

AGE-LENGTH-FREQUENCY DISTRIBUTIONS OF DOVER SOLE (MICROSTOMAS PACIFICUS)

LANDED IN OREGON IN 1948 AND 1951-65 FROM PMFC AREA 2D

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AGE-LENGTH-FREQUENCY DISTRIBUTIONS OF DOVER SOLE (MIGROSTOMAS PACIFICUS)  
LANDED IN OREGON IN 1948 AND 1951-65 FROM PMFC AREA 2D

INTRODUCTION

This report supplements an earlier report (Demory and Bailey, 1967) of data collected under a market sampling program by the Oregon Fish Commission since 1948.

Data are limited to Pacific Marine Fisheries Commission Area 2D (Figure 1). There are three reasons for this: (1) Astoria is the major port of landing for Dover sole (Microstomas pacificus), (2) the Astoria fleet expends little effort on Dover sole outside PMFC Area 2D, and (3) Astoria is the location of research personnel. The data cover only the period from June through September of each year.

Data were tabulated to the nearest lower centimeter even though some data were recorded by millimeter and one-half centimeter intervals. Thus, mean lengths shown are estimates of mean length at the half centimeter interval.

Age determinations for years 1948 and 1951-56 were made from otoliths. Age determinations for years 1957-65 were made from scales.

Tables 1-32 show by year and sex the age-length-frequency distribution of Dover sole landed from PMFC Area 2D.

ACKNOWLEDGMENTS

Otolith readings were made by Fish Commission personnel, mainly Dr. George Y. Harry, Jr. and Mr. Sigurd J. Westrheim. Scale readings in 1957-59 were made by Mr. Ray Morgan.<sup>1/</sup> Scale readings for years 1960-65 were made by the author.

Tabulation and publication of these data were made possible through funds supplied by the Commercial Fisheries Research and Development Act of 1964

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<sup>1/</sup> Deceased.

(PL 88-309), Bureau of Commercial Fisheries Contracts 14-17-0007-314 and 14-17-0007-478.

#### LITERATURE CITED

Demory, R. L. and H. A. Bailey. 1967. Length-frequency and age-length-frequency distributions for Dover sole, English sole, petrale sole and Pacific ocean perch landed in Oregon 1948-65. Investigational Report No. 6. Fish Comm. of Oregon. 53 p.

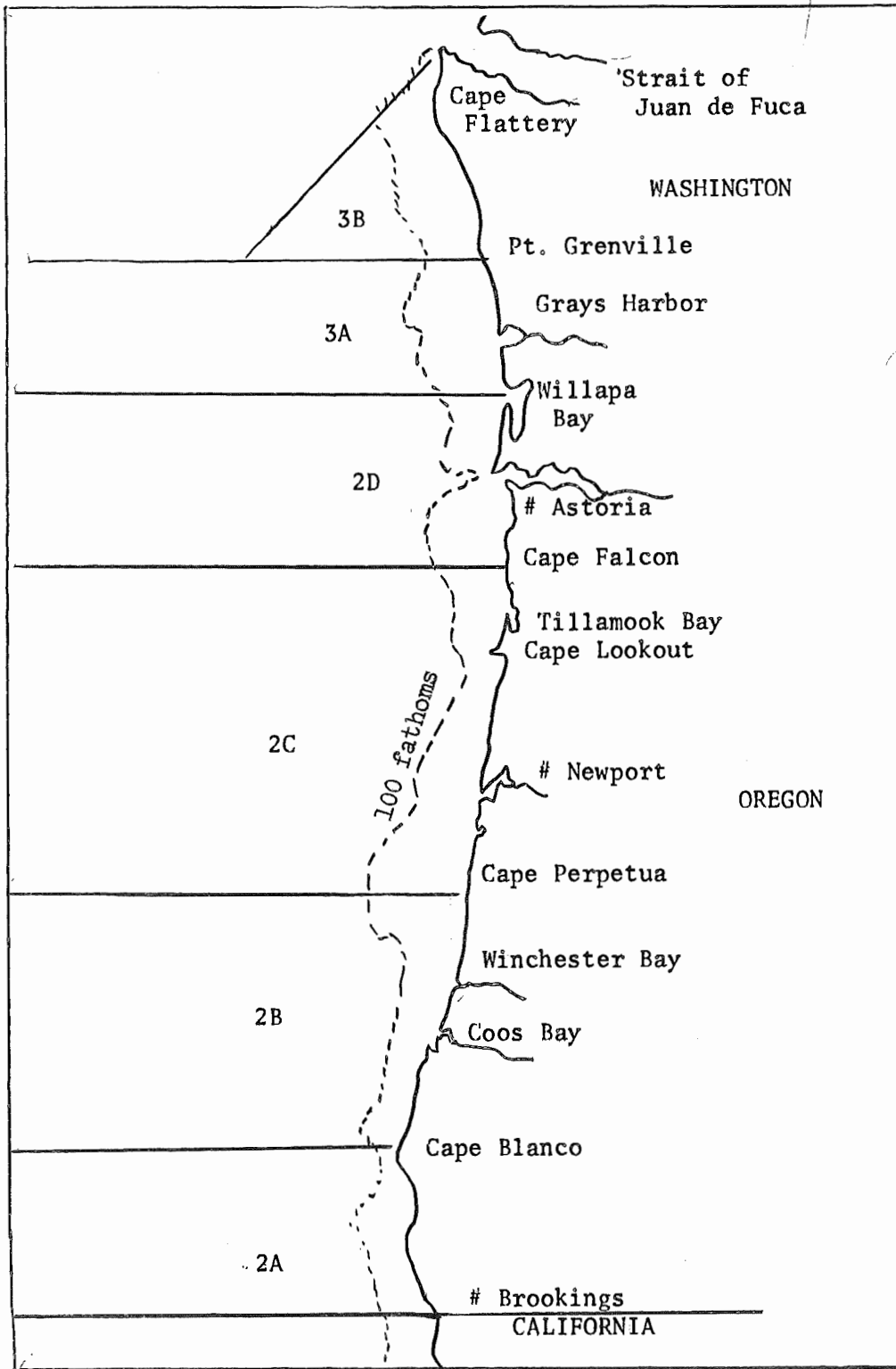


Figure 1. Pacific Marine Fisheries Commission statistical catch areas for the trawl fishery.

Table 1. Age-length frequency distribution of male Dover sole, 1948.

