

3. Description of the Haddock Resource

The 1993 haddock spawning stock level on Georges Bank is estimated to be 10,000 metric tons which is significantly lower than the 130,000 metric tons required to provide the fishery to take the maximum sustainable yield (SAW13, 1992). While the current fishing mortality rate for haddock of 0.52 is slightly higher than the rate of 0.4 derived from the Council's overfishing definition, continued fishing pressure at this level on the depressed stock will not reduce overfishing and will reduce the likelihood of rebuilding occurring. The most recent Canadian assessment (November 1993) corroborated the U.S. stock assessments by finding an increasing fishing mortality since 1989, with the 1992 value of F at 0.6, and a 1993 value even higher. Even if the most recent F estimated by the Canadians is discounted, the current fishing mortality rate is at least 0.5-0.6 (which corresponds to annual exploitation rate of 37%).

Even assuming that the provisions of Amendment 5 are successful in reducing the fishing mortality rate for haddock by 50% on the American side and that an equivalent F reduction was forthcoming by the Canadians, F would still be around 0.3 (annual exploitation rate of 24%) after a 10 year rebuilding schedule. There is, of course, no assurance that the general restrictions of Amendment 5 will result in a specific reduction in fishing mortality for one of the regulated species.

This "best case" scenario of an annual exploitation rate of 24% (after ten years) would only maintain the current (record low) stock sizes, but may not be sufficiently low to enable the stocks to rebuild. As indicated in the Purpose and Need for Action, the recommendation of the Stock Assessment Workshop (SAW13) was that fishing mortality rates need to be reduced well below the overfishing definition level to enable the stocks to rebuild. Further, the SAW indicated that because the abundance of both Georges Bank and Gulf of Maine haddock are very low, it may be necessary to reduce the exploitation levels below the maintenance level until significant rebuilding is observed.

The situation for the Gulf of Maine haddock stock is even more problematic than for Georges Bank. As the Status of Fishery Resources off the Northeastern United States for 1993 attests, haddock abundance in the Gulf of Maine is at the lowest level observed.

Finally, the 1993 haddock catch for Georges Bank and Gulf of Maine, combined, is projected to be about 900 metric tons, a little more than 44% of the 1992 total and the lowest level ever recorded.

There is evidence that a reduction in the exploitation rate can have a positive effect on the stock. A review of records for the spawning stock biomass and exploitation rates for the Georges Bank haddock resource show that a resurgence in stock size associated with the 1975 year class followed a period when the exploitation rate was reduced to about 0.1. This is the only actual evidence regarding the level of exploitation that may be required in order to effect stock rebuilding (Figure 2).

Further evidence of the depleted status of the stocks is that recent year classes have been poor when compared to earlier years. Since the 1978 year class (age 1 in 1979), the production of young fish on Georges Bank has been very low. Historically, year classes similar to the 1975 and

1978 year classes were produced regularly, thus sustaining the fishery at an average 47,000 metric tons for the period 1930-1960. The 1992 year class is the best in recent years, even though low by historical standards. If protected, the 1992 year class will begin spawning in 1994, and could contribute to rebuilding the spawning biomass (Figure 3). Furthermore, the stock has apparently responded to the current situation with a shift in its maturity level where haddock are now maturing at a younger age and smaller size, with some individuals of this year class already showing up in the fishery. This development further necessitates quick action over and above that of Amendment 5 to protect this year class.

3.1. Comparison of haddock abundance from the NMFS spring trawl survey: 1982-1985 versus 1989-1992

Survey abundance indices from 1982-1985 period are presented in Figure 4. This period was prior to the Hague Line Boundary decision between Canada and the U.S. Note that these data indicate spawning concentrations of haddock. There are indications of significant concentrations of haddock on the Canadian side, but, nevertheless, at this point in time, a substantial portion of the resource is located on the U.S. side of the boundary, as well as in the Great South Channel and the Gulf of Maine.

Data from the 1989-1992 period, following the Hague-Line decision, indicate very different abundance patterns (Figure 5). Haddock in the Gulf of Maine are notably absent, and spawners in the Channel area are considerably reduced.

3.2. Status of the Gulf of Maine haddock stock

Figure 6 depicts landings of Gulf of Maine haddock from 1976-1992. The Gulf of Maine stock has a long term yield potential of about 5,000 metric tons per year. Landings since 1976 peaked at about 7,000 metric tons, declined to about 200 metric tons in 1992, and are predicted to be less than 100 metric tons for 1993.

