of sets sampled	1.5	2.0	3.0	1.9	1.9	1.7	3.3	4.8	3.4	3.8	2.9
Number of fish measured	1,109	668	419	1,235	1,612	1,294	5,493	3,374	852	3,455	822
Total Weight of Measured Sample (kg)	51	23	11	55	72	95	401	255	79	221	48
Length (cm)	Estimated total number caught by length										
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	449	145	0	0	0	0	0
6	0	0	0	0	3,925	289	0	45	0	125	0
7	0	0	0	0	7,739	0	0	91	0	0	0
8	0	0	6,980	0	11,888	0	0	364	108	0	0
9	889	1,401	41,879	0	12,000	434	166	727	0	748	0
10	7,110	2,802	51,962	1,297	11,103	0	331	5,135	108	2,742	654
11	25,773	21,014	61,268	9,514	11,215	145	829	10,178	538	3,240	2,616
12	54,212	72,850	58,941	35,679	13,122	867	1,989	3,635	1,400	5,483	6,539
13	61,322	89,661	27,920	43,896	12,225	3,324	5,193	3,635	3,338	13,458	10,244
14	51,546	58,840	6,980	26,165	12,113	10,117	7,789	5,680	3,876	21,808	14,167
15	34,660	16,111	7,755	13,623	8,972	14,019	8,065	6,452	3,553	26,917	8,718
16	42,659	12,609	3,102	10,596	7,178	20,523	15,191	7,725	2,261	24,425	5,885
17	106,647	24,517	3,102	17,731	6,056	13,441	28,724	8,361	1,938	13,770	6,757
18	141,307	37,125	5,429	14,272	6,505	9,683	41,595	8,633	2,799	15,265	11,116
19	114,646	32,922	8,531	16,218	8,860	8,816	43,860	8,724	4,415	14,268	14,385
20	58,656	13,309	6,980	14,272	9,645	15,031	24,471	5,362	7,860	8,100	18,091
21	54,212	11,208	6,204	8,433	5,608	18,644	20,107	6,225	8,291	3,115	20,270
22	48,880	16,811	3,878	8,001	4,710	19,511	22,096	7,679	8,291	2,991	15,911
23	25,773	17,512	5,429	5,838	4,935	15,464	20,218	10,496	9,044	5,982	14,821
24	41,770	14,710	0	5,838	3,252	7,515	15,136	12,814	7,860	7,165	7,411
25	26,662	12,609	776	6,271	2,355	6,070	13,036	9,270	5,922	8,412	8,064
26	22,218	7,005	0	6,487	4,823	4,480	9,722	7,043	4,307	7,539	5,013
27	19,552	3,502	2,327	5,190	2,580	5,781	5,579	5,498	4,091	5,421	2,398
28	22,218	700	0	3,892	2,131	3,180	5,358	4,907	3,661	4,237	872
29	10,665	0	1,551	3,027	2,467	2,891	4,364	4,635	3,015	4,860	1,090
30	6,221	0	776	3,676	1,570	2,312	2,707	3,544	2,261	4,175	1,308
31	0	0	776	649	1,346	1,012	1,712	2,227	1,077	3,115	654
32	889	0	776	1,297	449	1,301	1,547	1,363	431	1,994	872
33	4,444	0	1,551	865	673	434	1,105	727	323	1,932	218
34	0	700	1,551	865	561	434	552	818	431	1,371	654
35	1,777	0	2,327	216	224	0	718	409	215	623	218
36	0	0	776	1,081	0	289	387	182	108	872	218
37	0	0	0	649	0	289	221	273	215	249	0
38	0	0	2,327	432	0	0	110	182	0	312	0
39	0	0	0	649	0	145	55	91	0	125	0
40	0	0	776	0	112	145	221	91	0	125	0
41	889	0	0	0	0	289	55	45	0	125	0
42	0	0	0	216	0	0	55	45	0	125	0
43	0	0	776	0	0	0	0	0	0	62	0
44	0	0	776	216	0	0	55	0	0	0	0
45	0	0	0	0	0	0	55	0	0	0	0
46	0	0	776	0	0	0	55	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0
Total Number Captured	985,597	467,918	324,958	267,051	180,791	187,020	303,429	153,311	91,737	215,276	179,164

Table 10. Shrimp Fishing Area 2 – Redfish by-catch showing the estimated number caught during a management year. Only years in which the species was measured are included. See Table 8 for other years where only weights were recorded.

Management Year	Redfish										
	1997	1998	1999	2000	2001	2002	2003/04	2004/05	2005/06	2006/07	2007/08
Total Observed Shrimp Catch (t)	8440	7500	9372	9736	8725	8761	6825	8158	5894	6951	8191
Number of Observed Sets	3204	1953	2708	2536	2230	2125	1585	1963	1184	1473	1463
Number of Sets with Species	2,907	1,745	2,212	1,797	1,703	1,797	1,266	1,689	1,128	1,391	1,256
Percent of Sets with Species	90.7	89.3	81.7	70.9	76.4	84.6	79.9	86.0	95.3	94.4	85.9
Number of sets with 1kg recorded	170	59	296	408	424	240	223	178	33	59	98
Percent of Sets with 1kg	5.3	3.0	10.9	16.1	19.0	11.3	14.1	9.1	2.8	4.0	6.7
Total Weight of By-catch Species (kg)	136,595	63,315	111,199	39,615	12,708	35,645	15,706	47,283	148,802	77,075	58,772
Number of sets sampled	47	40	82	47	43	36	53	94	40	56	42
Percent of sets sampled	1.5	2.0	3.0	1.9	1.9	1.7	3.3	4.8	3.4	3.8	2.9
Number of fish measured	10,793	10,323	20,194	7,566	4,828	6,218	3,227	7,097	9,652	6,815	2,595
Total Weight of Measured Sample (kg)	295	242	334	185	179	88	66	97	105	148	59
Length (cm)	Estimated total number caught by length										
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	21,308	0	0	405	0	0	0	1,562	0
5	21,300	1,831	102,543	0	213	1,215	12,612	0	8,503	1,562	0
6	67,603	4,971	306,297	1,713	6,319	5,671	21,417	18,036	49,601	30,726	0
7	280,136	58,606	554,996	16,274	11,359	43,341	36,171	183,770	290,518	210,394	26,896
8	689,457	279,423	1,148,612	22,484	24,493	271,793	59,016	501,102	1,594,307	391,104	227,119
9	724,185	212,969	934,538	22,698	44,017	620,952	78,054	552,285	4,320,927	394,228	139,459
10	772,804	240,440	494,736	117,774	21,511	829,556	73,295	732,643	3,714,381	240,599	228,115
11	884,395	510,444	863,623	430,626	12,211	507,941	139,926	704,370	2,030,793	287,990	515,002
12	333,847	520,387	832,328	379,233	13,347	102,074	174,432	337,805	782,273	317,153	482,130
13	77,790	421,490	463,107	210,067	19,310	49,822	105,421	144,286	402,474	588,999	168,347
14	68,529	311,604	371,551	159,102	42,597	34,025	37,837	96,516	222,494	603,581	272,941
15	109,276	107,531	278,996	104,284	52,607	17,012	15,944	57,032	141,716	336,422	232,100
16	204,198	7,849	146,157	58,245	34,929	9,316	3,570	45,333	34,012	92,178	132,486
17	183,361	3,401	84,565	43,898	21,440	10,126	2,380	48,745	17,006	24,477	98,617
18	86,587	8,111	36,955	23,341	11,501	6,886	2,618	22,423	7,086	11,978	42,834
19	93,533	5,756	13,650	19,058	6,815	3,240	714	3,900	12,754	7,812	8,965
20	151,412	2,355	16,314	5,353	4,686	2,430	952	4,387	19,840	10,421	1,992
21	163,451	1,831	15,315	2,998	3,266	2,025	2,142	2,437	14,172	4,687	6,973
22	69,918	523	13,317	1,285	1,491	405	714	975	7,086	10,421	996
23	14,817	1,308	3,995	857	923	405	238	1,950	5,669	521	0
24	926	0	9,988	428	639	0	476	487	2,834	0	0
25	0	0	2,996	214	923	0	0	975	0	521	0
26	0	0	3,329	0	1,065	0	0	0	0	521	0
27	0	0	2,331	214	1,065	0	0	0	0	0	0
28	0	0	1,332	0	994	0	0	0	0	0	0
29	0	0	333	0	923	0	0	0	0	0	0
30	0	0	0	0	497	0	0	0	0	0	0
31	0	0	0	0	1,562	0	0	0	0	0	0
32	0	0	0	0	781	0	0	0	0	0	0
33	0	0	0	0	639	0	0	0	0	0	0
34	0	0	0	0	355	0	0	0	0	0	0
35	0	0	0	0	142	0	0	0	0	0	0
36	0	0	0	0	71	0	0	0	0	0	0
37	0	0	0	0	71	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0
Total Number Captured	4,997,525	2,700,830	6,723,212	1,620,146	342,762	2,518,640	767,929	3,459,457	13,678,446	3,549,099	2,584,972

Table 11. Shrimp Fishing Area 2 – Atlantic Cod and American Plaice by-catch showing the estimated number of each species caught during a management year. Only years in which the species were measured are included. See Table 8 for other years where only weights were recorded.