Age	5	6	7	8	9	10	11	12	13	14	15		
Year class	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933		
Length (cm)												No.	Per cent
31	1		1									2	0.9
32													
33	2	3	1									6	2.8
34	2	6	1	1								10	4.7
35	1	8	4	1	1							15	7.0
36	3	8	7		1							19	8.9
37	1	11	7									19	8.9
38		6	5	2		1						14	6.6
39	1	8	9	5								23	10.8
40		5	5	6	2		1					19	8.9
41		1	3	5	4	1						14	6.6
42		1	6	2	4	2				1		16	7.5
43		1	1	4	4	3				1		14	6.6
44			1	4	5		2	1				13	6.1
45		1	2	3	1	2		1				10	4.7
46				1	1	1	1					4	1.9
47				4		3		1				8	3.8
48				1			3					4	1.9
49					1			1				2	0.9
50											1	1	0.5
No.	11	59	53	39	24	13	7	4		2	1	213	
Per cent	5.2	27.7	24.9	18.3	11.3	6.1	3.3	1.9		0.9	0.5		100.0
Average length	34.9	37.1	38.5	41.9	42.3	43.8	45.4	46.3		42.5	50.0	39.8	

Average age of sample = 7.7 years.

Average length of sample = 39.8 cm.



Table 2. Age-length frequency distribution of female Dover sole, 1948.

Age	4	5	6	7	8	9	10	11	12	13	14	15	16		
Year class	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932		
Length (cm)														No.	Per cent
32				1										1	0.3
33			2											2	0.7
34	1	1	2											4	1.4
35		2	3											5	1.7
36		2	7	3										12	4.2
37		2	6	6	2									16	5.6
38		2	10	1	1	1								15	5.2
39		2	3	4	3	2								14	4.9
40			4	5	2	1								12	4.2
41		1	3	5	4			1						14	4.9
42		1	3	10	7		1		1					23	8.0
43			2	6	8	1				1				18	6.3
44			2	7	9	7								25	8.7
45			4		3	2								9	3.1
46				4	7	3		1	1					16	5.6
47				3	3	3	1							10	3.5
48					1	6	4	2						13	4.5
49						5		1						6	2.1
50					2	1	4	2			1		1	11	3.8
51						1	3		1	1				6	2.1
52						1	1	3	1	1				7	2.4
53				1	1	2	1	1	1		2	1		9	3.1
54						1		3	2					6	2.1
55							2	1	1	2		2	1	9	3.1
56						1	1	1	3	1				6	2.1
57							2	1	1	2	1	1		8	2.8
58								1	2	1				4	1.4
59										2		1		3	1.0
60															
61										1	1			2	0.7
No.	1	13	51	55	53	37	21	17	11	14	6	5	2	286	
Per cent	0.3	4.5	17.8	19.2	18.5	12.9	7.3	5.9	3.8	4.9	2.1	1.7	0.7		99.5
Average length	34.0	37.5	38.7	41.3	43.5	46.6	51.0	51.4	52.7	55.4	55.0	55.8	52.5	44.8	

Average age of sample = 8.5 years.

Average length of sample = 44.8 cm.

Table 3. Age-length frequency distribution of male Dover sole, 1951.

Age	3	4	5	6	7	8	9	10	11	12	13	14	15	No.	Per cent
Year class	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936		
Length (cm)														No.	Per cent
28		1												1	0.3
29															
30															
31					1									1	0.3
32	1		2		1	1								5	1.3
33	1		8	1	4		2							16	4.1
34		1	2	6	5	2	1							17	4.3
35			5	7	9	7	4	2						34	8.6
36			2	7	14	3	7		2		1			36	9.1
37			2	5	6	13	8	5	2	1				42	10.6
38			1	11	12	11	8	1	2					46	11.6
39				4	8	8	10	7	2	1				40	10.1
40			1	4	8	3	10	3	3	3				35	8.9
41			1	1	5	6	6	5	3					27	6.8
42						7	4	1	1	2	1			16	4.1
43					2	2	3	5	2		2		1	17	4.3
44					2	2	6	7	3	1	1	1		23	5.8
45				1	1	1	3	2	3	2	1	1		15	3.8
46					1		2	1	1	2	3			10	2.5
47					2		1	2		1				6	1.5
48							1			1	1			3	0.8
49						1	1							2	0.5
50								1			1			2	0.5
51															
52															
53									1					1	0.3
No.	2	2	24	47	81	67	77	42	25	14	11	2	1	395	
Per cent	0.5	0.5	6.1	11.9	20.5	17.0	19.5	10.6	6.3	3.5	2.8	0.5	0.3		100.1

Average length 32.5 31.0 34.8 37.0 37.8 38.7 39.7 41.4 41.5 42.9 44.5 44.5 43.0 39.0

Average age of sample = 8.3 years.

Average length of sample = 39.0 cm.

Table 4. Age-length frequency distribution of female Dover sole, 1951.

Age	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17				
Year class	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934				
Length (cm)																No.	Per cent		
31			1														1	0.2	
32			1	1		1											3	0.7	
33				1		1											2	0.4	
34	1		2	1	3		2										9	2.0	
35			3	3	1	2	2	1									12	2.6	
36		1	4	4	5	5		1									20	4.4	
37			5	4	10	5	3	1									28	6.1	
38		1	2	4	7	4	1	2									21	4.6	
39		1	2	5	7	2	7	1									25	5.4	
40			1	2	4	4	5	3									19	4.1	
41			1	2	8	7	4	2	2				1				27	5.9	
42			1	2	9	9	8	6	3	2	1						41	8.9	
43			1	2	9	1	4	2	5	3	3						30	6.5	
44				1	5	6	6	3	1								22	4.8	
45			1	2	3	7	11	3	2								29	6.3	
46			1	1	2	4	7	5	7	3	1	1					32	7.0	
47				2	1	4	7	8	7			1		1	1		32	7.0	
48						2	1	5	2	3	1	2					16	3.5	
49							3	7	6	2	1	1					20	4.4	
50					1		2	1	5				3				12	2.6	
51					3			1	1			1			1		7	1.5	
52						1				3	1	2					7	1.5	
53								1	5	1	2		1				10	2.2	
54								3		3	2	2		2	1		13	2.8	
55									1	1			2				4	0.9	
56										3	3		2				8	1.7	
57										1	1	1	1				4	0.9	
58								1	1		1						3	0.7	
59																			
60									1								1	0.2	
61																			
62																			
63																			
64										1							1	0.2	
No.	1	3	26	35	77	61	69	65	49	29	17	12	10	4	1	459			
Per cent	0.2	0.7	5.7	7.6	16.8	13.3	15.0	14.2	10.7	6.3	3.7	2.6	2.2	0.9	0.2	100.0			
Average length	34.0	37.7	37.5	38.8	40.7	41.3	42.9	45.4	47.7	49.7	50.8	49.9	52.9	51.5	54.0	43.7			

Average age of sample = 9.1 years.  
Average length of sample = 43.7 cm.

Table 5. Age-length distribution of male Dover sole, 1952.

Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	No.	Per cent
Year class	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934		
Length (cm)																No.	Per cent
30	1		1													2	0.5
31		1	3	2												6	1.6
32		2	1		1											4	1.1
33		2	5		3	1										11	2.9
34		2	10	1	1	2										16	4.3
35	1	9	10	6	4	2	2	1								35	9.4
36		1	10	10	8	4	1									34	9.1
37			4	11	7	3	2	2								29	7.8
38		4	2	15	7	12	4	3								47	12.6
39		1	1	5	8	14	9	3	1							42	11.2
40			2	3	7	8	5	3	2	1						31	8.3
41			1		5	6	9	4	3	2		2				32	8.6
42				2	2	5	4	8	3	1						25	6.7
43			1				1	2	4	1						9	2.4
44			1			3	5	2	2		1			1		15	4.0
45				1		3		2	4	1		1				12	3.2
46					1		4	1		1	1	1	1			10	2.7
47						3							1			4	1.1
48										1		1				2	0.5
49								1	1						1	3	0.8
50							1	2		1						4	1.1
51												1				1	0.3
No.	2	22	52	56	54	66	47	34	20	9	2	7	2		1	374	
Per cent	0.5	5.9	13.9	15.0	14.4	17.6	12.6	9.1	5.3	2.4	0.5	1.9	0.5		0.3	100.2	
Average length	32.5	35.0	35.4	37.3	37.9	39.6	40.8	41.7	42.9	44.0	45.0	45.8	45.0		49.0	38.9	

Average age of sample = 8.6 years.

Average length of sample = 38.9 cm.

Table 6. Age-length distribution of female Dover sole, 1952

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Per	
Year class	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	No.	cent
Length (cm)																				
31	1																		1	0.2
32	1	2	2																5	1.0
33		2	2	2															6	1.2
34	7	10	3	4			1												25	4.8
35	6	5	3		3														17	3.3
36	7	10	7	5	1		1												31	6.0
37	4	15	12	4	4		2												41	7.9
38	5	9	4	10	5	2													35	6.8
39	2	10	3	10	3	4	3												35	6.8
40	2	3	6	9	3	5	1	1											30	5.8
41			5	8	4		1	2											20	3.9
42		2	3	7	5	11	7	4	1	2									42	8.1
43	1		3	2	6	4	5	2	1		1	1							26	5.0
44			4	7	6	4	10	3			1								35	6.8
45		1		3	6	3	7	1	1										22	4.3
46		2			1	4	5	5			2		1						20	3.9
47				2	6	3	4	1	1	1	2				1				21	4.1
48		1		1	2	1	3	4	1	1	2								16	3.1
49		1			2	5	4	3	1	1							1		18	3.5
50						3	3	2	2	2	1				1				15	2.9
51						1	3	2	4	2	1	3							16	3.1
52						1	1	1	3	1									8	1.5
53									2	2	1								5	1.0
54							1	2	1	2	1	1							8	1.5
55						1				1		1	1						4	0.8
56									1			2						1	4	0.8
57									1										1	0.2
58							1			2	1								4	0.8
59								1									1		2	0.4
60						1						2	1						4	0.8
No.	36	73	57	74	57	52	63	34	20	17	13	10	5		2	2	1	517		
Per cent	7.0	14.1	11.0	14.3	11.0	10.3	12.2	6.6	3.9	3.3	2.5	1.9	1.0		0.4	0.4	0.2	100.3		

Average

length 36.2 37.4 38.2 39.9 42.2 44.6 44.9 46.8 50.4 51.0 48.8 53.7 52.6 48.5 54.0 56.0 42.4

Average age of sample = 9.3 years.

Average length of sample = 42.4 cm.

Table 7. Age-length frequency distribution of male Dover sole, 1953.

Age	4	5	6	7	8	9	10	11	12	12+			
Year class	1949	1948	1947	1946	1945	1944	1943	1942	1941				
Length (cm)											No.	Per cent	
30		2	2		1						5	1.0	
31	2			1							3	0.6	
32		1		4	2	1					8	1.6	
33		1	1	7	5						14	2.8	
34		1	4	8	3	1				2	19	3.8	
35	1	2	9	9	5	6	5	2	1		40	8.1	
36		4	3	3	9	8	7	3	2	2	41	8.3	
37		1	4	8	5	8	4	3	2	1	36	7.3	
38		1	5	9	15	13	7	2	2	2	56	11.3	
39			2	3	4	9	4	8	4	6	40	8.1	
40			1	8	3	8	6	5	6	14	51	10.3	
41				1	4	3	5	4	2	18	37	7.5	
42				1			4	5	1	1	16	28	5.7
43					1	5	10	4		19	39	7.9	
44					1	3	1		1	19	25	5.1	
45				1			3	1		8	13	2.6	
46								2		8	10	2.0	
47					1		1	1	1	10	14	2.8	
48								3	1	5	9	1.8	
49										3	3	0.6	
50										2	2	0.6	
51										1	1	0.2	
52													
53										1	1	0.2	
No.	3	13	31	63	59	69	58	39	23	137	495		
Per cent	0.6	2.6	6.3	12.7	11.9	13.9	11.7	7.9	4.6	27.7		100.2	
Average length	32.3	34.5	35.7	36.3	37.1	38.6	39.8	40.6	39.8	43.1	39.4		

Average age of sample = 9.5 years.

Average length of sample = 39.4 cm.

Table 8. Age-length frequency distribution of female Dover sole, 1953.

Age Year class Length (cm)	3 1950	4 1949	5 1948	6 1947	7 1946	8 1945	9 1944	10 1943	11 1942	12 1941	12+	No.	Per cent
31	1			1	1							3	0.5
32													
33			1	1	1	1						4	0.7
34		1	1	1	6	1						10	1.7
35		1	1	4	5	5	2					18	3.0
36			4	3	8	7	2		1			25	4.1
37			2	5	6	8	1					22	3.6
38			2	6	10	11		2	1	1	1	34	5.6
39			2	4	11	6	3	2	1		3	32	5.3
40				4	9	6	8	5	1		4	37	6.1
41				3	3	6	9	9	3	1	1	35	5.8
42					6	10	10	5		1	5	37	6.1
43					4	3		2	7	6	4	26	4.3
44					2	1	6	5	10	2	6	32	5.3
45						2	3	4	6	3	10	28	4.6
46				2	1	1	4	5	4	6	9	32	5.3
47					1		3	2	4	6	14	30	5.0
48					2		1		5	5	16	29	4.8
49							3		6	2	22	33	5.5
50							1		2	3	14	20	3.3
51									1	3	17	21	3.5
52				1						1	17	19	3.2
53											18	18	3.0
54											12	12	2.0
55											13	13	2.2
56											10	10	1.7
57										1	8	9	1.5
58											10	10	1.7
59													
60													
61											2	2	0.3
62											1	1	0.2
63											1	1	0.2
No.	1	2	13	35	76	68	56	41	52	41	218	603	
Per cent	0.2	0.3	2.2	5.8	12.6	11.3	9.3	6.8	8.6	6.8	36.1		99.9
Average length	31.0	34.5	36.5	38.3	38.8	39.1	42.4	42.5	45.1	46.6	50.5	44.6	

Average age of sample = 9.9 years.