The extreme reduction in stock size for Gulf of Maine haddock is illustrated by reductions in NMFS trawl survey catches (Figure 7). The 1989-1992 survey values have successively been the poorest on record. Based on these data, the stock has been declining at an annual rate of 25% for the past 15 years. The trend shows no sign of flattening out. This stock is already near commercial extinction. There is serious concern that unless the trend is reversed, the stock may become threatened or endangered.

3.3. Updated abundance indices

Recent data on the relative abundance of haddock on Georges Bank were compiled from NEFSC spring and autumn bottom trawl surveys and the Canadian bottom trawl survey. Canadian spring surveys have been conducted in March and April each year since 1986 (Table 1) and concentrate on eastern Georges Bank, on both sides of the Hague Line. Recent surveys indicate a relatively strong 1992 year class (age 2 in 1994), which was also indicated by relatively high abundance at age 1 in 1993. The 1993 year class may also be among the largest since 1985.

Research survey indices conducted by the United States are given in Table 2. The spring and

autumn surveys cover the entirety of Georges Bank. Overall, haddock survey abundance indices remain very low, but have increased slightly since 1991. The spring 1994 index of 5.17 represents an increase from previous years. The few fish taken were caught primarily on two large tows on the Canadian side of the Bank. Recent U.S. haddock surveys indices are dominated by the 1992 year class (age 2 fish 1994) as are the Canadian indices. These age 2 fish should recruit to the fishable population in autumn 1994. The 1992 year class appears to be equivalent in strength to the 1983, 1985 and 1987 year classes and, furthermore, the 1991 and 1993 year classes appear to be stronger than those which have recruited since the 1987 year class. However, all of the year classes recruited since 1980 have been less than 1/10th the size of the 1975 and 1978 year classes.

Table 1. Total estimated abundance-at-age (numbers in 000's) of haddock from unit area 5Zj and 5Zm from the Canadian spring surveys.

Year	AGE GROUP									
	1	2	3	4	5	6	7	8	9+	1-9+
1986	5057	306	8175	997	189	348	305	425	401	16205
1987	46	4286	929	3450	653	81	387	135	1132	11099
1988	971	49	12714	257	4345	274	244	130	686	19670
1989	47	6473	959	2814	241	523	40	36	259	11391
1990	726	108	12302	166	4465	299	1370	144	389	19968
1991	400	2175	137	10776	115	1868	117	497	220	16306
1992	1914	3879	1423	221	4810	18	1277	52	655	14249
1993	3448	1759	545	431	34	1186	19	281	15	7849
1994	4197	15163	5332	549	314	20	915	18	356	26864

Table 2. Stratified mean catch per tow (numbers) for haddock in NEFSC offshore spring and autumn research vessel bottom trawl surveys on Georges Bank (Strata 13-25, 29-30)