Management Year	Atlantic Cod						American Plaice				
	1998 7500	2000 9736	2001 8725	2004/05 8158	2006/07 6951	2007/08 8191	2000 9736	2001 8725	2004/05 8158	2006/07 6951	2007/08 8191
Total Observed Shrimp Catch (t)											
Number of Observed Sets	1953	2536	2230	1963	1473	1463	2536	2230	1963	1473	1463
Number of Sets with Species	2	1	1	9	20	11	179	261	272	323	206
Percent of Sets with Species	0.1	0.0	0.0	0.5	14	0.8	7.1	11.7	13.9	21.9	14.1
Number of sets with 1kg recorded	2	1	1	6	17	8	147	184	202	246	153
Percent of Sets with 1kg	0.1	0.0	0.0	0.3	12	0.5	5.8	8.3	10.3	16.7	10.5
Total Weight of By-catch Species (kg)	2	1	1	23	23	24	277	528	455	529	351
Number of sets sampled	40	47	43	94	56	42	47	43	94	56	42
Percent of sets sampled	2.0	1.9	1.9	4.8	3.8	2.9	1.9	1.9	4.8	3.8	2.9
Number of fish measured	2	1	1	4	13	1	13	3	75	138	47
Total Weight of Measured Sample (kg)	2	1	1	4	9	1	1	2	4	7	3
Length (cm)	Estimated total number caught by length										
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	76	0
6	0	0	0	0	0	0	0	0	0	76	0
7	0	0	0	0	0	0	0	0	0	907	0
8	0	0	0	0	0	0	0	0	0	605	0
9	0	0	0	0	3	0	0	0	0	529	0
10	0	0	0	0	3	0	0	0	0	605	117
11	0	0	0	0	0	0	0	0	114	1,511	0
12	0	0	0	0	0	0	277	0	228	1,511	0
13	0	0	0	0	3	0	0	0	683	453	117
14	0	0	0	0	0	0	0	0	341	756	117
15	0	0	0	0	3	0	277	0	796	378	117
16	0	0	0	0	3	0	0	0	341	453	351
17	0	0	0	0	0	0	277	528	569	907	0
18	0	0	0	0	3	0	1,385	0	683	227	468
19	0	0	0	0	3	0	554	0	455	453	585
20	0	0	0	0	0	0	0	0	683	302	1,287
21	0	0	0	0	3	0	277	264	1,251	76	1,053
22	0	0	0	0	0	0	0	0	455	0	468
23	0	0	0	0	0	0	554	0	455	151	351
24	0	0	0	0	0	24	0	0	228	151	351
25	0	0	0	0	0	0	0	0	341	0	0
26	0	0	0	0	3	0	0	0	228	0	117
27	0	0	0	6	0	0	0	0	228	0	0
28	1	0	0	6	0	0	0	0	114	0	0
29	0	0	0	6	3	0	0	0	0	76	0
30	0	0	0	0	0	0	0	0	228	0	0
31	0	0	0	0	3	0	0	0	114	0	0
32	0	0	1	6	0	0	0	0	0	76	0
33	0	0	0	0	3	0	0	0	0	76	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	76	0
37	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	3	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
41	0	1	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0
48	1	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0
Total Number Captured	2	1	1	24	39	24	3,601	792	8,535	10,431	5,499

Table 12.. Shrimp Fishing Area 2 - Northern, Striped and Spotted wolffishes by-catch showing the estimated number of each species caught during a management year. Only years in which the species were measured are included. See Table 8 for other years where only weights were recorded.

Management Year	Northern Wolffish			Striped Wolffish						Spotted Wolffish					
	04/05	06/07	07/08	2002	03/04	04/05	05/06	06/07	07/08	2002	03/04	04/05	05/06	06/07	07/08
Total Observed Shrimp Catch (t)	8158	6951	8191	8761	6825	8158	5894	6951	8191	8761	6825	8158	5894	6951	8191
Number of Observed Sets	1963	1473	1463	2125	1585	1963	1184	1473	1463	2125	1585	1963	1184	1473	1463
Number of Sets with Species	137	13	4	251	88	232	118	90	176	62	41	97	37	54	76
Percent of Sets with Species	7.0	0.9	0.3	11.8	5.6	11.8	10.0	6.1	12.0	2.9	2.6	4.9	3.1	3.7	5.2
Number of sets with 1kg recorded	19	3	2	169	67	178	72	69	142	61	32	85	24	44	73
Percent of Sets with 1kg	1.0	0.2	0.1	8.0	4.2	9.1	6.1	4.7	9.7	2.9	2.0	4.3	2.0	3.0	5.0
Total Weight of By-catch Species (kg)	50	6	3	434	123	319	326	146	237	63	54	133	141	74	81
Number of sets sampled	94	56	42	36	53	94	40	56	42	36	53	94	40	56	42
Percent of sets sampled	4.8	3.8	2.9	1.7	3.3	4.8	3.4	3.8	2.9	1.7	3.3	4.8	3.4	3.8	2.9
Number of fish measured	195	77	1	18	37	332	2	58	254	3	7	74	1	51	96
Total Weight of Measured Sample (kg)	20	4	1	4	14	58	2	7	28	1	6	26	1	11	21
Length (cm)	Estimated total number caught by length														
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0
6	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0
7	10	3	0	0	0	28	0	0	0	0	0	0	0	0	0
8	8	5	0	0	0	0	0	0	8	0	0	0	0	0	4
9	10	17	0	0	18	0	0	21	25	0	0	0	0	13	0
10	10	18	0	0	9	17	0	42	34	0	0	0	0	0	4
11	20	18	0	0	9	17	0	21	8	0	0	5	0	0	15
12	55	9	0	0	0	22	0	104	51	0	9	0	0	13	31
13	63	12	0	109	0	55	0	188	127	0	9	0	141	7	27
14	100	15	0	0	0	39	163	42	102	0	0	5	0	20	12
15	100	3	0	217	0	72	0	63	119	0	72	0	26	0	35
16	58	8	0	109	18	99	0	104	203	0	0	26	0	13	62
17	43	6	0	0	26	116	0	63	152	63	9	61	0	34	50
18	10	0	0	326	0	154	163	63	229	63	9	41	0	67	12
19	0	2	0	217	9	149	0	42	135	0	149	0	20	0	34
20	0	0	0	109	26	160	0	42	152	0	18	51	0	61	12
21	3	0	0	326	26	94	0	63	161	0	0	26	0	34	15
22	0	0	0	109	18	94	0	21	161	63	9	15	0	20	19
23	0	0	0	109	26	127	0	0	119	0	0	15	0	0	23
24	0	0	3	0	26	66	0	63	152	0	0	31	0	0	8
25	0	0	0	0	18	77	0	42	34	0	0	10	0	7	8
26	0	0	0	109	0	88	0	42	42	0	0	5	0	7	0
27	0	0	0	0	26	94	0	125	25	0	0	0	0	0	0
28	0	0	0	0	0	33	0	42	25	0	0	10	0	7	0
29	0	0	0	0	18	39	0	0	17	0	0	10	0	0	4
30	0	0	0	109	18	11	0	0	8	0	0	5	0	0	4
31	0	0	0	109	18	39	0	0	0	0	0	5	0	0	0
32	0	0	0	0	9	44	0	0	8	0	0	0	0	0	0
33	0	0	0	0	0	17	0	0	8	0	0	10	0	0	0
34	0	0	0	0	0	17	0	21	0	0	0	0	0	0	4
35	0	0	0	0	0	28	0	0	8	0	0	0	0	0	0
36	0	0	0	0	9	6	0	0	8	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
39	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	6	0	0	8	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
44	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Number Captured	490	118	3	1958	327	1837	326	1214	2,146	189	63	377	141	344	372

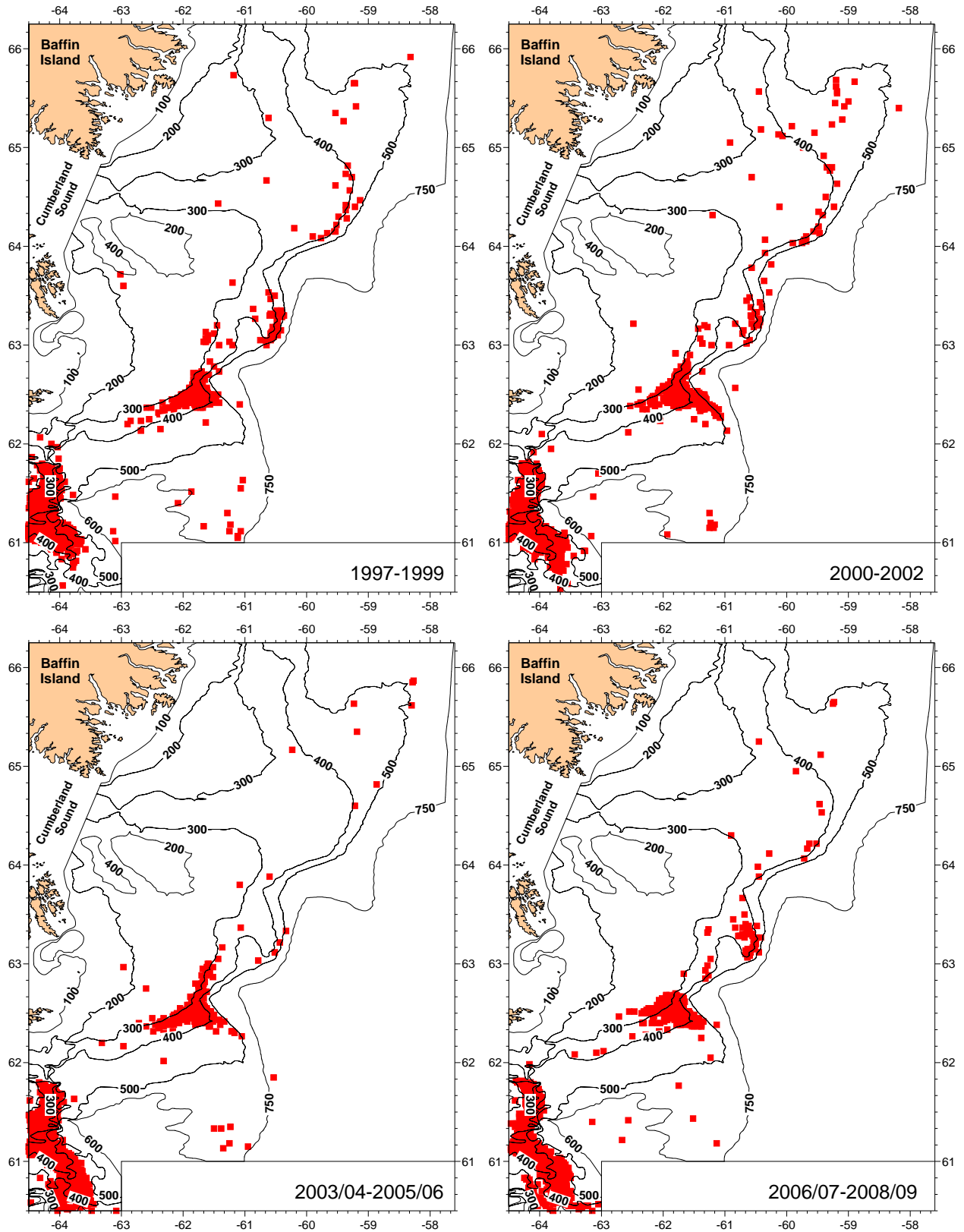


Figure 10. Shrimp Fishing Area 2 – All fishing set locations recorded by the observer program from 1997 through 2008 management years.