Average length of sample = 44.6 cm.

Table 9. Age-length frequency distribution of male Dover sole, 1954.

Age	4	5	6	7	8	9	10	11	12	12+		
Year class	1950	1949	1948	1947	1946	1945	1944	1943	1942			
Length (cm)											No.	Per cent
32	1		1	2							4	1.7
33	1	1	1	1	1	1				1	7	3.0
34	1	4	2	7	2						16	6.9
35	1	2	4	6	3	2					18	7.7
36			7	6	3	2					18	7.7
37		3	2	9	4	1	2	1			22	9.4
38		1	2	7	8	3	1				22	9.4
39			2	4	5	2	1	3		1	18	7.7
40		2	1	2	8	2	2	2	3	2	24	10.3
41			2	1	3	6	2	1	1	2	18	7.7
42						3	2	1	4	3	13	5.6
43				1		2	1				4	1.7
44					1	1	4	3		3	12	5.2
45									1	6	7	3.0
46					1				1	6	8	3.4
47										4	4	1.7
48										8	8	3.4
49				1						2	3	1.3
50						1		1		2	4	1.7
51										2	2	0.9
52												
53										1	1	0.4
No.	4	13	24	47	39	26	15	12	10	43	233	
Per cent	1.7	5.6	10.3	20.2	16.7	11.2	6.4	5.2	4.3	18.5		99.8
Average length	33.5	36.0	36.5	36.8	38.3	39.8	41.1	41.6	42.0	45.7	39.6	

Average age of sample = 8.7 years.  
Average length of sample = 39.6 cm.



Table 10. Age-length frequency distribution of female Dover sole, 1954.

Age	4	5	6	7	8	9	10	11	12	12+		
Year class	1950	1949	1948	1947	1946	1945	1944	1943	1942		No.	Per cent
Length (cm)												
29	1										1	0.2
30												
31												
32		2	2	1	1						6	1.2
33	2	1	1								4	0.8
34	1	1	2	2							6	1.2
35	1	4	2	2	2						11	2.3
36	2	3	4	4	2				1		16	3.3
37			2	3	4	1					10	2.1
38	1	3	1	5	10	1	1				22	4.6
39		1	1	6	7	2		1			18	3.7
40			5	12	7	2	1				27	5.6
41			2	8	9	5	3	1	1		29	6.0
42			1	6	8	1	3	2		1	22	4.6
43			1	7	13	4	4	8	1		38	7.9
44			1	2	5	7	5	1	3	2	26	5.4
45			1	2	1	5	4	4	5	3	25	5.2
46				2	3	4	8	3	7	5	32	6.7
47			1	1		3	10	4	7	5	31	6.4
48			1	4	1	1	3	6	5	9	30	6.2
49				1		2	3	3	3	11	23	4.8
50							4	1	2	13	20	4.2
51					1			3	2	14	20	4.2
52							1			9	10	2.1
53								1		6	7	1.5
54										11	11	2.3
55								1		10	11	2.3
56										9	9	1.9
57							1		1	5	7	1.5
58										3	3	0.6
59										2	2	0.4
60										2	2	0.4
61										2	2	0.4
No.	8	15	28	68	74	38	51	39	38	122	481	
Per cent	1.7	3.1	5.8	14.1	15.4	7.9	10.6	8.1	7.9	25.4		100.0
Average length	34.3	35.5	38.6	40.7	40.8	43.6	45.8	46.3	46.7	51.8	44.8	

Average age of sample = 9.4 years.

Average length of sample = 44.8 cm.

Table 11. Age-length frequency distribution of male Dover sole, 1955.

Age	5	6	7	8	9	10	11	12	12+		
Year class	1950	1949	1948	1947	1946	1945	1944	1943			
Length (cm)										No.	Per cent
30		1								1	0.3
31	1		1							2	0.7
32			2							2	0.7
33	2		1							3	1.0
34		2	1	2	1					6	2.0
35			3	2	5		1			11	3.7
36	1	2	4	4	2	2				15	5.1
37		6	11	8	2	4	5	2		38	12.9
38	1	1		3	6	6	1	1	4	27	9.2
39		1	4	5	8	3	3	1	4	29	9.9
40			5	3	4	2	4	1	6	25	8.5
41	1			3	4	3	6	1	12	30	10.2
42					4	2	6		13	25	8.5
43						1	2	2	18	23	7.8
44					1		2	1	11	15	5.1
45						1	1		13	15	5.1
46									9	9	3.1
47							1		7	8	2.7
48									6	6	2.0
49											
50									3	3	1.0
51											
52									1	1	0.3
No.	6	13	36	30	37	24	32	9	107	294	
Per cent	2.0	4.4	12.2	10.2	12.6	8.2	10.9	3.1	36.4		99.8
Average length	35.3	36.1	36.8	37.7	38.7	39.2	40.6	40.2	43.6	40.2	
Average age of sample = 9.9 years.											
Average length of sample = 40.2 cm.											

Table 12. Age-length frequency distribution of female Dover sole, 1955.

Age	4	5	6	7	8	9	10	11	12	12+	No.	Per cent
Year class	1951	1950	1949	1948	1947	1946	1945	1944	1943			
Length (cm)											No.	Per cent
30												
31												
32		1		1							2	0.3
33	1					1					2	0.3
34		1			2						3	0.5
35		2	5	1		2					8	1.4
36		3	3	2	3	2					13	2.2
37		4	6		1	1	1				13	2.2
38		1	3	5	9	7	1	2			28	4.8
39		1	7	6	14	8	2		1	2	41	7.0
40			2	5	13	4	10	1	3	1	39	6.7
41		1	2	3	11	15	2	4	1	3	42	7.2
42			2	3	6	10	5	4	3	4	37	6.3
43			1	2	9	11	8	6	2	8	47	8.0
44			1		13	12	8	4	4	12	54	9.2
45		1		1	5	7	6	5	1	11	37	6.3
46				1	4	5	6	2	3	16	37	6.3
47				1	2		4	3	3	18	31	5.3
48					1	1	2	6	1	18	29	5.0
49						1	2	3	3	18	27	4.6
50							4	1	2	21	28	4.8
51								1		12	13	2.2
52										6	6	1.0
53										9	9	1.5
54										10	10	1.7
55										7	7	1.2
56										4	4	0.7
57										5	5	0.9
58										6	6	1.0
59										2	2	0.3
60										4	4	0.7
61												
62												
63										1	1	0.2
No.	1	15	32	31	93	85	61	42	27	198	585	
Per cent	0.2	2.6	5.5	5.3	15.9	14.5	10.4	7.2	4.6	33.9		99.8
Average length	33.0	37.0	38.3	39.9	41.2	41.9	43.8	44.7	44.7	49.3	44.2	

Average age of sample = 9.9 years.