SPRING CRUISES												
Adjusted for changes in gear, vessel and door usage												
Year	0	1	2	3	4	5	6	7	8	9+	Total	Total 1+
1968	0.00	0.44	3.10	0.51	0.77	7.36	1.85	0.28	0.49	0.38	15.17	15.17
1969	0.00	0.00	0.08	0.64	0.28	0.46	4.64	1.13	0.31	0.51	8.03	8.03
1970	0.00	0.73	0.28	0.00	0.36	0.51	0.51	2.19	1.08	0.93	6.58	6.58
1971	0.00	0.00	1.27	0.28	0.00	0.13	0.13	0.10	0.90	0.24	3.05	3.05
1972	0.00	4.41	0.10	0.67	0.13	0.03	0.05	0.15	0.03	1.42	6.99	6.99
1973	0.00	33.62	5.31	0.00	0.59	0.10	0.00	0.20	0.02	1.40	41.23	41.23
1974	0.00	2.34	14.57	3.14	0.00	0.26	0.00	0.02	0.11	0.41	20.84	20.84
1975	0.00	1.03	1.06	3.64	0.69	0.00	0.15	0.10	0.02	0.16	6.84	6.84
1976	0.00	88.54	0.33	0.65	1.01	0.47	0.00	0.05	0.00	0.11	91.17	91.17
1977	0.00	0.67	36.61	0.46	1.34	0.65	0.49	0.00	0.05	0.13	40.40	40.40
1978	0.00	0.08	1.06	17.46	0.39	1.03	0.90	0.18	0.07	0.11	21.28	21.28
1979	0.00	39.58	1.73	1.24	6.25	0.36	0.18	0.41	0.07	0.05	49.87	49.87
1980	0.00	5.70	51.18	0.56	1.14	5.34	0.73	0.41	0.51	0.26	65.83	65.83
1981	0.00	3.76	3.74	22.19	2.49	0.86	2.03	0.28	0.13	0.06	35.53	35.53
1982	0.00	0.86	1.74	1.07	4.63	0.47	0.32	0.70	0.00	0.00	9.79	9.79
1983	0.00	0.47	0.60	0.64	0.24	2.65	0.02	0.05	1.27	0.20	6.14	6.14
1984	0.00	2.29	1.29	0.70	0.69	0.64	0.78	0.08	0.05	0.33	6.84	6.84
1985	0.00	0.00	4.96	0.76	0.40	0.87	0.34	1.17	0.10	0.25	8.85	8.85
1986	0.00	2.49	0.18	2.06	0.24	0.11	0.21	0.12	0.33	0.11	5.85	5.85
1987	0.00	0.00	3.62	0.06	0.81	0.08	0.10	0.05	0.22	0.01	4.95	4.95
1988	0.00	1.55	0.04	0.99	0.13	0.32	0.12	0.11	0.12	0.00	3.38	3.38
1989	0.00	0.03	3.63	0.47	0.74	0.14	0.43	0.06	0.05	0.01	5.56	5.56
1990	0.00	0.89	0.00	5.94	0.34	0.60	0.06	0.14	0.00	0.01	7.98	7.98
1991	0.00	0.56	1.11	0.25	1.93	0.09	0.10	0.03	0.04	0.02	4.13	4.13
1992	0.00	0.40	0.18	0.11	0.07	0.33	0.03	0.03	0.03	0.00	1.18	1.18
1993	0.00	1.17	0.65	0.18	0.14	0.12	0.37	0.06	0.02	0.02	2.73	2.73

AUTUMN CRUISES												
Adjusted for changes in vessel and door usage												
Year	0	1	2	3	4	5	6	7	8	9+	Total	Total 1+
1963	91.98	27.83	10.11	7.46	9.14	6.52	2.24	1.85	1.29	0.51	158.92	66.94
1964	2.60	123.70	69.86	6.39	1.96	4.18	1.71	0.75	0.28	0.36	211.78	209.19
1965	0.36	11.14	84.82	10.63	1.18	0.88	1.00	0.88	0.28	0.29	111.45	111.09
1966	6.73	1.05	3.17	20.15	3.67	0.57	0.54	0.36	0.13	0.08	36.45	29.72
1967	0.03	7.36	0.39	1.09	7.41	1.78	0.54	0.23	0.36	0.20	19.40	19.37
1968	0.10	0.07	1.05	0.15	0.36	4.23	1.39	0.29	0.18	0.42	8.23	8.13
1969	0.42	0.03	0.00	0.31	0.15	0.18	1.67	0.56	0.10	0.29	3.71	3.28
1970	0.05	4.52	0.23	0.02	0.31	0.29	0.56	1.50	0.52	0.44	8.44	8.39
1971	2.66	0.00	0.34	0.08	0.02	0.24	0.03	0.10	0.82	0.31	4.61	1.94
1972	7.40	2.76	0.00	0.57	0.10	0.00	0.10	0.07	0.03	1.42	12.44	5.05
1973	3.54	9.86	1.76	0.00	0.21	0.05	0.00	0.08	0.02	0.78	16.31	12.77
1974	0.82	1.94	1.08	0.34	0.00	0.02	0.00	0.00	0.00	0.24	4.44	3.63
1975	25.74	0.69	0.78	5.32	1.01	0.00	0.03	0.00	0.02	0.33	33.92	8.19
1976	4.74	70.33	0.57	0.59	0.90	0.33	0.00	0.05	0.11	0.28	77.89	73.16
1977	0.15	2.43	21.32	0.64	0.65	0.72	0.39	0.04	0.01	0.10	26.47	26.32
1978	15.05	0.96	1.18	10.56	0.21	0.29	0.51	0.01	0.00	0.01	28.79	13.74
1979	1.50	51.87	0.04	1.03	4.34	0.29	0.32	0.06	0.01	0.00	59.47	57.96
1980	13.30	3.09	14.48	0.51	0.21	1.93	0.54	0.53	0.10	0.07	34.76	21.46
1981	0.43	6.98	2.36	4.21	0.24	0.47	0.60	0.00	0.00	0.01	15.31	14.88
1982	1.49	0.00	1.45	0.38	1.54	0.15	0.08	0.23	0.02	0.11	5.44	3.95
1983	6.35	0.26	0.23	0.29	0.33	1.03	0.13	0.00	0.11	0.02	8.75	2.40
1984	0.03	3.64	0.96	0.26	0.31	0.07	0.49	0.00	0.00	0.13	5.90	5.86
1985	11.35	0.65	1.53	0.22	0.05	0.10	0.07	0.17	0.00	0.05	14.19	2.84
1986	0.00	5.11	0.09	1.21	0.06	0.13	0.13	0.02	0.03	0.03	6.81	6.81
1987	1.08	0.00	0.79	0.10	0.77	0.06	0.06	0.02	0.02	0.00	3.62	1.82
1988	0.07	3.02	0.18	1.30	0.12	0.40	0.12	0.11	0.00	0.03	5.35	5.28
1989	0.49	0.05	2.81	0.20	0.69	0.09	0.14	0.02	0.02	0.00	4.51	4.02
1990	0.80	0.70	0.03	1.24	0.05	0.18	0.04	0.00	0.00	0.00	3.03	2.23
1991	2.24	0.21	0.25	0.05	0.23	0.02	0.02	0.00	0.00	0.02	3.04	0.80
1992	2.76	2.19	0.22	0.24	0.00	0.47	0.02	0.08	0.03	0.06	6.06	3.30
1993	1.58	4.20	2.09	0.32	0.00	0.06	0.15	0.02	0.00	0.00	8.42	6.84