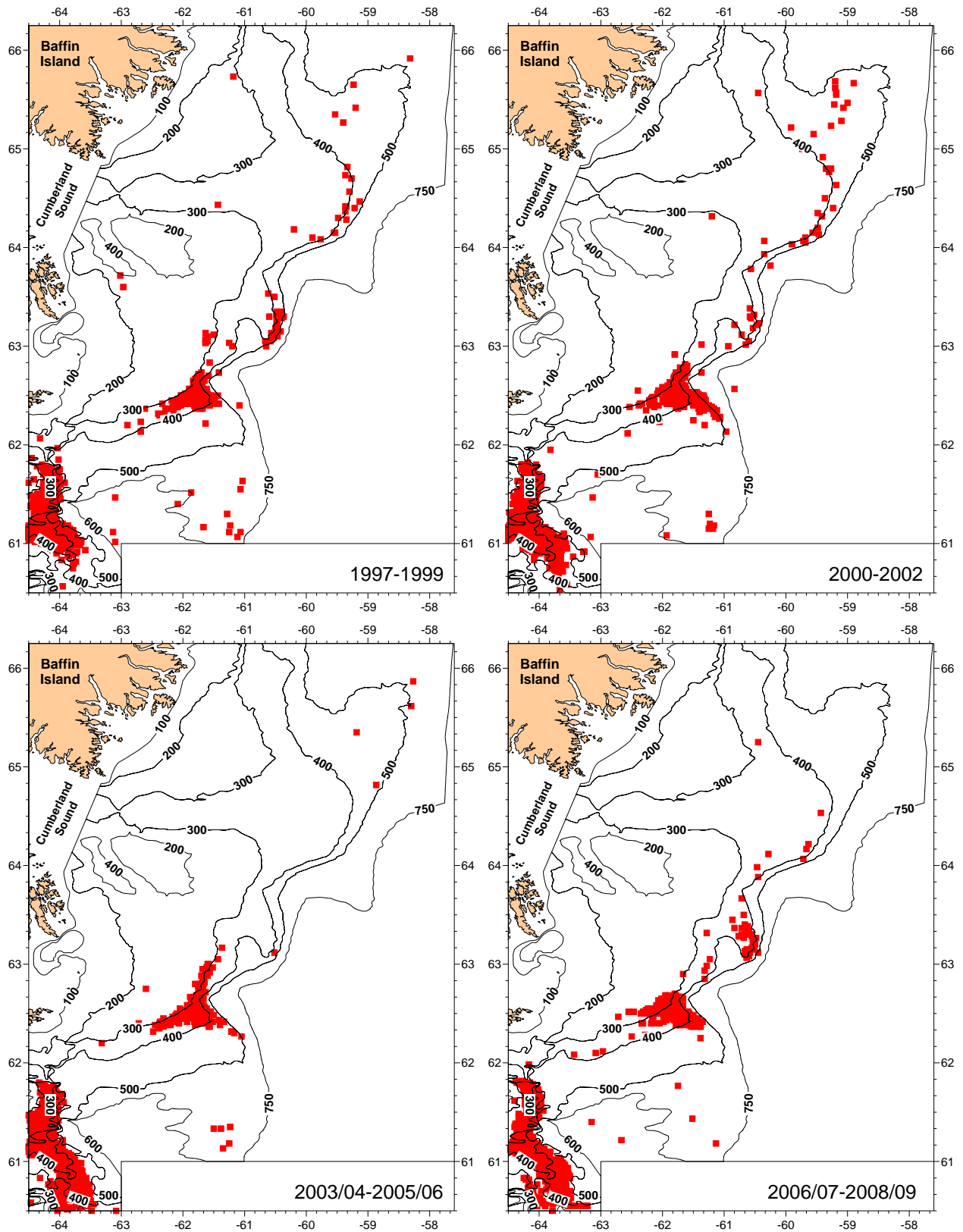


Figure 11. Shrimp Fishing Area 2 – Greenland Halibut (*Reinhardtius hippoglossoides*) locations recorded by the observer program from 1997 through 2008/09 management years.

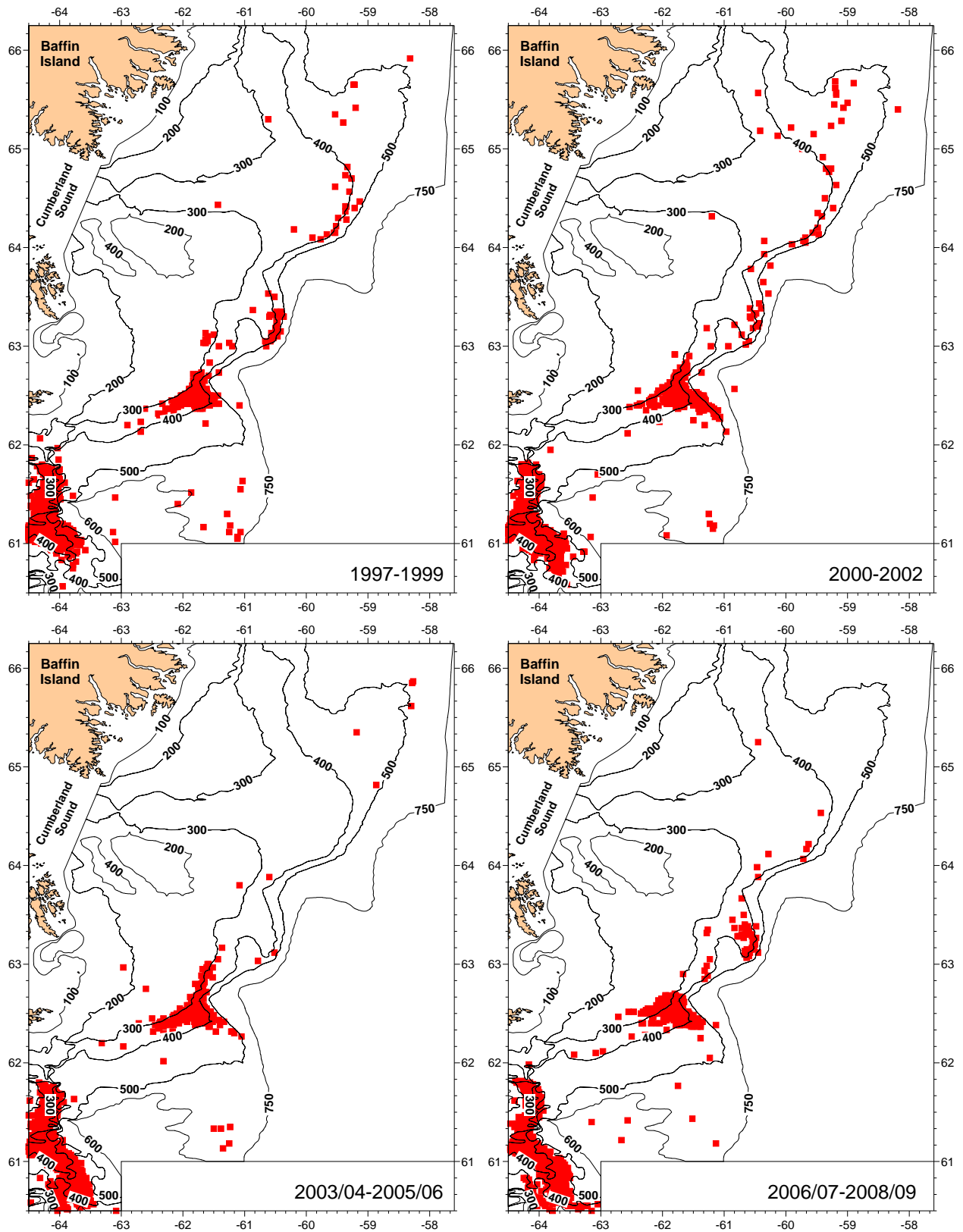


Figure 12. Shrimp Fishing Area 2 – Redfish (*Sebastes* sp.) locations recorded by the observer program from 1997 through 2008/09 management years.