Average length of sample = 44.4 cm.

Table 13. Age-length frequency distribution of male Dover sole, 1956.

Age	4	5	6	7	8	9	10	11	12	12+		
Year class	1952	1951	1950	1949	1948	1947	1946	1945	1944			
Length (cm)											No.	Per cent
30												
31												
32		1				1					2	0.8
33		2		1	3	1	1				8	3.3
34				1	1		1				3	1.3
35		1	5	5	4	1					16	6.7
36		1	5	7	4	4	1	1			23	9.6
37		1		1	4	4	2	1	1	3	17	7.1
38				5	1	3	5	1		3	18	7.5
39			1		5	4	3	3	3	1	20	8.4
40					4	10	1	3	3	5	26	10.9
41	1			1	1	4	2	5	4	9	27	11.3
42					3	2	5	3	1	10	24	10.0
43							2	3	1	4	10	4.2
44					1	1	1	1	1	3	8	3.3
45								1	1	5	7	2.9
46										12	12	5.0
47										4	4	1.7
48					1			1	1	2	5	2.1
49										3	3	1.3
50										3	3	1.3
51										2	2	0.8
52										1	1	0.4
No.	1	6	11	21	32	35	24	23	16	70	239	
Per cent	0.4	2.5	4.6	8.8	13.4	14.6	10.0	9.6	6.7	29.3		99.9
Average length	41.0	34.3	35.8	36.3	38.0	39.7	39.4	41.1	41.3	43.8	40.1	
Average age of sample = 9.8 years.												
Average length of sample = 40.1 cm.												

Table 14. Age-length frequency distribution of female Dover sole, 1956.

Age	5	6	7	8	9	10	11	12	12+		
Year class	1951	1950	1949	1948	1947	1946	1945	1944			
Length (cm)										No.	Per cent
27	1									1	0.3
28											
29											
30											
31											
32	1									1	0.3
33	2									2	0.6
34	2	3	1							6	1.9
35	2	1		1		1				5	1.6
36	1	3	1	3	2					10	3.2
37	6	5	1	4	4	1				21	6.8
38		2	5	2	6	7	1			23	7.4
39	1	2	2	3	4	4	2		1	19	6.1
40	1	2	2	4	5	3		1		18	5.8
41		1	4	4	1	2			1	13	4.2
42		1	4		4	2	3	2		16	5.2
43				2	12	8	2	1	3	28	9.1
44		1			2	9		3	1	16	5.2
45					7		3	3	3	16	5.2
46					3	2	3	3	8	19	6.1
47					3	2		1	8	14	4.5
48					1	3	1	2	7	14	4.5
49					1		2	2	11	16	5.2
50						1	1	1	6	9	2.9
51							1		3	4	1.3
52						1	2		7	10	3.2
53								1	3	4	1.3
54						1			9	10	3.2
55									3	3	1.0
56							1		3	4	1.3
57									1	1	0.3
58									4	4	1.3
59									1	1	0.3
60									1	1	0.3
No.	17	21	20	23	55	47	22	20	84	309	
Per cent	5.5	6.8	6.5	7.4	17.8	15.2	7.1	6.5	27.2		99.9
Average length	35.3	37.7	39.4	38.9	42.0	42.7	45.8	45.8	50.1	43.8	

Average age of sample = 9.7 years.

Average length of sample = 43.8 cm.

Table 15. Age-length frequency distribution of male Dover sole, 1957.

Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Year class	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939		
Length (cm)																No.	Per cent
30																	
31																	
32																	
33																	
34				3	2	1			1							7	4.0
35			1		5	1	1	1								9	5.2
36	1		1	1	2	2	1	1	2							11	6.3
37		1		2	5	6	2	2	1	2		2				23	13.2
38				1	6	2	3	2			1					15	8.6
39				1	1	2	4	5		3	1	2				19	10.9
40				4	2	2	3	1	4		1			1		18	10.3
41						2	1	1	4	1	1					10	5.7
42						2	5	3	1	1	2	1	1		1	17	9.8
43					1	3	4		3	2	1	1	2	1		18	10.3
44					1		1	1								3	1.7
45						3	2	1	1	1		2				10	5.7
46							1							2	1	4	2.3
47						1	1			1						3	1.7
48							1	1	1	1						4	2.3
49																	
50																	
51													1			1	0.6
52													1			1	0.6
53																	
54										1						1	0.6
No.	1	1	2	12	25	27	30	19	18	13	7	10	4	3	2	174	
Per cent	0.6	0.6	1.2	6.9	14.4	15.5	17.2	10.9	10.3	7.5	4.0	5.7	2.3	1.7	1.2		99.8
Average length	36.0	37.0	35.5	37.4	37.4	39.8	41.1	40.0	40.6	42.6	40.7	43.0	42.0	45.0	44.0		40.1

Average age of sample = 10.6 years  
Average length of sample = 40.1 cm.

Table 16. Age-length frequency distribution of female Dover sole, 1957.

Age	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Per No.	Per cent	
Year class	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932			
Length (cm)																							
29				1																	1	0.4	
30																							
31																							
32																							
33																							
34	1				1	1																3	1.1
35		1																				1	0.4
36		2	1	1		1																5	1.8
37	1	3		1	1		1															7	2.6
38		3	1	3	1	3		1														12	4.4
39	1	1	2	3	2	1	1		2													13	4.7
40	1	4	3	6	2	4	2															22	8.0
41		4	3	2	6	2	3	3	1													24	8.6
42			2	4	4	7	7	1	1		2											28	10.2
43	1		2	3	2	2	4	2	2		2	1										21	7.7
44			3	3	2	5	3	2			1											19	6.9
45					4	5	2	4	1													16	5.8
46				1	1	2	4	3														11	4.0
47				1	2	4	3	3		1	1			1								16	5.8
48					3	1	4	4	1		1			1								15	5.5
49				1	2		1	2	3				1									10	3.6
50						1		3	5	1												10	3.6
51					1	1	1	1	1	1		1										6	2.2
52					1		1		1				1									4	1.5
53										1	1	1	1								1	5	1.8
54								1	1	1				1							1	5	1.8
55									1	1			1		2						1	6	2.2
56											1											2	0.7
57									1			1		2	1							5	1.8
58								1														1	0.4
59											1											1	0.4
60							1									2	1					4	1.5
61															1							1	0.4
No.	5	18	17	30	35	40	38	30	21	6	10	6	3	4	4	2	4				1	274	
Per cent	1.8	6.6	6.2	10.9	12.8	14.6	13.9	10.9	7.7	2.2	3.6	2.2	1.1	1.5	1.5	0.7	1.5				0.4	99.8	

Average

length 38.6 38.6 41.0 40.9 43.4 43.0 44.6 46.3 47.9 51.7 47.7 50.8 52.0 53.8 57.0 60.0 56.0

55.0 44.6

Average age of sample = 11.7 years.

