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Summary of Statistics on Discards and Industrial Fish
(ICNAF Statistics Form 4)
for the year 1969

by

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Summaries of the catch discarded and catch converted into fish meal at sea for 1969 have been prepared from data submitted by Canada(M), Canada(N), France(M), Germany(Fed. Rep.), Poland, Portugal, Spain and the USA. The USSR presented industrial fish information by species and subarea for all vessels combined and this has been summed and included in the "other" column of the accompanying tables.

Some discrepancies between STANA 1W and Statistics Form 4 submissions have been noted but where these appear to be obvious errors, the corrected information has been incorporated into the summaries. However, there are cases where no nominal catch can be assigned to a particular vessel class for which discard and industrial fish information is available.

Canada(M) notes that "it remains normal practice to discard 100% of all silver hake, argentines, sculpins, lumpfish, sea robins, anglers, eelpouts and dogfish." However, these are species not sought for and, in general, are too small to be retained by a 6½ inch mesh. Skates are landed occasionally but are normally discarded. Discards of commercial species of groundfish by longliners and gill rakers are negligible due to the selective properties of the gear. Discards of pollock, hake and cusk by otter trawlers are also low.

ABBREVIATIONS AND SYMBOLS USED
(as in latest Statistical Bulletin)

Species:	Had	- haddock
	Red	- redfish
	Flo	- flounders
	Pol	- pollock
	Her	- herring
	Mix	- mixed
	NK	- not known
Gear:	OT	- otter trawl
	OT.Si	- otter trawl, side
	OT.St	- otter trawl, stern
	PT	- pair trawl
	DS	- Danish seine
Tonnage Class:	1	0 - 50 GRT
	1b	26 - 50 GRT
	2	51 - 150 GRT
	3	151 - 500 GRT
	4	501 - 900 GRT
	5	901 - 1800 GRT
	6	over 1800 GRT
Country:	Can (M)	- Canada (Maritime and Quebec)
	Can (N)	- Canada (Newfoundland)
	Fr (M)	- France (Metropolitan)
	Ger	- Germany
	Pol	- Poland
	Por	- Portugal
	Spa	- Spain
Source of information:		
	Log	- logbook
	Int	- dockside interview
	Rep	- reports by captain
Symbols:	...	- not available or not reported
	0	- magnitude known to be nil or zero
	-	- magnitude known to be more than zero
		but less than half the unit

Division	Species	Gear and Tonnage Class	Country	COD			HADDOCK			REDFISH			FLUNDER			OTHER			Source of Information	Sampling Rate (%)
				Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)		
1B	Cod	OTS15 PT 4	Fr(M) Spa	110 7088	- 6	-				0	-	100				0	76	100	Rep Log	100 95
1C	Cod	OTS15	Fr(M)	7286	69	1				0	50	100	0	2	100	15	0	0	Rep	100
	"	OTS15	Fr(M)	1774	0	0				1	-	33	0	0	0	14	19	0	Rep	100
	"	OT4-6	Ger	12013	134	1				333	18	5	9	0	0	0	6	58	Rep	100
	"	OTS15	Por	791	-	-								0	0	0	11	100	Log	100
	"	OT5	Spa	353	-	-								0	0	0	11	100	Log	94
1D	"	PT3	Spa	1690	20	1										0	30	100	Log	95
	Cod	OTS15	Fr(M)	8413	112	1				0	62	100	0	21	100	15	0	0	Rep	100
	"	OTS15	Fr(M)	4222	5	-				5	3	38	3	-	3	56	34	38	Rep	100
	"	OT4-6	Ger	27904	191	1				1019	32	3	26	0	0	0	3	100	Rep	100
	"	OTS15	Por	1073	-	-								0	0	0	19	100	Log	100
1E	"	OT5	Spa	843	-	-										0	5	100	Log	94
	"	PT3	Spa	11566	2	-										0	5	100	Log	95
	Cod	OTS15	Fr(M)	2273	26	1				0	10	100	0	-	100	1	0	0	Rep	100
	"	OTS15	Fr(M)	938	2	-				0	1	100	0	0	0	52	33	39	Rep	100
	"	OT4-6	Ger	28099	27	1				993	20	2	39	0	0	0	20	100	Rep	100
1F	"	OT5	Spa	660	-	-										0	5	100	Log	94
	"	PT3	Spa	1524	-	-										0	5	100	Log	95
	Cod	OT4-6 PT3	Ger Spa	10322 15	3 -	- -				1541	38	2				90 0	13 1	13 100	Rep Log	100 95
Subarea 1 Total All Nations				128957 204790	597	-				3892 4252	234	6	79 1734	23	23	243 4578	275	53		
2H	Cod	OTS15	Fr(M)	339	8	2				0	8	100				66	207	76	Rep	100
"	"	OT5-6	Ger	11118	905	7				8	17	68	71	0	0				Rep	100
"	"	OTSt6	Por	4843	18	-													Log	100
"	"	OTS15	Por	1370	17	1										0	4	100	Log	100
"	"	OT5	Spa	143	2	1										0	26	100	Log	94
2J	Cod	OTS15	Fr(M)	17719	846	5				2	46	96	4	-	6	21	0	0	Rep	100
	"	OTS15	Fr(M)	11405	32	-				0	-	100	1	0	0	40	0	0	Rep	100
	"	OT5-6	Ger	59899	2362	4				0	40	23	133	0	0	179	565	76	Rep	100
	"	OTSt6	Pol	46148	60	-				485	0	0	1665	0	0	2	-	-	Int	33
	"	OTSt6	Por	11000	58	1										0			Log	100
"	"	OTSt6	Por	48869	398	1										0	311	100	Log	100
"	"	OTS15	Por	33006	135	-										0	1134	100	Log	94
Subarea 2 Total				245859	4841	2				632	111	15	1874	0	0	308	2247	88		