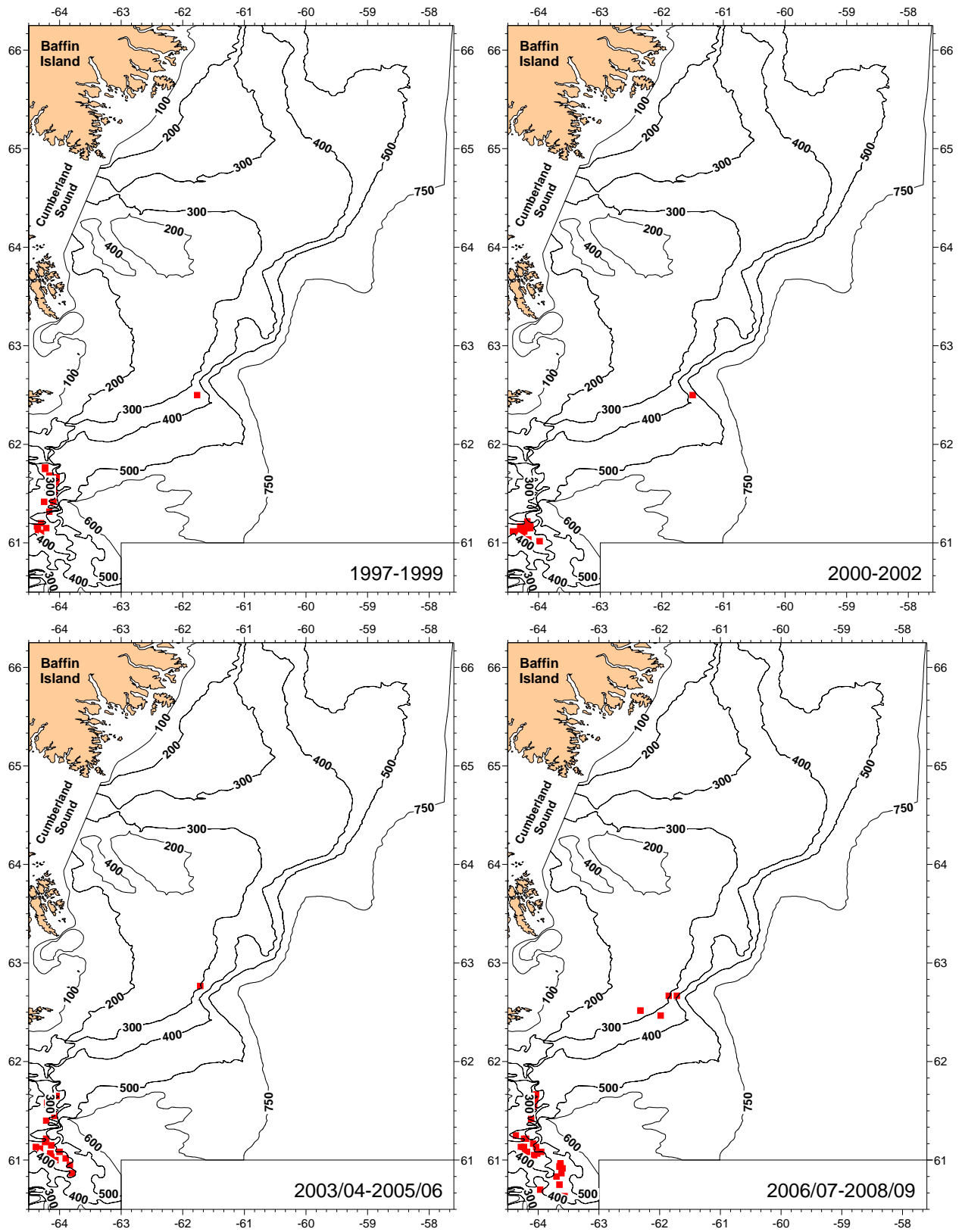


Figure 13. Shrimp Fishing Area 2 – Atlantic Cod (*Gadus morhua*) locations recorded by the observer program from 1997 through 2008/09 management years.

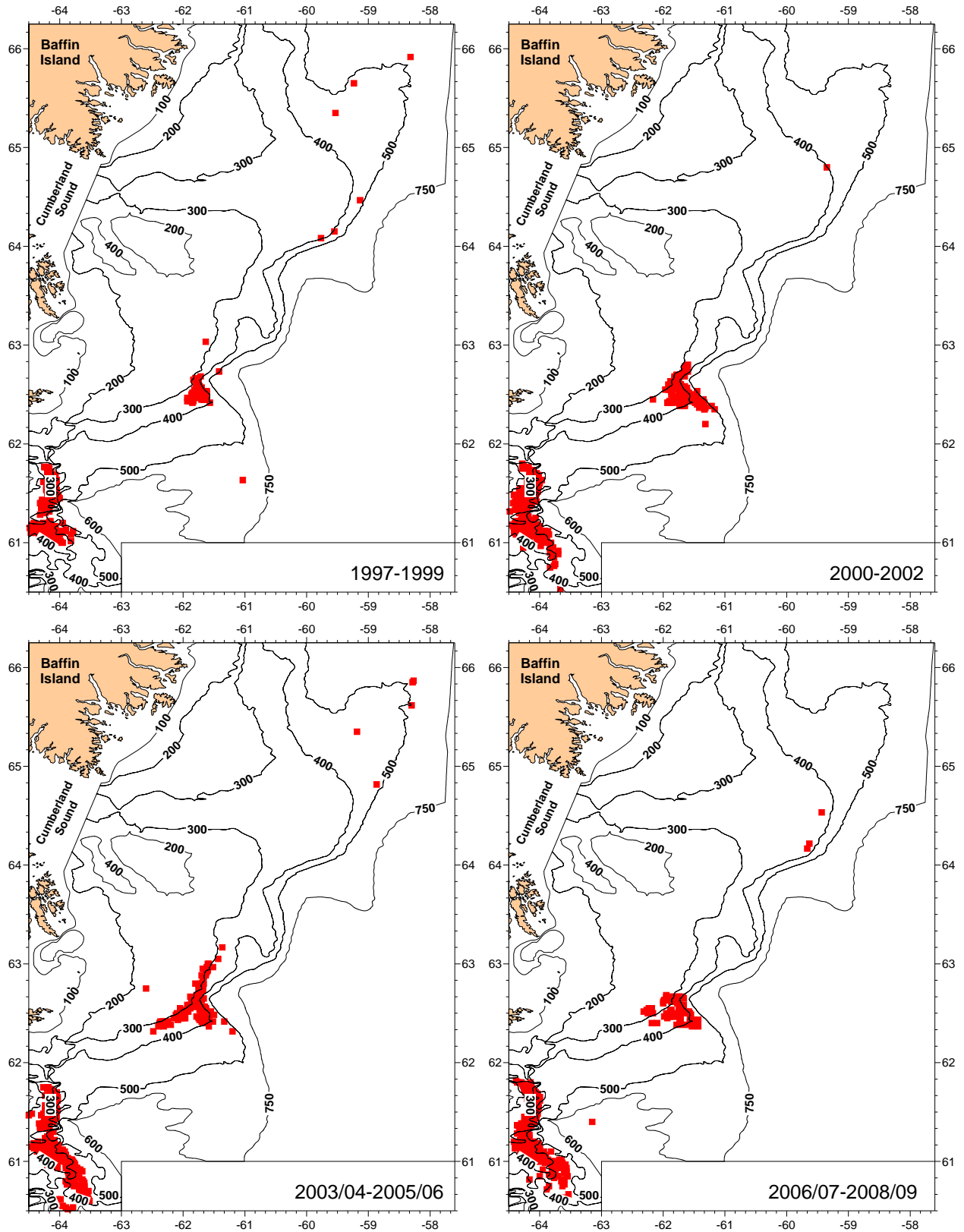


Figure 14. Shrimp Fishing Area 2 – American Plaice (*Hippoglossoides platessoides*) locations recorded by the observer program from 1997 through 2008/09 management years.

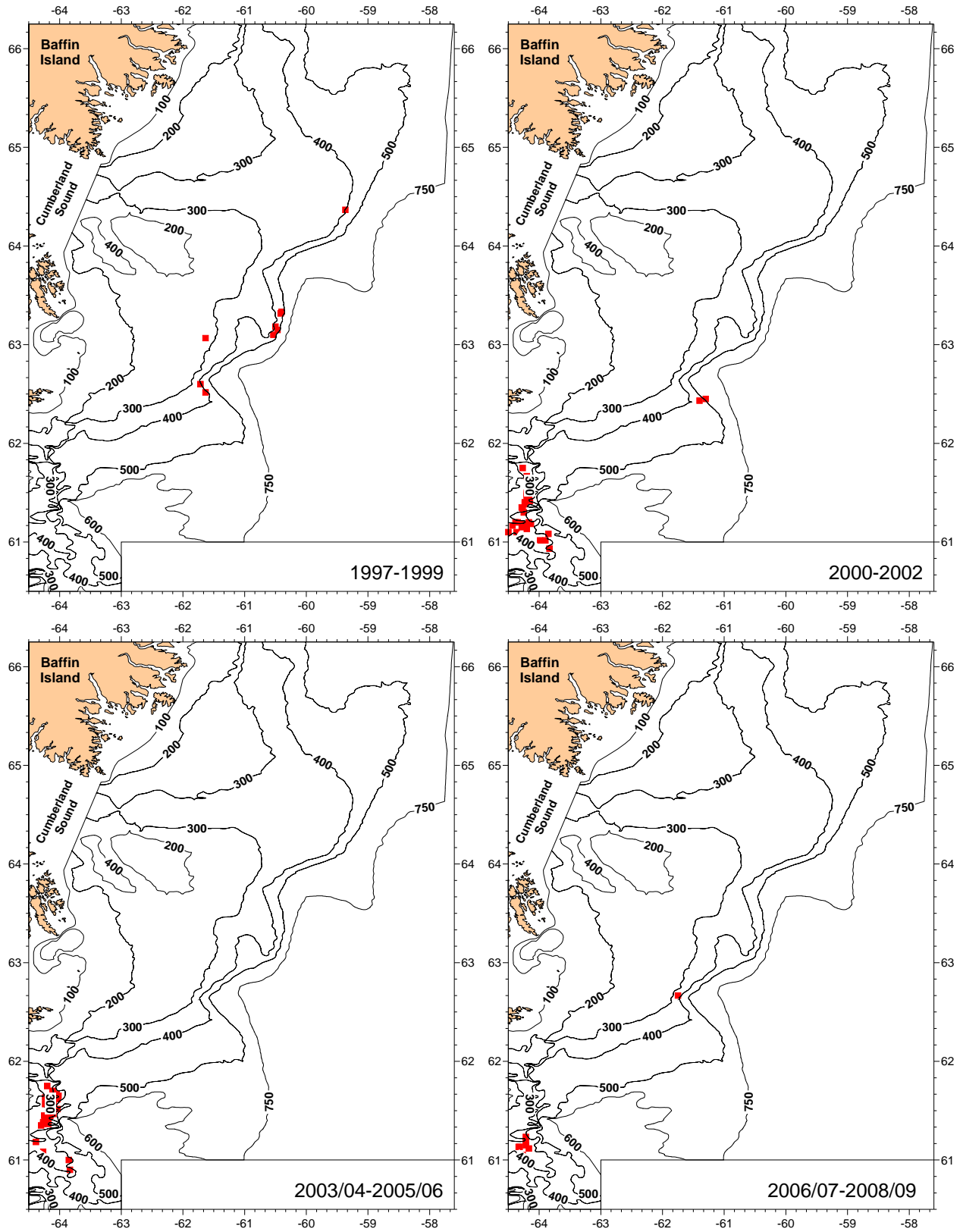


Figure 15. Shrimp Fishing Area 2 – Northern Wolffish (*Anarhichas denticulatus*) locations recorded by the observer program from 1997 through 2008/09 management years.