Average length of sample = 44.6 cm

Table 17. Age-length frequency distribution of male Dover sole, 1958.

Age	5	6	7	8	9	10	11	12	13	14	15	16	17		
Year class	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941		
Length (cm)														No.	Per cent
27	1													1	0.8
28															
29															
30				1										1	0.8
31	1													1	0.8
32															
33		1	1			1								3	2.5
34		3												3	2.5
35	1		1		3	2								7	5.8
36		2	3		2		2	1						10	8.3
37	1		6	2	3	2								14	11.7
38		1	1	5	4	2		1					1	15	12.5
39			3	2	4	3	2	1	2					17	14.2
40				2	2	3	2	2	2					13	10.8
41			1	2		4	2							9	7.5
42					3		1	1				1		6	5.0
43				1	1		2							4	3.3
44										1				1	0.8
45					2				1	1				4	3.3
46						1	1		1					3	2.5
47		1							1					2	1.7
48											1			1	0.8
49						1		1						2	1.7
50												1		1	0.8
51															
52															
53															
54															
55									1					1	0.8
56															
57									1					1	0.8
No.	4	8	16	15	24	19	12	7	9	2	1	1	2	120	
Per cent	3.3	6.7	13.3	12.5	20.0	15.8	10.0	5.8	7.5	1.7	0.8	0.8	1.7		99.7
Average length	32.5	36.5	37.1	38.5	39.0	39.4	40.5	40.6	45.3	44.5	48.0	42.0	44.0	39.4	

Average age of sample = 9.4 years.

Average length of sample = 39.4 cm.



Table 18. Age-length frequency distribution of female Dover sole, 1958.

Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		Per cent		
Year class	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936				
Length (cm)																					No.	Per cent	
31		1																			1	0.4	
32		1																			1	0.4	
33			2	1				1													4	1.8	
34			1	1				1													3	1.3	
35			1	1	1	3															6	2.6	
36		1	1	3	2	3	3				1										14	6.1	
37	1		1		6	1		4	2												15	6.6	
38				4	3	2	1	1	1		1										13	5.7	
39			2	1	3	4		2	1												13	5.7	
40			1	2	6	6	5	5	2			1									28	12.3	
41			1	3	3	1	1	3	2		1										15	6.6	
42			1	2	2	2	1	5	4	1											18	7.9	
43				3					2	4		3	1								13	5.7	
44						5	1	2		2		1	1								12	5.3	
45				1	2	2			2	1		1									9	3.9	
46						1			2	3			1								7	3.1	
47							1	2	2		2	1									8	3.5	
48				1	4		1	2	2	1	1	1	1	1	1						14	6.1	
49									1		1	2	1								5	2.2	
50							2				1		1								4	1.8	
51						1	1	1		1		2		1							7	3.1	
52									2	2	1										5	2.2	
53									1			2								1	4	1.8	
54											2	1				1					4	1.8	
55																							
56																							
57						1											1				2	0.9	
58												1									1	0.4	
59																1					1	0.4	
60																							
61																							
62																							
63																				1		1	0.4
No.	1	3	11	23	32	32	19	31	29	8	14	14	5	2		3				1	228		
Per cent	0.4	1.3	4.8	10.1	14.0	14.0	8.3	13.6	12.7	3.5	6.1	6.1	2.2	0.9		1.3				0.4		100.0	
Average length	37.0	33.0	37.2	39.6	40.3	41.0	41.4	42.1	44.0	47.3	46.1	48.9	47.4	57.0		56.7				53.0	42.6		

Average age of sample = 10.4 years.

Average length of sample = 42.6 cm.

Table 19. Age-length frequency distribution of male Dover sole, 1959.

Age	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	No.	Per cent
Year class	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938		
Length (cm)																		
30																		
31																		
32																		
33		2															2	1.4
34		2															2	1.4
35	2		3	1	1												7	4.9
36		4	4	1	1	1											11	7.7
37	1	3	5	6	1	1											17	11.9
38	2	1	2		2	1											8	5.6
39	1	6	1	4	4	2		2	1								21	14.7
40	1	1	3	6	1	6		1									19	13.3
41		1	2	1	4	2	3		1								14	9.8
42			3	1	2	3	3	1	1								14	9.8
43		1	2	2	4	1	1										11	7.7
44			1	1		3	2	1		1							9	6.3
45					1				1								2	1.4
46				1		1			1				1				4	2.8
47																		
48																1	1	0.7
49																		
50							1										1	0.7
No.	7	21	26	24	21	21	10	5	5	1						1	143	
Per cent	4.9	14.7	18.2	16.8	14.7	14.7	7.0	3.5	3.5	0.7						0.7		100.1
Average length	37.4	37.4	38.7	39.5	40.2	40.9	43.0	40.8	42.6	44.0		46.0				48.0	39.8	

Average age of sample = 9.5 years.  
 Average length of sample = 39.8 cm.

Table 20. Age-length frequency distribution of female Dover sole, 1959.

Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		Per		
Y.C.	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935		No.	cent	
L.																									
(cm)																									
30																									
31				1																			1	0.3	
32																									
33																									
34							2																2	0.7	
35			3	1	1			1															6	2.0	
36			3	2	5	2		1	1														14	4.6	
37				2	4	2		1															9	3.0	
38			2	3	11	7	3	2															28	9.2	
39		1	1	8	4	3	3	1	1	1													23	7.6	
40			2	2	4	3	7	2															20	6.6	
41	1		1	3	7	3	3	1	2	1	1												23	7.6	
42				3	4	11		1	4				1										24	7.9	
43					3	5			2	2		1											13	4.3	
44					4	5	3			1		1											14	4.6	
45						3	1	3		2	1	1			1								12	3.9	
46					2	3		4	1		3	1											14	4.6	
47					3	2	5	4	6	1	1	3	2										27	8.9	
48					1	2		1	1	1	2	2	3	1									14	4.6	
49								1	1	1	1	1	2	1			1						9	3.0	
50								1	1		2	1											5	1.6	
51									1		1				1								3	1.0	
52							1			1		2	2		1								7	2.3	
53									1		2		1	1									5	1.6	
54								1	2		1	3	1		2					1			11	3.6	
55										1	1				1						1		4	1.3	
56													3								1		4	1.3	
57															1		1	2					4	1.3	
58															1	1	1					1	4	1.3	
59																1	1				1		3	1.0	
60																									
61																									
62									1														1	0.3	
No.	1	1	12	25	53	53	29	26	23	16	13	18	12	5	6	3	3					3	1	1	304
%	0.3	0.3	3.9	8.2	17.4	17.4	9.5	8.6	7.6	5.3	4.3	5.9	3.9	1.6	2.0	1.0	1.0					1.0	0.3	0.3	100.0

Ave.  
L. 41.0 39.0 37.4 38.7 40.3 41.5 42.9 42.9 46.0 46.9 48.5 48.7 51.0 54.8 53.7 55.0 57.3 55.0 59.0 58.0 44.0

Average age of sample = 10.8 years.