Division	Main Species	Gear and Tonnage Class	Country	COD			HADDOCK			REDFISH			FLOUNDERS			OTHER			Source of Information	Sampling Rate (%)
				Nominal Catch	Dis-posed	Rate (%)	Nominal Catch	Dis-posed	Rate (%)	Nominal Catch	Dis-posed	Rate (%)	Nominal Catch	Dis-posed	Rate (%)	Nominal Catch	Dis-posed	Rate (%)		
3K	Cod	OTS15	Fr(M)	7570	97	1				32	204	86	11	1	8	10	3	23	Rep	100
	"	OTS5	Fr(M)	2357	8	-				0	9	100	1	0	0	69	0	0	Rep	100
	"	OT6	Ger	229	0	0										-	-	-	Rep	100
	"	OTS6	Pol	13302	40	-				5194	0	0	4544	0	0	0	172	100	Int	33
	"	OTS15	Por	12492	13	-										0	450	100	Int	100
3L	"	OTS	Spa	11971	9	-												100	Log	96
	Cod	OTS4	Can(N)	5258	0	0	12	0	0	12	0	0	2328	172	9	93	0	0	Log	1
	"	OTS13	Can(N)	1171	0	0	1	0	0	8	0	0	652	47	7	13	0	0	Log	14
	"	OTS15	Fr(M)	7756	247	3				3	197	98	4	0	0	27	23	46	Rep	100
	"	OTS5	Fr(M)	2994	1	-				1	3	75				189	0	0	Rep	100
3N	"	OTS6	Por	4328	3	-										0	12	100	Log	100
	"	OTS15	Por	36115	25	-										0	253	100	Log	100
	"	OTS	Spa	16684	36	-										0	748	100	Log	94
	"	PT3	Spa	40496	489	1	515	30	6	42	0	0	38345	4281	10	139	911	87	Log	95
	Flo	OTS4	Can(N)	8485	0	0	14	0	0	14	0	0	4437	573	11	752	0	0	Log	2
3M	"	OTS13	Can(N)	1131	0	0	1	0	0							64	0	0	Log	5
	Cod	OTS15	Fr(M)	11145	9	-				0	249	100							Rep	100
	"	OTS5	Fr(M)	686	2	-				0	2	100				0	33	100	Rep	100
	"	OTS15	Por	6652	6	-										0	94	100	Log	100
	"	OTS	Spa	1932	1	-										0	5	100	Log	94
3Pn	"	PT3	Spa	750	-	-	0	-	-										Log	95
	Cod	OTS15	Fr(M)	111	1	1							0	-	100	42	0	0	Rep	100
	"	OTS5	Fr(M)	493	0	0										0	19	100	Rep	100
	"	OTS	Spa	404	-	-										130	672	84	Log	94
	Flo	PT3	Can(N)	31251	448	1	389	22	5	36	0	0	1201	1818	60	98	0	0	Log	1
30	"	OTS4	Can(N)	1146	0	0	2	0	0										Log	
	Cod	OTS4	Can(N)	1175	0	0	167	0	0	14	0	0	257	0	0	27	0	0	Log	6
	"	PT3	Spa	39503	525	1	268	42	14							43	757	95	Log	95
	Cod	OTS15	Fr(M)	47	-	-				0	2	100							Rep	100
	"	OTS	Spa	79	-	-	0	-	100							0	1	100	Log	94
3Pn	"	PT3	Spa	24	-	-	0	-	100							0	0	100	Log	95
	Red	OTS13	Can(N)	166	0	0	3	0	0	3137	0	0	45	0	0	15	0	0	Log	14

