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United States Report on Methods of Estimating Discards in 1964

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The estimates of discard by United States vessels in 1964 were based on information from vessel captains questioned at the end of their trips. We thus obtained sufficient information to make an estimate of discard of haddock and yellowtail flounder. The redfish and whiting fleets do not generally discard significant quantities of the species they seek. Small quantities of many other species were discarded but the available data are insufficient for making valid estimates.

Haddock

The procedure used for estimating the amount of haddock discard was as follows: The port interviewer questioned essentially all vessel captains landing haddock in Boston (the major haddock port) concerning the amount of fish they had discarded; from which percentage of discard was estimated. No discard was reported in Division 5Y. For Division 4X only small amounts of discard were recorded. The percentage of discard from 4X on a yearly basis was 0.2.

The quantity of haddock discard from Division 5Y was considerably greater and varied during the year. The percentages of discard by quarter are as follows:

Quarter	Percentage discard
1	0.8
2	4.1
3	2.2
4	5.2

The estimates of total haddock discard reported to ICNAF are made by applying the percentages obtained from the Boston data to the total United States haddock landings.

The discard in 5Z consisted of fish in the 1962 and 1963 year-classes as the following samples indicate:

	M	May		September	
Length in 2 cm	Age 1	Age 2	Age 1	Age 2	
19.5	2	-	-	-	
21.5	7	2	1	-	
23.5	3	-	1	-	
25.5	2	2	2	-	
27.5	2	-	-	-	
29.5	-	2	6	-	
31.5	-	2	7	-	
33.5	-	4	20	5	
35.5	-	4	16	3	
37.5	-	5	5	14	
39.5	-	5	1	13	
41.5	-	-	-	5	
Total	16	-26	59	40	

The average size of discard haddock was 33.5 cm.

In the second quarter of 1965 the fleet apparently fished a concentration of small fish. To the best of our knowledge, these areas were avoided in the third quarter. By the fourth quarter the abundant 1963 year-class became available in such a quantity as to cause the amount of discard to increase.

(over)

Yellowtail flounder

The procedure for estimating the percentage of yellowtail flounder discarded differs somewhat from that used for haddock. New Bedford is the major U.S. yellowtail flounder port. Interviewers in that port questioned only a portion of the vessel captains concerning the amount of yellowtail flounder discarded, and estimates of the percentages of yellowtail discarded are based only on those boats. For ICNAF reporting, these New Bedford percentages were applied to the total U.S. yellowtail landings.

The estimated percentages by quarters are as follows:

Quarter	Percentage discard
1	26,6
2	34.2
3	44.4
4	18.8

The larger discard in the third quarter indicates a good incoming yearclass. By the fourth quarter these fish were larger and the discard percentage consequently was less. No samples were available for estimating age and size distribution.