Average length of sample = 44.0 cm.

Table 21. Age-length frequency distribution of male Dover sole, 1960.

Age Year class Length (cm)	6 1954	7 1953	8 1952	9 1951	10 1950	11 1949	12 1948	13 1947	14 1946	15 1945	16 1944	17 1943	18 1942	19 1941	No.	Per cent
30		1													1	0.6
31							1								1	0.6
32				1											1	0.6
33			2	1											3	1.7
34		1	1	1		1									4	2.2
35		3	1		2		1								7	3.9
36			2	4	1		1	2							10	5.6
37	1	2	1	3	4	3	1	3	1						19	10.7
38			2	7	9	5	1	1							25	14.0
39		1	1	3	7	2	2	1	1			1			19	10.7
40			2	4	5	3	3	1	3	1					22	12.4
41			2	3	1	4	4	2	2						18	10.1
42				2	4	1	3	2	1						13	7.3
43					5	2		2							9	5.1
44			1	3		1	3					1			9	5.1
45						4	1	1				1			7	3.9
46						1			1						2	1.1
47					1	2									3	1.7
48							1					1		1	3	1.7
49																
50						1								1	2	1.1
51																
No.	1	8	15	32	39	30	22	15	9	1	4	1		1	178	
Per cent	0.6	4.5	8.4	18.0	21.9	16.9	12.4	8.4	5.1	0.6	2.2	0.6		0.6		100.1
Average length	37.0	35.3	37.7	38.6	39.5	41.3	40.5	39.8	40.7	40.0	44.0	50.0		48.0	<b>39.7</b>	

Average age of sample = 10.6 years.

Average length of sample = 39.7 cm.

Table 22. Age-length frequency distribution of female Dover sole, 1960.

Age	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
Year class	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936				
Length (cm)																				No.	Per cent	
30																						
31																						
32				1																	1	0.3
33				1																	1	0.3
34	1	2																			3	0.8
35			3	1		1															5	1.4
36	4	2	3	1	2																12	3.3
37	1	2	4	3		2	1														13	3.5
38	1	2	4	4	3																14	3.8
39	1	3	2	5	7	1	3														22	6.0
40		2	6	6	7	3	2	1													27	7.4
41		1	4	4	5	3	2	1													20	5.4
42	1	4	4	5	2	5	2	3													26	7.1
43			2	1	8	6	2	1		1											21	5.7
44			1	5	5	4	4	2	1												22	6.0
45			3	4	3	4	2	3		1					1						21	5.7
46		2	2	2	8	3	2	1	4	1											23	6.3
47				3	2	4	2														11	3.0
48			2	1		4	4	2	4	3											20	5.4
49			1	3				3	5	3	2										17	4.6
50					2	1	3	2	5	1			1								15	4.1
51				1		2	4	1	2	1	1										12	3.3
52						2		5	3	1	2	1									14	3.8
53						1	2	1	3	3	1				1						12	3.3
54					3	2	2				1										8	2.2
55						1	1	1			1	1	1								6	1.6
56						1			1		2	1									5	1.4
57						2				2	2		1		1						9	2.5
58												1	2								3	0.8
59									1												1	0.3
60									1												1	0.3
61											1										1	0.3
62								1													1	0.3
No.	9	18	43	46	58	50	43	32	28	16	11	5	6		1					1	367	
Per cent	2.5	4.9	11.7	12.5	15.8	13.6	11.7	8.7	7.6	4.4	3.0	1.4	1.6		0.3					0.3		100.2
Average length	37.1	38.7	40.2	41.8	43.1	45.6	46.4	48.0	50.3	50.1	54.9	54.2	54.3		57.0						57.0	45.0

Average age of sample = 12.0 years.

Average length of sample = 45.0 cm.

Table 23. Age-length frequency distribution of male Dover sole, 1961.

26.

Age	6	7	8	9	10	11	12	13	14	15	16	17	18	19	No.	Per cent
Year class	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942		
Length (cm)															No.	Per cent
30																
31																
32		1	1												2	1.3
33	1	1													2	1.3
34	1	2	2	3	1										9	5.6
35		1	3	1											5	3.1
36		3	5	5	2	2		1							18	11.3
37	2	3	2	3	3	1	1	1							16	10.0
38		5	8		4	3		1							21	13.1
39		2	4	4	2	2	2	2					1		19	11.9
40		3	2		2	5	1								13	8.1
41			2	2	7	6	2	1							20	12.5
42			1	4	1	2	3								11	6.9
43			3		2	1	2	1							9	5.6
44					2										2	1.3
45						1	1			1					3	1.9
46						1	1		1						3	1.9
47				1			1								2	1.3
48							1		1					1	3	1.9
49											1	1			2	1.3
No.	4	21	33	23	26	24	15	7	2	1	1	1	1	1	160	
Per cent	2.5	13.1	20.6	14.4	16.3	15.0	9.4	4.4	1.3	0.6	0.6	0.6	0.6	0.6		100.3
Average length	35.3	36.9	37.9	38.3	39.6	40.2	42.3	39.0	47.0	45.0	49.0	49.0	39.0	48.0	39.2	

Average age of sample = 9.7 years.

Average length of sample = 39.2 cm.