Division	Species	Gear and Tonnage Class	Country	COD			HADDOCK			REDFISH			FLOUNDERS			Main Species	OTHER			Sou. of Inform. nation	Sampling Rate (%)
				Nominal Catch	Disc-posed	Rate (%)	Nominal Catch	Disc-posed	Rate (%)	Nominal Catch	Disc-posed	Rate (%)	Nominal Catch	Disc-posed	Rate (%)		Nominal Catch	Disc-posed	Rate (%)		
3Ps	Cod	OTS15	Fr(M)	15	2	12	11	0	0							NK	49	16	25	Rep	100
	"	OTS	Spa	238	1	-	559	95	15							NK	73	478	87	Log	94
	"	PT3	Spa	27903	160	1	12	0	0							NK	12	0	0	Log	95
	Red	OTS13	Can(N)	174	0	0				3518	0	0	98	0	0	Mix				Log	11
	"	OTS12	Can(N)	27	0	0				750	43	5	28	0	0					Log	29
	Flo	OTS14	Can(N)	370	0	0	126	0	0	17	0	0	1909	269	12	Mix	24	0	0		
Subarea 3	Total			296630	2123	1	2080	189	8	12778	709	5	53860	7161	12		1869	4647	71		
	All Nations			569087			5321			87032			141345				165029				
4R	Cod	OTS13	Can(N)	2842	0	0	72	6	8	331	0	0	502	67	12	Mix	50	0	0	Log	14
	"	OTS15	Fr(M)	16318	243	1				1	427	100	9	5	35	NK	7	4	36	Rep	100
	"	OTS15	Fr(M)	906	0	0				0	3	100	3	0	0	NK	0	4	100	Log	100
	"	OTS15	Por	1330	2	-										NK	0	63	100	Log	94
	"	OTS15	Spa	2688	1	-										NK	0	100	100	Log	11
	Red	OTS13	Can(N)	782	0	0	6	0	0	14897	0	0	259	0	0	Mix	76	0	0	Log	94
	Flo	OTS13	Can(N)	50	0	0	1	0	0	43	0	0	61	0	0	Wol	1	0	0	Log	100
	Mix	OTS13	Can(M)	525	160	23	15	0	0	7494	0	0	233	0	0	NK	327	0	0	Log	3
	Mix	OTS2	Can(M)	119	19	14				2959	0	0	111	29	21	NK	35	0	0	Log	7
4S	Cod	OTS5	Spa	42	-	-										NK	0	-	100	Log	94
	Red	OTS13	Can(N)	93	0	0				3901	0	0	13	0	0	NK	23	0	0	Log	4
	Mix	OTS3	Can(M)	438	65	13				13559	0	0	132	0	0	NK	218	0	0	Log	5
4T	Cod	OTS15	Fr(M)	207	13	6	19	0	0	0	3	100	1127	519	32	NK	305	0	0	Rep	100
	Mix	OTS3	Can(M)	3459	326	9	53	0	0	1466	0	0				NK	800	0	0	Log	9
	"	OTS2	Can(M)	6338	887	12				7542	0	0	4402	701	14	Hak	71	0	0	Log	3
	"	OTS1b	Can(M)	7736	419	5	43	0	0	1327	0	0	1113	356	24	NK		0	0	Log	4
	"	DS1b	Can(M)	870	122	12	9	0	0				1547	340	18	NK	28	0	0	Log	9
4Vn	Cod	OTS15	Fr(M)	119	19	14										NK				Rep	100
	"	OTS15	Por	307	1	-										NK	0	1	100	Log	100
	"	OTS5	Spa	277	4	-										NK	0	-	100	Log	94
	"	PT3	Spa	1372	3	-	0	-	100				44	0	0	NK	0	21	100	Log	95
	Red	OTS13	Can(N)	86	0	0	1	0	0	2017	0	0			0	NK	3	0	0	Log	15
	Her	OTS5-6	Ger							28	0	0				Her	8996	0	0	Log	100
	Mix	OTS3	Can(M)	5658	792	12	28	0	0	2376	0	0	2173	0	0	NK	157	0	0	Log	4