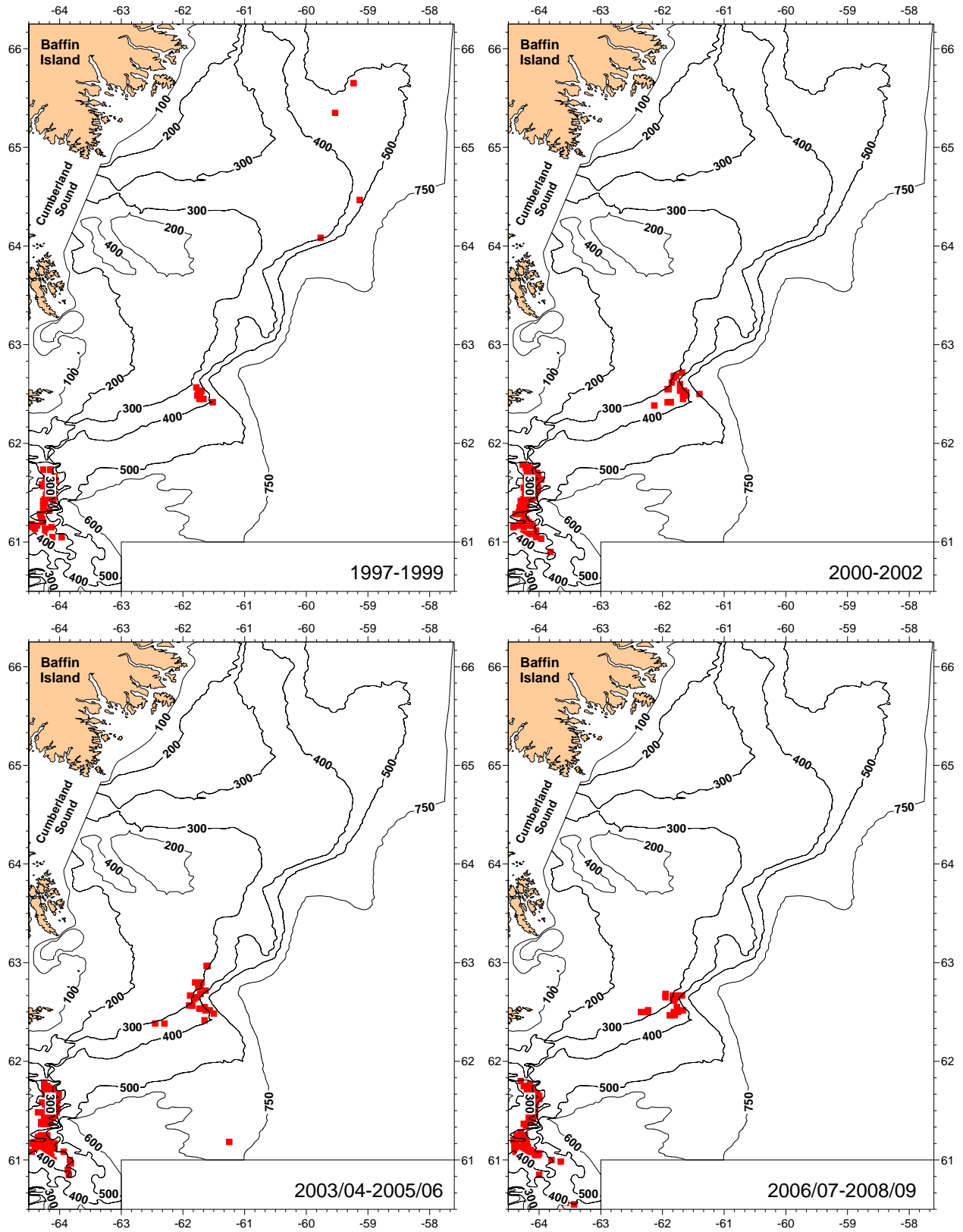


Figure 16. Shrimp Fishing Area 2 – Spotted Wolffish (*Anarhichas minor*) locations recorded by the observer program from 1997 through 2008/09 management years.

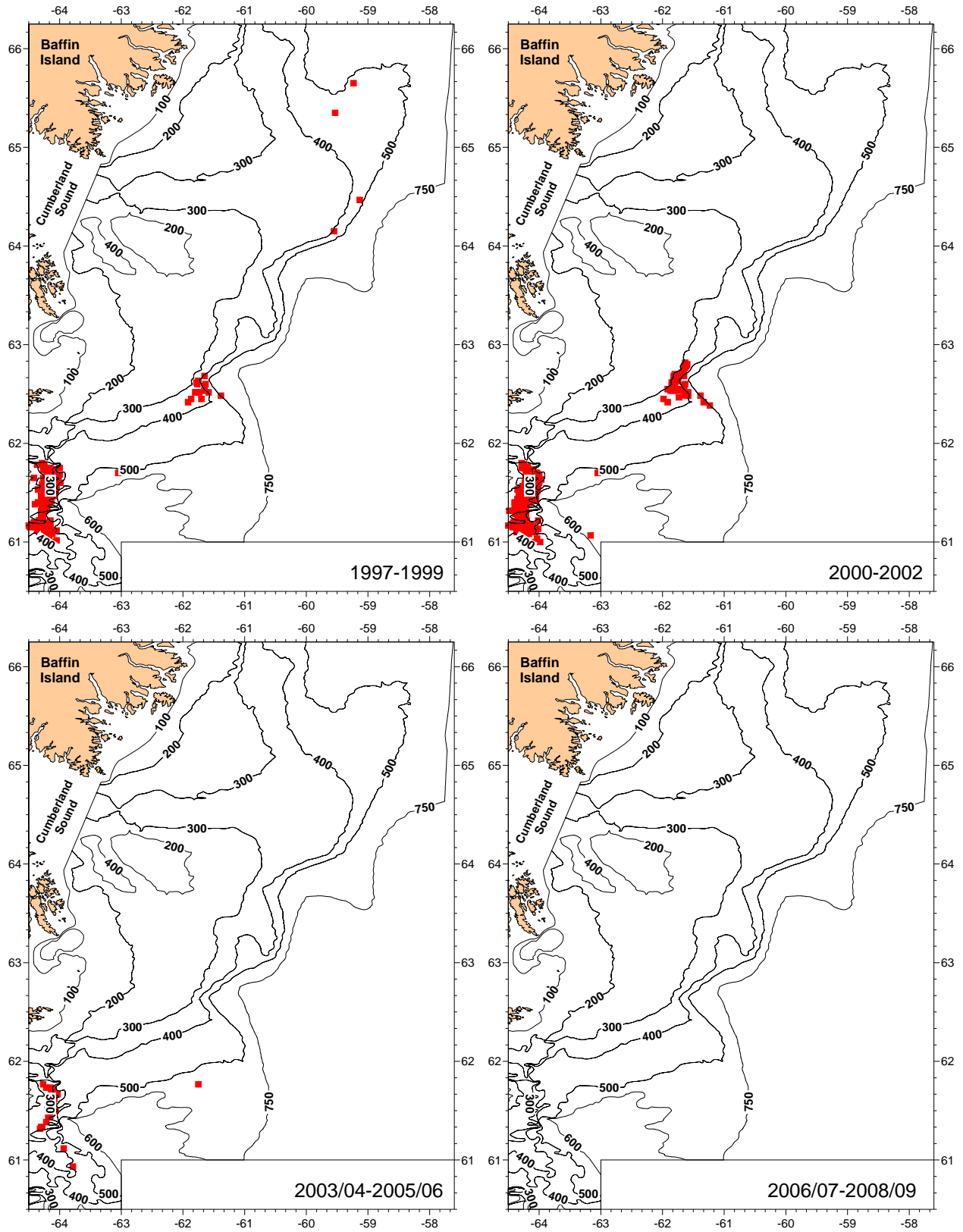


Figure 17. Shrimp Fishing Area 2 – Striped Wolffish (*Anarhichas lupus*) locations recorded by the observer program from 1997 through 2008/09 management years.