4. Description of the Haddock Fishery

The recent performance of the haddock fishery was examined for the purpose of determining impacts of the proposed actions and alternatives. In 1992, 4.5 million pounds of haddock were landed with an ex-vessel value of \$5.6 million and an average ex-vessel price of \$1.24. The 1992 landings were somewhat higher than the 1989 record low landings. For 1993, the haddock catch is projected to be slightly greater than 900 metric tons or just under 2 million pounds, just over 44% of the 1992 total. For 1994, preliminary landings to date (through March) are 54 mt or about 119 thousand pounds (see Appendix 6, Review of haddock landings and discard data, NEFSC, May, 1994). For the first three months of the year, landings have declined by 2/3 relative to the same period in 1993 and in even greater proportion relative to earlier years (Appendix 6). Virtually all landings are taken for commercial purposes.

The following section describes the haddock fishery in terms of gear used, numbers and sizes of vessels used to catch haddock, the areas and seasons fished, where haddock is landed and the species caught in conjunction with haddock. Information for the 1992 fishery is derived from the preliminary 1992 commercial landing statistics collected by the NEFSC, NMFS, and the vessel permit files maintained by NMFS.

4.1. Landings by gear type

The haddock landings by gear type for 1992 are presented in Table 3. The otter trawl is the predominant gear type accounting for 1992 landings of 3.7 million pounds or 84% of the haddock landings. Paired otter trawls, sink gill nets and line trawls are the only other gear types contributing significantly to 1992 landings with reported landings of 573,000 pounds (13%), 98,000 pounds (2%), and 59,000 pounds (1%), respectively. Note that 1992 total haddock landings by scallop vessels is about 6,000 pounds or about 1/10th of 1% of total 1992 landings.

Table 3. Haddock landings (lb) for each gear type for 1992.

Gear Type	Pounds landed	Percent of total landings
Fish otter trawl	3,744,726	84%
Otter trawl paired	572,609	13%
Sink gill net	98,293	2%
Line trawl	59,402	1%
Sea scallop dredge	6,121	<1%
Hand line	2,247	<1%
Danish seine	748	<1%
Scottish seine	189	<1%
Shrimp otter trawl	64	<1%
Offshore lobster trap	3	<1%

4.2. Landings by tonnage class

There were 465 vessels that landed haddock in 1992. This total does not include unidentified-tonnage and under-tonnage vessels. The data in Table 4 indicate the number of vessels contributing to haddock landings by gross registered tonnage (GRT) range.

The vessels are spread across the 5-250 tonnage range, with no particular tonnage range dominating. Vessels have traditionally been defined as small, medium and large on the basis of more inclusive tonnage ranges. The small vessel class (5 - 60 GRT) had 174 vessels, the medium tonnage class (61 - 125 GRT) had 112 vessels, while the large vessel class (126+ GRT) had 179 vessels.