DISCARDS 1969 (Cont'd)

DISCARDS 1969 (Cont'd)

Division	Main Species	Gear and Tonnage Class	Country	COD			HADDOCK			REDFISH			FLOUNDER			OTHER			Source of Information	Sampling Rate (%)
				Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)	Nominal Catch	Discarded	Rate (%)		
4Vs	Cod " Her Mix	OT5 PT3 OT5-6 OT3	Spa Spa Ger Can(M)	629 17092 1316	- 48 0	- - 0	631 218	9 0	1 0	70 814	0 0	0 0	4299	688	14	0 144 13033 185	1 348 5 0	100 71 - 0	Log Log Rep Log	94 95 100 1
4W	Cod Flo Her	PT3 DS2 OT5-6	Spa Can(M) Ger	14584 5	98 0	1 0	863 11	32 0	4 0	545	31	5				864 52 156	301 0 0	26 0 0	Log Log Rep	95 2 100
4X	Cod Mix	PT3 OT2	Spa Can(M)	8217 2409	3 81	- 3	473 4209	26 0	5 0	100	0	0	435	127	23	203 2872	54 0	21 0	Log Log	95 1
Subarea 4 Total All Nations				96814 206065	3306	3	6652 41884	73	1	58925 110928	433	1	17008 53204	2863	14	28606 521549	808	3		
5Y	Cod Her	PT3 OT5-6	Spa Ger	152	-	-	230	-	-							120 8376	2 57	2 1	Log Rep	95 100
5Ze	Cod Her " Her "	PT3 OT5-6 OTS141 OTS142	Spa Ger Pol Pol	13598 3 113 21	26 0 3 0	- 0 3 0	1201	65	5	8	0	0	1 0	0 3	0 100	225 60897 11307 17552	227 457 7 400	50 1 - 2	Log Rep Int Int	95 100 33 33
5Zw	Her "	OT5-6 OTS142	Ger Pol	9	3	25				0	2	100	0	2	100	1195 438	5 6	- 1	Rep Int	100 33
5Z NK	Yel	OT1-3	USA	3990	0	0	2583	0	0	31443	5073	14				6310	0	0	Int	13
Subarea 5 Total All Nations				17886 45823	32	-	4014 24952	65	2	8 12830	0	0	31444 78224	5078	14	106420 532192	1161	1		
6A	Yel Her	OT1-3 OTS142	USA Pol	16 3	0 2	0 40				564 0	200 1	26 100				345 2827	0 3	0 -	Int Int	6 33
6B	Her Her	OTS141 OTS142	Pol Pol	102 11	0 2	0 15										7636 2590	300 3	4 -	Int Int	33 33
6C	Her	OTS141	Pol	0	1	100				0	2	100				66	1	1	Int	33
Subarea 6 Total All Nations				132 584	5	4				564 8688	203	26				13464 230210	307	2		
All Sub. Totals All Nations				786278 1438667	10904	1	12777 70310	327	3	76235 1487	2	104829	15328	13		150910	9445	6		

DISCARDS 1969 (Cont'd)

Division	Species	Gear and Tonnage Class	Country	COD			HADDOCK			REDFISH			FLOUNDERS			OTHER			Sou. of Inform- ation	Sampling Rate (%)
				Nominal Catch	Disc-posed	Rate (%)	Nominal Catch	Disc-posed	Rate (%)	Nominal Catch	Disc-posed	Rate (%)	Nominal Catch	Disc-posed	Rate (%)	Nominal Catch	Disc-posed	Rate (%)		
1	AIL	AIL	AIL	128957	597	-				3892	234	6	79	23	23	243	275	53		
2	AIL	AIL	AIL	245859	4841	2				632	111	15	1874	0	0	308	2247	88		
3	AIL	AIL	AIL	296630	2123	1	2080	189	8	12778	709	5	53860	7161	12	1869	4647	71		
4	AIL	AIL	AIL	96814	3306	3	6652	73	1	58925	433	1	17008	2863	14	28606	808	3		
5	AIL	AIL	AIL	17886	32	-	4014	65	2		0	0	31444	5078	14	106420	1161	1		
6	AIL	AIL	AIL	132	5	4				8			564	203	26	13464	307	2		
AIL	AIL	AIL	AIL	786278	10904	1	12746	327	3	76235	1487	2	104829	15328	13	150910	9445	6		
AIL	Total Catch			1438642			72219			220808			300597			1454922				