Table 13. Shrimp Fishing Area 3 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1994. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1986	1987	1988	1989	1990	1991	1992	1994
Number of Sets Observed	99	98	25	71	4	191	499	81	295	14	104
Commercial Shrimp Species Total Catch Weight (tonnes)											
<i>Pandalus borealis</i>	0	108.85	0.939	0.002	0	0	4.495	0	4.974	0.061	4.831
<i>Pandalus montagui</i>	87.321	105.797	11863	485.688	0.12	613.909	1275.883	179.007	622.737	0.695	153.452
Total Shrimp	87.321	214.647	12.802	485.69	0.12	613.909	1280.378	179.007	627.711	0.756	158.283
By-Catch Species Total Catch Weight (tonnes)											
Total By-catch	10.130	4.392	3.072	2.274	0.130	14.405	49.877	3.720	34.526	0.859	7.809
Percent By-catch in Total Catch	10.4	2.0	19.4	0.5	52.0	2.3	3.7	2.0	5.2	53.2	4.7
SARA Species Total Catch Weight (tonnes)											
Anarhichadidae	0	0.01	0	0	0	0	0	0	0	0	0
<i>Anarhichas denticulatus</i>	0.206	0.073	0.38	0	0	0.026	0.077	0.001	0.01	0	0.002
<i>Anarhichas lupus</i>	0	0.015	0.002	0.008	0	0	0.006	0.002	0	0.005	0.003
<i>Anarhichas minor</i>	0.013	0.065	0.144	0.01	0	0.015	0.253	0	0.107	0	0.027
Other Fish Total Catch Weight (tonnes)											
<i>Somniosus microcephalus</i>	0.25	0.25	0	0	0	0.8	5.55	0	4.05	0.25	1025
Rajidae	0	0.252	0	0	0.006	0.745	2.565	0.176	0.583	0	0.271
<i>Raja sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Amblyraja radiata</i>	2.1	0.005	0.113	0.373	0	1.252	2.418	0.185	4.035	0	0.549
<i>Leucoraja erinacea</i>	0	0	0	0	0	0.078	0.037	0	0	0	0
<i>Rajella fyllae</i>	0	0	0	0	0	0	0.002	0	0.005	0	0.006
<i>Amblyraja hyperborea</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Amblyraja jensenii</i>	0.005	0	0	0	0	0	0	0	0	0	0
<i>Malacoraja spinacidermis</i>	0	0	0	0	0	0	0	0	0.001	0	0
<i>Leucoraja ocellata</i>	0	0	0	0	0	0	0	0	0	0	0.026
<i>Bathyraja spinicauda</i>	0	0	0	0.003	0	0	0	0	0.002	0	0
<i>Hydrolagus affinis</i>	0	0.021	0	0	0	0	0	0	0	0	0
<i>Clupea harengus</i>	0	0	0	0	0	0	0	0.001	0.007	0	0
<i>Bathyractus sp.</i>	0	0	0	0	0	0	0	0	0.001	0	0
<i>Xenodermichthys copei</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0	0	0	0	0	0	0	0	0.004
<i>Mallotus villosus</i>	0	0	0	0	0	0	0.002	0.001	0	0	0
<i>Chauliodus sloani</i>	0	0	0	0.001	0	0.002	0.016	0.002	0.002	0	0.004
<i>Stomias boa ferox</i>	0	0	0	0	0	0	0.002	0	0.002	0	0
Myctophidae	0	0	0	0	0	0.016	0.037	0	0.004	0	0
<i>Notoscopelus sp.</i>	0	0	0	0	0	0	0.003	0	0	0	0
<i>Notoscopelus elongatus kroyeri</i>	0	0	0	0	0	0	0	0	0.016	0	0
Paralepididae	0	0	0	0	0	0	0	0	0	0	0
<i>Paralepis sp.</i>	0	0	0	0	0	0.001	0	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0	0	0	0	0	0	0.001	0	0.037	0	0
Anguillidae	0	0	0	0	0	0	0	0	0	0	0
<i>Ophichthus cruentifer</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Serrivomer beanii</i>	0	0	0	0	0	0	0	0	0.001	0	0
<i>Synaphobranchus kaupii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Antimora rostrata</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Gadus sp.</i>	0	0	0	0	0	0	6.57	0	0	0	0
<i>Gadus morhua</i>	0.001	0	0	0.001	0	0.139	0.136	0	0.207	0.002	0.001
<i>Urophycis chuss</i>	0	0	0	0	0	0.005	0	0	0	0	0
<i>Urophycis tenuis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Boreogadus saida</i>	1417	0.31	0.185	0.451	0.02	2.399	5.636	1431	3.809	0.325	0.457
<i>Arctogadus glacialis</i>	0	0	0	0	0	0.11	0	0	0	0	0
<i>Gaidropsarus sp.</i>	0	0	0	0	0	0	0.108	0	0.007	0	0
<i>Gaidropsarus ensis</i>	0	0	0.002	0.004	0	0.037	0.134	0	0	0	0
<i>Gaidropsarus argentatus</i>	0	0	0	0	0	0	0.14	0	0	0	0.004
<i>Molva molva</i>	0	0	0	0	0	0	0	0	0.002	0	0
<i>Brosme brosme</i>	0	0	0	0	0	0	0	0	0.006	0	0
<i>Enchelyopus cimbricus</i>	0	0	0	0	0	0.015	0	0	0	0	0
Gadiformes	0	0	0	0	0	0	0	0	0	0	0
<i>Macrourus berglax</i>	0.151	0	0.102	0.056	0	0	0.021	0	0	0	0
<i>Coryphaenoides rupestris</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0.001	0	0	0	0	0
Trachinoidei	0	0	0	0	0	0	0	0	0.001	0	0
<i>Ammodytes dubius</i>	0	0	0	0	0	0	0	0	0	0	0.001
Blennioidei	0	0	0	0	0	0	0	0	0.124	0	0
<i>Eumesogrammus praecisus</i>	0	0	0	0	0	0.002	0	0	0	0	0

Table 13. Cont'd Shrimp Fishing Area 3 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1979 to 1994. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1986	1987	1988	1989	1990	1991	1992	1994
Number of Sets Observed	99	98	25	71	4	191	499	81	295	14	104
Other Fish cont'd	Total Catch Weight (tonnes)										
<i>Lumpenus fabricii</i>	0	0	0	0	0	0.001	0	0	0	0	0
<i>Lumpenus lampraeiformis</i>	0	0	0	0	0	0	0	0	0.012	0	0
<i>Leptoclinus maculatus</i>	0	0	0	0	0	0.002	0.032	0	0	0	0.007
<i>Anisarchus medius</i>	0	0	0	0	0	0	0.073	0	0.001	0	0
Zoarcidae	0.444	0.004	0.036	0	0	0.19	1.838	0.087	0.239	0	0.191
<i>Lycodes sp.</i>	0	0	0	0	0	0	0.058	0	0.064	0	0.045
<i>Lycodes esmarkii</i>	0	0	0	0	0	0.007	0.121	0	0.005	0	0.001
<i>Lycodes lavalaei</i>	0	0	0	0.009	0	0	0.039	0	0	0	0
<i>Lycodes reticulatus</i>	0	0	0	0.002	0	0.043	0.17	0.006	0.499	0.006	0.078
<i>Lycodes vahlii</i>	0	0	0.01	0.001	0	0	0.209	0.001	0.006	0	0.018
<i>Lycodes turneri</i>	0	0	0	0	0	0.025	0.003	0.009	0.023	0	0.098
<i>Lycodes terraenovae</i>	0	0	0	0	0	0	0	0	0.031	0	0
<i>Lycodes eudipleurostictus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lycodes pallidus</i>	0	0	0	0.002	0	0.004	0.002	0	0.167	0	0
<i>Zoarces americanus</i>	0	0	0	0	0	0	0	0	0.002	0	0.391
<i>Gymnelus viridis</i>	0	0	0	0	0	0	0	0	0	0	0
Lycenchelys	0	0	0	0	0	0	0	0	0	0	0
<i>Lycenchelys paxillus</i>	0	0	0	0.014	0	0	0.015	0	0	0	0
<i>Sebastes sp.</i>	0	0.001	0.047	0.145	0.05	2.225	2.09	0.098	2.866	0.152	0.125
<i>Prionotus alatus</i>	0	0	0	0	0	0	0	0	0	0	0
Cottidae	0.67	0	0.084	0	0	0.174	0.779	0.059	0.39	0	0.018
<i>Hemirhamphus americanus</i>	0	0	0.004	0	0	0	0	0	0	0	0
<i>Arctiellus sp.</i>	0	0	0	0	0	0	0	0	0	0	0.011
<i>Arctiellus atlanticus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Arctiellus uncinatus</i>	0	0	0	0	0	0.006	0.059	0	0	0	0.022
<i>Triglops sp.</i>	0	0	0	0	0	0.141	0	0.002	0	0	0.01
<i>Triglops murrayi</i>	0	0	0.001	0.194	0	0.202	0.563	0.379	0.444	0	0
<i>Triglops nybelini</i>	0	0.558	0	0	0	0.078	0.112	0.066	0.015	0	0.285
<i>Triglops pingelii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus aeneus</i>	0	0	0	0.002	0	0	0.147	0	0	0	0
<i>Myoxocephalus scorpius</i>	0	0	0	0.006	0	0	0.008	0	0.001	0	0
<i>Myoxocephalus octodecemspinosus</i>	0	0	0	0	0	0.03	0	0	0	0	0.022
<i>Myoxocephalus quadricornis</i>	0	0	0	0	0	0.001	0	0	0	0	0
<i>Myoxocephalus scorpioides</i>	0	0	0	0	0	0	0.037	0	0.107	0	0
<i>Cottunculus thomsonii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Cottunculus microps</i>	0	0	0	0	0	0	0.002	0	0.01	0	0.001
<i>Icelus bicornis</i>	0	0	0	0	0	0	0.016	0	0.008	0	0.002
<i>Icelus spatula</i>	0	0	0	0	0	0	0	0.002	0.046	0	0
Agonidae	0	0	0	0	0	0.013	0.421	0	0.068	0	0.082
<i>Leptagonus decagonus</i>	0.111	0	0.002	0.006	0.007	0.18	0.212	0.117	0.473	0	0.092
<i>Aspidophoroides monopterygius</i>	0	0	0	0	0	0	0.028	0	0	0.002	0.126
Cyclopteridae	0	0	0.017	0	0	0	1.405	0	0	0	0
<i>Eumicrotremus sp.</i>	0	0	0	0	0	0	0.181	0	0.293	0	0
<i>Eumicrotremus spinosus</i>	0	0	0.032	0.173	0	0.592	1.001	0.048	0.02	0.011	0.072
<i>Eumicrotremus derjugini</i>	0	0	0	0	0.007	0.001	0.885	0.199	0.901	0	0.358
<i>Cyclopterus lumpus</i>	0	0.01	0	0	0	0.152	0.02	0.012	0	0	0
<i>Cyclopteroopsis mcalpini</i>	0	0	0	0	0	0	0	0	0	0	0
Liparidae	1.358	0.002	0	0	0	0	0.219	0.035	0	0.002	0.153
<i>Paraliparis sp.</i>	0	0	0	0	0.01	0.117	1.312	0.034	0	0	0
<i>Paraliparis bathybius</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis sp.</i>	0	0	0.006	0.003	0	0.002	0.005	0	0.212	0	0.005
<i>Liparis atlanticus</i>	0	0	0	0	0	0	0.009	0	0.01	0	0
<i>Liparis fabricii</i>	0	0	0	0.129	0	0.351	0.539	0.011	0.636	0	0.054
<i>Liparis liparis</i>	0	0	0	0.002	0	0.002	0	0	0.432	0	0
<i>Liparis tunicatus</i>	0	0	0	0.004	0	0.024	0.126	0.042	0.436	0	0
<i>Liparis gibbus</i>	0	0	0	0	0	0	0.017	0	0.021	0	0.047
<i>Careproctus longipinnis</i>	0	0	0	0.004	0	0	0	0.108	0	0	0
<i>Careproctus reinhardti</i>	0	0	0	0.01	0	0.046	1.586	0.039	0	0	0
<i>Careproctus ranula</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Hippoglossoides platessoides</i>	0.057	0.01	0.005	0.027	0	0.228	0.395	0.05	0.814	0	0.155
<i>Reinhardtius hippoglossoides</i>	3.347	1039	189	0.631	0.03	3.896	10.958	0.5	12.097	0.104	2.45
<i>Hippoglossus hippoglossus</i>	0	0	0.006	0	0	0.015	0.01	0	0	0	0
<i>Paralichthys sp.</i>	0	0	0	0	0	0	0.001	0	0	0	0
<i>Lophius americanus</i>	0	0	0	0	0	0	0	0	0	0	0.074
Unidentified Fish	0	1.767	0.002	0	0	0	0	0	0.095	0	0.276