Table 4. Number of vessels landing haddock in 1992, by tonnage range and percent of landings.

Tonnage range (GRT)	Numbers of Vessels	Contribution to landings
5 - 10	14	
11 - 15	28	
16 - 20	30	
21 - 30	43	
31 - 50	48	
51 - 60	11	Small (174 vessels - 37%)
61 - 70	20	
71 - 90	20	
91 - 105	26	
106 - 125	46	Medium (112 vessels - 24%)
126 - 150	80	
151 - 180	57	
181 - 215	41	
216 - 250	1	Large (179 vessels - 39%)
TOTAL VESSELS	465	

4.3. Relative contribution of haddock to total groundfish catch and value, 1960 versus 1992

In 1960, haddock represented 28% of total landings by weight and 34% of the total ex-vessel value obtained from 14 species of groundfish and flounders (total haddock landings were 45,000 metric tons, while cod and yellowtail flounder together yielded 28,000 metric tons) (Figure 8). This year is typical of the 1930-1960 period, when haddock dominated the value and landings of the groundfish fishery.

By 1992, however, haddock landings (2,200 metric tons) contributed only 2% of total groundfish landings by weight and 3% of the total ex-vessel value (Figure 9).

4.4. Landings by port

Haddock landings in 1992 by major port are presented in Table 5. Gloucester, MA is the leading port with 42% of the total haddock landings. In terms of contribution to total haddock landings, Gloucester is followed by New Bedford, MA (28%), Boston, MA (15%), and Portland, ME

(12%). Other ports where haddock is landed, but in lesser quantities, include Chatham, MA, Newport, RI, Point Judith, RI, and Portsmouth, NH.

Table 5. Haddock landings (pounds) and ex-vessel value (dollars) by port, 1992.

Port	Landings, pounds	Ex-vessel value, dollars
Gloucester	1,869,982	\$2,385,209
New Bedford	1,260,086	\$1,363,489
Boston	647,913	\$ 878,818
Portland	527,902	\$ 729,456
Other ports	178,519	\$ 224,737

4.5. Cumulative monthly haddock landings, 1990-1993

The annual pattern of cumulative monthly landings of haddock landings for the last four years (through September, 1993) are shown in Figure 10. The 1993 landings are well below the 1990-1992 levels, suggesting total USA landings will be less than 900 metric tons for all of 1993 - the lowest level ever recorded. The rapid increase in landings in June of each year is due to the opening of Closed Areas II and two at the end of May, under the provisions of the pre-Amendment 5 Multispecies FMP. Under the status quo alternative one might anticipate similar landings patterns given that Closed Area I is reopened and Closed Area II opens in June of 1995 (but is closed in June 1996 and thereafter).

4.6. Haddock landings by month, quarter and statistical area

As indicated in Table 6, the 2nd quarter and the month of June specifically, appears to be the most important quarter and month for haddock landings. In 1992, 59.9% of the haddock landings occurred in the 2nd quarter while 33.0% occurred in the month of June. Statistical Areas 561 and 562 in the eastern Georges Bank next to the Hague line were the most important contributors to total landings (Figure 1). Area 562 accounted for 59.3% of the 1992 haddock landings with the majority occurring during the month of June. Area 515, a large area in the middle of the Gulf of Maine, ranks third with seasonal landings peaking during the third quarter and especially during the month of July.

Table 6. 1992 Haddock landings by month, quarter and statistical area (in 1,000s of pounds)

AREA	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOT
464				1.0	.4	1.9		.7					4.0
511		.6				1.0				7			2.3
512	1.7	.6	2.0	2.7	.3	.7	8.9	5.6	5.2	3.9	3.0		34.6
513	4.7	11.3	4.7	12.0	3.2	11.7	6.0	6.1	21.0	21.8	12.9	2.2	117.6
514	6.6	5.4	3.8	3.9	2.9	1.7	7.1	13.1	3.7	9.8	3.1	1.6	62.7
515	26.3	46.8	15.8	46.9	11.5	20.5	81.0	52.3	33.9	24.5	15.3	10.8	385.6
521	50.9	8.0	4.5	5.0	6.0	45.5	24.8	26.0	46.4	22.4	20.2	9.1	268.8
522	10.1	16.4	10.3	26.9	32.7	91.7	23.3	23.6	15.3	16.4	17.8	18.9	303.4
525	13.1	8.2	22.4	55.2	19.3	4.7	5.6			.2		.5	129.2
526	.4	3.1	5.0	3.0	1.1	3.7	.8			.1		3.1	20.3
537	.1	.4	.6		2.2		1.5			.6	.1	.1	5.6
539	.1												.1
561	62.2	50.7	13.9	15.7	85.8	159.1	21.6	38.9	33.5	2.2	.6	6.7	490.9
562	427.3	105.8	84.2	273.2	596.0	1135.5	16.5	.1		3.6	3.3	16.0	2661.5
TOTAL	603.5	257.3	167.2	445.5	761.4	1477.7	197.1	166.4	159.0	106.2	76.3	69.0	4486.6
% TOTAL	13.5%	5.7%	3.7%	9.9%	17.0%	33.0%	4.4%	3.7%	3.5%	2.4%	1.7%	1.5%	100.0%
QUARTER	1028.0			2684.6			522.5			251.5			4486.6
% TOTAL	22.9%			59.9%			11.6%			5.6%			100.0%