INDUSTRIAL FISH 1969

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Division	Main Species	Gear and Tonnage Class	Country	COD			HADDOCK			REDFISH			FLOUNDERS			OTHER			Source of Information	Sampling Rate (%)
				Nominal Catch	Dis-posed	Rate (%)	Nominal Catch	Dis-posed	Rate (%)	Nominal Catch	Dis-posed	Rate (%)	Nominal Catch	Dis-posed	Rate (%)	Main Species	Nominal Catch	Dis-posed		
1C	Cod	OT4-6	Ger	12013	502	4			333	46	14	9	0	0	NK	14	29	100	Rep	100
1D	"	"	Ger	27904	1601	6			1019	125	12	26	0	0	Wol	56	68	100	Rep	100
1E	"	"	Ger	28099	564	2			993	102	10	39	0	0	Wol	52	63	100	Rep	100
1F	"	"	Ger	10322	27	-			1541	90	6				Wol	90	28	31	Rep	100
2H	Cod	OT5-6	Ger	11118	209	2			8	15	100	71	0	0	Wol	66	31	47	Rep	100
2J	"	OT5-6	Ger	59899	2210	4			137	99	72	133	0	0	NK	179	250	100	Rep	100
2	Mlx	OT	USSR	130549	0	0			5212	0	0	14228	0	0	Mlx	2637	3726	100	NK	NK
3K	Cod	OT6	Ger	229	-	-			-	-	-				NK	-	-	-	Rep	100
3	Mlx	OT	USSR	56882	0	0			70119	0	0	38329	0	0	Mlx	11769	7996	68	NK	NK
4Vn	Her	OT5-6	Ger						28	0	0				Her	8996	-	-	Rep	100
4Vs	Her	OT5-6	Ger						70	0	0				Her	13033	715	5	Rep	100
4Vs	Her	OTSt6	Pol	13	0	0			6894	0	0				Her	5468	850	16	Log	33
4W	Her	OT5-6	Ger												Her	156	-	-	Rep	100
4	Mlx	OT PT PS	USSR	2783	0	0			235	0	0	12914	0	0	Mlx	127934	12977	100	NK	NK
5Y	Her	OT5-6	Ger												Her	8376	226	3	Rep	100
5Ze	Her	OT5-6	Ger	3	0	0			8	0	0	1	0	0	Her	60897	1679	3	Rep	100
5Ze	Her	OTSt6	Pol	1001	0	0			251	0	0	160	0	0	Her	20411	2800	14	Log	33
"	"	OTSt5	Pol	NK					NK			NK			Her	NK	1920	NK	Log	33
"	"	OTSt4	Pol	21	0	0									Her	17552	715	4	Log	33
5Zw	Her	OT5-6	Ger												Her	1195	11	1	Rep	100
"	"	OTSt6	Pol	152	0	0									Her	3244	950	29	Log	33
"	"	OTSt5	Pol	NK					NK			NK			Her	NK	1300	NK	Log	33
"	"	OTSt4	Pol	9	0	0									Her	438	115	26	Log	33
5	Mlx	OT PT PS	USSR	646	0	0			65	0	0	27419	0	0	Mlx	304755	40447	13	NK	NK
6A	Her	OTSt6	Pol	8	0	0									Her	893	200	22	Log	33
"	"	OTSt4	Pol	3	0	0									Her	2827	200	7	Log	33
6B	"	OTSt6	Pol	2	0	0									Her	987	260	26	Log	33
"	"	OTSt4	Pol	11	0	0									Her	2590	350	14	Log	33
6C	"	OTSt4	Pol												Her	66	10	15	Log	33
2&3	Cod	OTSt6	Por	21733	967	4									NK	NK	458	NK	Log	100
3&4	Cod	OTSt5	Por	57111	638	1									NK	NK	78	NK	Log	100
ALL Totals				420511	6718	2			551	0	0	88570	477	1	93329	0	0			
ALL All Nations				1438642					72219			220808			300597					