Table 13. Cont'd Shrimp Fishing Area 3 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1995 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	1979	1980	1981	1986	1987	1988	1989	1990	1991	1992	1994
Number of Sets Observed	99	98	25	71	4	191	499	81	295	14	104
Sponge											
	Total Catch Weight (tonnes)										
Porifera	0	0	0	0	0	0	0	0	0	0	0
Other Invertebrates											
	Total Catch Weight (tonnes)										
Invertebrata	0	0	0	0	0	0	0.001	0	0	0	0
Cnidaria	0	0	0	0	0	0	0	0	0	0	0.01
Scyphozoa	0	0	0	0	0	0	0.335	0	0	0	0
Anthozoa	0	0	0	0	0	0	0	0	0	0	0
Buccinidae	0	0	0	0	0	0	0	0	0	0	0
<i>Chlamys islandica</i>	0	0	0	0	0	0	0	0	0	0	0.003
Teuthida	0	0	0	0	0	0	0	0	0	0	0
<i>Sepioteuthis sepioidea</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Illex illecebrosus</i>	0	0	0	0.003	0	0	0.018	0	0.011	0	0.007
Octopoda	0	0	0	0	0	0	0.073	0.003	0.017	0	0.024
<i>Octopus burryi</i>	0	0	0	0	0	0	0	0	0	0	0
Pycnogonida	0	0	0	0	0	0	0	0	0	0	0
Crustacea	0	0	0	0	0	0	0	0	0	0	0.001
Dendrobranchiata	0	0	0.002	0	0	0	0	0	0	0	0
<i>Sergestes arcticus</i>	0	0	0	0	0	0	0	0	0	0	0.027
Pasiphaeidae	0	0	0	0	0	0	0.001	0	0	0	0.041
<i>Pasiphaea multidentata</i>	0	0	0	0	0	0	0.003	0	0	0	0
<i>Eualus macilentus</i>	0	0	0	0	0	0.001	0	0	0	0	0
<i>Eualus gaimardii</i>	0	0	0	0	0	0.001	0	0	0	0	0
<i>Caridion gordonii</i>	0	0	0	0	0	0	0	0	0	0	0.04
<i>Pandalus sp.</i>	0	0	0	0	0	0.011	0.011	0	0	0	0
<i>Sclerocrangon boreas</i>	0	0	0	0	0	0	0.017	0	0.017	0	0.004
<i>Sabinea sarsii</i>	0	0	0	0	0	0	0	0.014	0	0	0
<i>Argis dentata</i>	0	0	0	0	0	0.001	0	0	0	0	0
Pleocyemata	0	0	0	0	0	0	0	0	0	0	0.001
<i>Polycheles sculptus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lithodes sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Neolithodes grimaldii</i>	0	0	0	0	0	0	0	0	0	0	0
Majidae	0	0	0	0	0	0	0	0	0	0	0.002
<i>Hyas araneus</i>	0	0	0	0	0	0	0.001	0	0.002	0	0
<i>Psolus fabricii</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Strongylocentrotus droebachiensis</i>	0	0	0	0	0	0	0	0	0	0	0
Asteroidea	0	0	0	0	0	0	0	0	0	0	0
Hard Coral											
	Total Catch Weight (tonnes)										
<i>Lophelia pertusa</i>	0	0	0	0	0	0	0	0	0.001	0	0
Other											
	Total Catch Weight (tonnes)										
Plant Material	0	0	0	0	0	0	0	0	0.015	0	0

Table 13. Cont'd Shrimp Fishing Area 3 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1995 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	1995	1996	1997	1998	1999	2000	2001	2002	2003/04	2004/05	2006/07	2008/09
Number of Sets Observed	18	2	189	48	21	59	6	9	6	6	1	1
Commercial Shrimp Species	Total Catch Weight (tonnes)											
<i>Pandalus borealis</i>	0.052	0.237	414.73	32.545	32.281	27.872	18.918	12.017	13.7	2.105	1.012	2.734
<i>Pandalus montagui</i>	89.683	0.861	55.88	140.975	15.186	193.007	7.04	3.128	5.352	0.024	0	2.148
Total Shrimp	89.735	1.098	470.61	173.52	47.467	220.879	25.958	15.145	19.052	2.129	1.012	4.882
By-Catch Species	Total Catch Weight (tonnes)											
Total By-catch	1359	0.562	16.518	1.073	0.535	1.256	0.219	0.065	0.184	0.601	0.016	0.295
Percent By-catch in Total Catch	15	33.9	3.4	0.6	1.1	0.6	0.8	0.4	1.0	22.0	1.6	5.7
SARA Species	Total Catch Weight (tonnes)											
Anarhichadidae	0	0	0	0	0	0	0	0	0	0	0	0
<i>Anarhichas denticulatus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Anarhichas lupus</i>	0	0	0.001	0	0.001	0.001	0	0	0	0.004	0	0
<i>Anarhichas minor</i>	0	0	0.05	0	0	0	0	0	0	0	0	0
Other Fish	Total Catch Weight (tonnes)											
<i>Somniosus microcephalus</i>	0.6	0	0	0.1	0	0	0	0	0	0	0	0
Rajidae	0	0	0.161	0	0	0.003	0	0	0	0	0	0.03
<i>Raja</i> sp.	0	0	0.001	0	0	0	0.001	0	0	0	0	0
<i>Amblyraja radiata</i>	0.048	0.015	0.156	0.043	0.028	0.032	0.009	0.004	0	0.008	0.001	0
<i>Leucoraja erinacea</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Rajella fyllae</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Amblyraja hyperborea</i>	0	0	0.035	0	0	0	0	0	0	0	0	0
<i>Amblyraja jenseni</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Malacoraja spinacidermis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Leucoraja ocellata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Bathyraja spinicauda</i>	0.005	0	0.046	0.017	0	0.002	0	0	0	0	0	0
<i>Hydrolagus affinis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Clupea harengus</i>	0.001	0	0	0	0	0	0	0	0	0.007	0	0
<i>Bathytroctes</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0
<i>Xenodermichthys copei</i>	0	0	0	0.01	0	0	0	0	0	0	0	0
<i>Prosopium cylindraceum</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Mallotus villosus</i>	0	0	0	0.001	0	0	0	0	0.006	0	0	0
<i>Chauliodus sloani</i>	0	0	0	0	0	0.005	0	0	0	0	0	0
<i>Stomias boa ferox</i>	0	0	0	0	0	0	0	0	0	0	0	0
Myctophidae	0	0	0.179	0.05	0	0.02	0.002	0.003	0.005	0.001	0.001	0.001
<i>Notoscopelus</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0
<i>Notoscopelus elongatus kroyeri</i>	0	0	0	0	0.002	0.013	0.026	0	0	0	0	0
Paralepididae	0	0	0	0	0	0	0.001	0	0	0	0.001	0
<i>Paralepis</i> sp.	0	0	0.003	0	0	0	0	0	0	0	0	0
<i>Arctozenus risso kroyeri</i>	0	0	0.011	0.003	0.004	0.005	0	0	0	0	0	0
Anguillidae	0	0	0	0	0	0	0	0	0.001	0	0	0
<i>Ophichthus cruentifer</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Serrivomer beanii</i>	0	0	0	0	0	0.002	0	0	0	0	0	0
<i>Synaphobranchus kaupii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Antimora rostrata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gadus</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gadus morhua</i>	0	0	0	0.001	0	0	0	0	0	0	0	0
<i>Urophycis chuss</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Urophycis tenuis</i>	0	0	0	0	0.008	0	0	0	0	0	0	0
<i>Boreogadus saida</i>	0.067	0	0.02	0.018	0.022	0.031	0	0	0.051	0.482	0	0.002
<i>Arctogadus glacialis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gaidropsarus</i> sp.	0	0	0	0	0	0	0.001	0	0	0	0	0
<i>Gaidropsarus ensis</i>	0	0.005	0.215	0.013	0.005	0	0.001	0	0	0	0	0
<i>Gaidropsarus argentatus</i>	0	0	0.008	0	0	0.006	0	0	0	0	0	0
<i>Molva molva</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Brosme brosme</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Enchelyopus cimbrius</i>	0	0	0	0	0	0	0	0	0	0	0	0
Gadiformes	0	0	0	0	0	0	0	0	0	0	0	0
<i>Macrourus berglax</i>	0	0	0	0	0	0	0.001	0	0	0	0	0
<i>Coryphaenoides rupestris</i>	0	0	0	0	0	0	0.01	0	0	0	0	0
<i>Anoplogaster cornuta</i>	0	0	0	0	0	0	0	0	0	0	0	0
Trachinoidei	0	0	0	0	0	0	0	0	0	0	0	0
<i>Ammodytes dubius</i>	0	0	0	0	0	0	0	0	0	0	0	0
Blennioidei	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eumesogrammus praecisus</i>	0	0	0	0	0	0	0	0	0	0	0	0