4.7. Relative contribution of haddock to total groundfish catch and value, 1992

In terms of the top ten species landed for 9,710 trips in 1992 where haddock was landed, haddock is the 5th most important of the major species in terms of landings and ranked third with respect to ex-vessel value (Table 7). The predominant species landed are cod and pollock. With the exception of cusk, all species included are managed under the Northeast Multispecies FMP. Total landings for all species taken on trips landing haddock for 1992 was 54.3 million pounds. Haddock represented 8.3% of the total landings and 10.4% of the total value for these trips.

Table 7. The top ten species in pounds landed for all trips landing haddock in 1992.

Species	Landings, pounds	Landings, metric tons	Ex-vessel value, dollars
Cod	22,933,528	10,403	\$23,822,916
Pollock	8,238,754	3,737	\$ 6,296,951
White hake	6,709,475	3,043	\$ 3,923,088
American plaice	4,955,009	2,248	\$ 4,776,924
Haddock	4,484,402	2,034	\$ 5,581,709
Yellowtail flounder	2,614,213	1,186	\$ 3,322,717
Cusk	1,789,936	812	\$ 1,019,810
Windowpane flounder	1,671,176	758	\$ 1,197,802
Winter flounder	1,343,416	609	\$ 1,741,885
Witch flounder	1,327,024	602	\$ 2,236,135

4.8. Canadian Fisheries Management

Since the haddock stocks are transboundary and since Canadian fisheries management practices as well as fisheries abundance indicators potentially impact U.S. fisheries, in this subsection we briefly review the Canadian fishery management system for groundfish. Canada develops catch levels utilizing a fishing mortality rate of $F_{0.1}$, a conservative management strategy. The Canadian Georges Bank fishery (Statistical Area 5Y and 5Z) operates through a combination of quotas and trip limits. The overall quota is broken down by vessel size and gear class (Table 8). Mobile gear vessels are subject to individual quotas or company quotas (enterprise allocations) depending on vessel size. Once these quotas are achieved, fishing is no longer allowed in the area by the vessel or company. Fixed gear vessels fish under trip limits and once the fixed gear quota is reached, the entire fleet is prohibited from fishing for cod or haddock in this area for the remainder of the year. Larger fixed gear vessels are subject to company quotas.

Table 8. Canadian quotas for haddock and cod (in metric tons) for 1993

		5Y		5Z	
		Inshore	Offshore	Inshore	Offshore
Haddock		-		3,820	1,180
	fixed gear less than 65'	-	-	1,185	-
	mobile gear less than 65'	-	-	2,535	-
	fixed gear 65' - 100'	-	-	50	-
	mobile gear 65' - 100'	-	-	50	-
	vessels over 100'	-	-	-	1,180
Cod		750		14,325	675
	fixed gear less than 65'	750	-	9,615	-
	mobile gear less than 65'	-	-	4,430	-
	fixed gear 65' - 100'	-	-	140	-
	mobile gear 65' - 100'	-	-	140	-
	vessels over 100'	-	-	-	675

Vessels subject to individual quotas are required to land all fish that are caught, which in turn counts against the quota. To aid in monitoring small fish taken in this fishery, Canada uses at-sea observers and will close an area when small fish exceed 15% of the catch. In addition to the quotas there was a minimum mesh size in place of 130 mm (5.1 inches) square mesh or 145 mm (5.7 inches) diamond mesh. There is a spawning area closure for haddock on Georges Bank opposite Closed Area II which is currently closed from March 1 through May 31.