Table 13. Cont'd Shrimp Fishing Area 3 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1995 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	1995	1996	1997	1998	1999	2000	2001	2002	2003/04	2004/05	2006/07	2008/09
Number of Sets Observed	18	2	189	48	21	59	6	9	6	6	1	1
Other Fish cont'd	Total Catch Weight (tonnes)											
<i>Lumpenus fabricii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lumpenus lampraeiformis</i>	0	0.001	0.227	0	0	0	0	0	0.002	0.005	0	0
<i>Leptoclinius maculatus</i>	0	0	0	0.005	0	0	0	0	0	0	0	0
<i>Anisarchus medius</i>	0	0	0	0	0.003	0.003	0	0	0	0	0	0
Zoarcidae	0	0	0.94	0.049	0.043	0	0.005	0	0.004	0	0	0
<i>Lycodes sp.</i>	0	0	0	0.005	0	0	0	0	0	0	0	0
<i>Lycodes esmarkii</i>	0	0	0.077	0.004	0.004	0	0	0	0	0	0	0
<i>Lycodes lavalaei</i>	0	0	0	0	0	0.001	0	0	0	0	0	0
<i>Lycodes reticulatus</i>	0.028	0.004	0.061	0	0	0	0	0	0	0	0	0
<i>Lycodes vahlii</i>	0	0.007	0.723	0.01	0.003	0.077	0	0	0.005	0	0	0
<i>Lycodes turneri</i>	0.001	0	0.002	0	0	0	0	0	0	0	0	0
<i>Lycodes terraenovae</i>	0	0	0	0	0	0	0	0	0	0.006	0	0
<i>Lycodes eudipleurostictus</i>	0	0	0	0	0	0	0.035	0	0	0	0	0
<i>Lycodes pallidus</i>	0	0	0	0	0.001	0	0	0	0	0	0	0
<i>Zoarces americanus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gymnelus viridis</i>	0	0	0	0	0	0.024	0	0	0	0	0	0
<i>Lycenchelys</i>	0.002	0	0	0	0	0.043	0	0	0	0	0	0
<i>Lycenchelys paxillus</i>	0	0	0	0	0	0.012	0	0	0	0	0	0
<i>Sebastes sp.</i>	0.037	0.21	3.096	0.232	0.07	0.031	0.038	0	0.022	0.034	0.005	0.23
<i>Prionotus alatus</i>	0	0	0.07	0.045	0.013	0	0	0	0	0	0	0
Cottidae	0	0	0.177	0.01	0.045	0	0.005	0	0.001	0	0	0
<i>Hemirhamphus americanus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Arctiellus sp.</i>	0	0.026	0.63	0.005	0	0	0.001	0	0.005	0	0.001	0
<i>Arctiellus atlanticus</i>	0.023	0	0.007	0.005	0.005	0.042	0	0	0.003	0	0	0
<i>Arctiellus uncinatus</i>	0	0	0.059	0.032	0.005	0.031	0	0	0	0	0	0
<i>Triglops sp.</i>	0	0	0.651	0.105	0.091	0.332	0	0	0	0	0	0
<i>Triglops murrayi</i>	0.194	0.061	0.016	0.005	0.005	0.018	0	0	0.008	0	0	0
<i>Triglops nybelini</i>	0	0.04	0	0	0.019	0.002	0	0	0.006	0	0	0
<i>Triglops pingelii</i>	0	0	0	0	0	0	0	0	0.002	0	0	0
<i>Myoxocephalus sp.</i>	0.012	0	0.09	0.03	0.015	0	0.015	0	0	0	0	0
<i>Myoxocephalus aeneus</i>	0	0	0	0	0.003	0.032	0	0	0.001	0	0	0
<i>Myoxocephalus scorpius</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus octodecemspinosus</i>	0	0	0	0	0	0	0	0	0	0	0.001	0
<i>Myoxocephalus quadricornis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Myoxocephalus scorpioides</i>	0	0.005	0.003	0	0	0.01	0	0	0	0	0	0
<i>Cottunculus thomsonii</i>	0	0	0	0	0	0	0	0	0.006	0	0	0
<i>Cottunculus microps</i>	0	0	0.016	0.021	0.001	0.001	0.017	0	0	0.009	0	0
<i>Icelus bicornis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Icelus spatula</i>	0	0	0	0	0	0	0	0	0	0	0	0
Agonidae	0	0	0.105	0.001	0.013	0.005	0	0	0.001	0	0	0
<i>Leptagonus decagonus</i>	0	0	0.965	0.015	0.004	0.006	0.008	0	0.001	0.004	0.001	0.001
<i>Aspidophoroides monopterygius</i>	0	0.001	2.839	0.022	0	0.001	0	0	0	0.004	0.002	0
Cyclopteridae	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eumicrotremus sp.</i>	0	0	0.003	0	0	0	0	0	0	0	0	0
<i>Eumicrotremus spinosus</i>	0	0	0.385	0.008	0	0.003	0	0	0.012	0.015	0	0
<i>Eumicrotremus derjugini</i>	0.042	0.003	0.275	0.037	0.035	0.217	0	0	0.001	0	0	0
<i>Cyclopterus lumpus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cyclopteroopsis mcalpini</i>	0.001	0	0	0	0	0	0	0	0	0	0	0
Liparidae	0	0.16	0.913	0.021	0.037	0.036	0.001	0	0.002	0	0	0
<i>Paraliparis sp.</i>	0	0	0.21	0.01	0	0	0	0	0	0	0	0
<i>Paraliparis bathybius</i>	0.03	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis sp.</i>	0.094	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis atlanticus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis fabricii</i>	0	0	0.592	0.003	0.002	0.005	0.006	0	0.002	0	0	0
<i>Liparis liparis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Liparis tunicatus</i>	0	0	0	0	0	0.007	0	0	0	0	0	0
<i>Liparis gibbus</i>	0.01	0.01	0.661	0	0.002	0.007	0.005	0	0.003	0.003	0	0
<i>Careproctus longipinnis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Careproctus reinhardti</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Careproctus ranula</i>	0	0	0.002	0.003	0.013	0.027	0	0	0	0	0.001	0.001
<i>Hippoglossoides platessoides</i>	0	0	0.001	0.002	0	0.001	0.002	0	0	0	0	0
<i>Reinhardtius hippoglossoides</i>	0.12	0.01	158	0.117	0.028	0.096	0.025	0	0.033	0.019	0.001	0.03
<i>Hippoglossus hippoglossus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Paralichthys sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lophius americanus</i>	0	0	0	0	0	0	0	0	0	0	0	0
Unidentified Fish	0.002	0.002	0.2	0	0.002	0.02	0	0	0	0	0	0

Table 13. Cont'd Shrimp Fishing Area 3 - by-catch from the shrimp fishery for all years with records included in the Observer database from 1995 to 2008/09. Missing years indicate that no fishing occurred in the area that year.

Management Year	1995	1996	1997	1998	1999	2000	2001	2002	2003/04	2004/05	2006/07	2008/09
Number of Sets Observed	18	2	189	48	21	59	6	9	6	6	1	1
Sponge												
	Total Catch Weight (tonnes)											
Porifera	0	0	0	0	0	0.007	0	0	0	0	0	0
Other Invertebrates												
	Total Catch Weight (tonnes)											
Invertebrata	0	0	0	0	0	0	0	0	0	0	0	0
Cnidaria	0	0	0.014	0	0.001	0.007	0	0	0	0	0	0
Scyphozoa	0	0	0	0.002	0	0	0	0	0	0	0	0
Anthozoa	0	0	0	0.002	0	0.005	0	0	0	0	0	0
Buccinidae	0	0	0	0	0	0.002	0	0	0	0	0	0
<i>Chlamys islandica</i>	0	0	0	0	0	0	0	0	0	0	0	0
Teuthida	0	0.001	0.015	0.006	0	0.008	0.001	0	0	0	0	0
<i>Sepioteuthis sepioidea</i>	0	0	0	0	0	0	0.001	0	0	0	0	0
<i>Illex illecebrosus</i>	0	0	0	0.002	0	0.002	0.001	0	0	0	0	0
Octopoda	0	0	0.024	0.003	0.002	0.006	0	0	0	0	0	0
<i>Octopus burryi</i>	0	0	0	0	0	0	0	0	0.001	0	0	0
Pycnogonida	0	0.001	0	0	0	0	0	0	0	0	0	0
Crustacea	0	0	0	0	0	0	0	0	0	0	0	0
Dendrobranchiata	0	0	0	0	0	0	0	0	0	0	0	0
<i>Sergestes arcticus</i>	0	0	0	0	0	0	0	0	0	0	0	0
Pasiphaeidae	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pasiphaea multidentata</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eualus macilentus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eualus gaimardii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Caridion gordonii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pandalus sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Sclerocrangon boreas</i>	0	0	0.001	0	0	0	0	0	0	0	0	0
<i>Sabinea sarsii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Argis dentata</i>	0	0	0	0	0	0	0	0	0	0	0	0
Pleocyemata	0	0	0	0	0	0	0	0	0	0	0	0
<i>Polycheles sculptus</i>	0	0	0.002	0	0	0	0	0	0	0	0	0
<i>Lithodes sp.</i>	0	0	0	0	0	0	0.001	0	0	0	0	0
<i>Neolithodes grimaldii</i>	0.029	0	0	0	0	0	0	0	0	0	0	0
Majidae	0	0	0	0	0	0	0	0	0	0	0	0
<i>Hyas araneus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Psolus fabricii</i>	0.021	0	0	0	0	0	0	0	0	0	0	0
<i>Strongylocentrotus droebachiensis</i>	0	0	0	0	0	0.005	0	0	0	0	0	0
Asteroidea	0	0	0	0	0	0.004	0	0	0	0	0.001	0
Hard Coral												
	Total Catch Weight (tonnes)											
<i>Lophelia pertusa</i>	0	0	0	0	0	0	0	0	0	0	0	0
Other												
	Total Catch Weight (tonnes)											
Plant Material	0	0	0	0	0	0	0	0	0	0	0	0