27. Table 24. Age-length frequency distribution of female Dover sole, 1961.

Age Year class length (cm)	6 1955	7 1954	8 1953	9 1952	10 1951	11 1950	12 1949	13 1948	14 1947	15 1946	16 1945	17 1944	18 1943	19 1942	20 1941	No.	Per cent
30																	
31																	
32																	
33	1	1	1					1								4	1.3
34					1											1	0.3
35	1	2		2	1											6	1.9
36	1	1	4	3	1			1								11	3.4
37	3	4	1	3	4	3										18	5.5
38		3	6	3	2	2		2			1					19	5.8
39		3	8	6	5		1									23	7.1
40		4	2	7	3	1	4	2	1							24	7.4
41		3	4	3	3	4	2									19	5.8
42		1	1	7	7	3	4	1	1	2						27	8.3
43			1	4	4	8	1	4	2							24	7.4
44			2	4	4	4	1	1	1							17	5.2
45				1	3	2	2	1	1	1						11	3.4
46				3	2	6	3	2	1	2						19	5.8
47					2	1	4	1			2					10	3.1
48			1	3	3	4	1	1			1					14	4.3
49				1		3	1		3			1				9	2.8
50								2	2		1					5	1.5
51							2		1							3	0.9
52					1	2	2		2		2	1				10	3.1
53							2	1		1						4	1.2
54					1		1	1	1				1			5	1.5
55							1									1	0.3
56																	
57													1			1	0.3
58																	
59									1							1	0.3
60													1		1	2	0.6
61																	
62																	
63																	
64						1										1	0.3
No.	6	22	31	50	47	44	34	19	17	8	5	2	3		1	289	
Per cent	2.1	7.6	10.7	17.3	16.3	15.2	11.8	6.6	5.9	2.8	1.7	0.7	1.0		0.3		99.8
Average length	35.8	38.3	39.3	41.2	42.1	44.5	45.3	44.9	48.1	45.0	49.6	50.5	57.0		6.0		43.0

Average age of sample = 10.5 years.

Average length of sample = 43.0 cm.

Table 25. Age-length frequency distribution of male Dover sole, 1962.

28.

Age	6	7	8	9	10	11	12	13	14	15	16	17			
Year class	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945			
Length (cm)													No.	Per cent	
30															
31															
32															
33		1		1									2	1.6	
34	2	2	1	1									6	4.7	
35		1	1	3	1								6	4.7	
36		2	3	2	1	1							9	7.1	
37	2	5	5	3	2								17	13.4	
38	2	1	4	8	3	3							21	16.5	
39	2	2	5	1	2		1						13	10.2	
40	1	3	6	4	2								16	12.6	
41		2	4	1	3	2	1						13	10.2	
42	1		1	3	2								7	5.5	
43			1	2	2	1							6	4.7	
44			1	1	1	1							4	3.1	
45					2								2	1.6	
46															
47					1	1							2	1.6	
48						2							2	1.6	
49															
50															
51															
52															
53															
54															
55													1	1	0.8
No.	10	19	32	30	22	11	2						1	127	
Per cent	7.9	15.0	25.2	23.6	17.3	8.7	1.6						0.8		99.9
Average length	37.8	37.4	38.8	38.5	40.5	42.0	40.0						55.0	<b>39.2</b>	

Average age of sample 8.7 years.

Average length of sample 39.2 cm.



Table 26. Age-length frequency distribution of female Dover sole, 1962.

Age	5	6	7	8	9	10	11	12	13	14	15	16	17			
Year class	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945			
Length (cm)														No.	Per cent	
30																
31																
32					1										1	0.3
33		1	1	1											3	0.9
34		1	1	4	1										7	2.2
35	2	1	5	2	1	2									13	4.1
36		1	4	4	3	2	1								15	4.7
37	2	2	12	6	3	2									27	8.5
38		5	6	9	4	5	2	1							32	10.1
39		4	5	4	6	3	1			1					24	7.6
40		1	3	8	3	5	2	1							23	7.3
41		1	2	6	7	6	4	1							27	8.5
42			1	11	5	2	1								20	6.3
43				4	5	3	1	1							14	4.4
44		2		3	4	3	2	1		1		1			17	5.4
45			1	2	4	5	1	2				1			16	5.0
46				1	3	2	1		1						8	2.5
47			1	1	1	3	3	2	1						12	3.8
48				2	4	2	3								11	3.5
49				1		1	4			1					7	2.2
50				1	1	1	2	1	1	1					8	2.5
51				1		2		2		1	1	1			7	2.2
52								1	1	1					3	0.9
53						1		2	1						4	1.3
54						1	2	1					1	1	6	1.9
55						1	1	1						1	4	1.3
56																
57								2		2					4	1.3
58						1	1			1					3	0.9
59										1					1	0.3
No.	4	19	42	71	56	53	32	19	5	10	3	1	2		317	
Per cent	1.3	6.0	13.2	22.4	17.7	16.7	10.1	6.0	1.6	3.2	0.9	0.3	0.6			99.9
Average length	36.0	38.3	37.8	40.3	41.4	43.2	45.7	48.6	49.6	51.6	46.7	54.0	54.5		42.2	

Average age of sample = 9.2 years.  
Average length of sample = 42.2 cm.

Table 27. Age-length frequency distribution of male Dover sole, 1963. 30.

Age	4	5	6	7	8	9	10	11	12	13		
Year class	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950		
Length (cm)											No.	Per cent
30												
31			3								3	1.9
32	1	1		1		1					4	2.5
33		1	1	1	1						4	2.5
34		1	1	2	2						6	3.7
35			1	2	4						7	4.3
36		1	2	3	3	5					14	8.7
37		1		6	7	5	1	1			21	13.0
38			1	7	6	2	1	1			18	11.2
39			2	3	6	4	3		2		20	12.4
40			1	2	4	2	2	1			12	7.5
41				2	8	1	5				16	9.9
42					2	3	4	1			10	6.2
43					3	4				1	8	5.0
44					1	3	1	1	1		7	4.3
45					1						1	0.6
46						1	1	1	1		4	2.5
47						1	1	1			3	1.9
48												
49					1		1				2	1.2
50												
51								1			1	0.6
No.	1	5	12	29	49	32	20	8	4	1	161	
Per cent	0.6	3.1	7.5	18.0	30.4	19.9	12.4	5.0	2.5	0.6		99.9
Average length	32.0	34.4	35.3	37.2	39.0	39.8	41.6	43.1	42.0	43.0	<b>39.0</b>	

Average age of sample = 8.3 years.  
 Average length of sample = 39.0 cm.

Table 28. Age-length frequency distribution of female Dover sole, 1963.

Age Year class Length (cm)	4 1959	5 1958	6 1957	7 1956	8 1955	9 1954	10 1953	11 1952	12 1951	13 1950	14 1949	15 1948	16 1947	17 1946	No.	Per cent
30		1	2												3	0.9
31																
32			1		1										2	0.6
33		1	1												2	0.6
34	1	1	1	3	2										8	2.4
35		1	2	1	2			1							7	2.1
36			3	4	3										10	3.0
37		1	5	13	8	4									31	9.3
38				15	13	3									31	9.3
39			5	5	13	5	1								29	8.7
40		1		12	9	7	3						1		33	9.9
41			2	7	12	5	1	1	1						29	8.7
42			2	2	2	9	5	1	1						22	6.6
43			2	3	3	8	6	1	2						25	7.5
44				1	3	6		2							12	3.6
45				1	1	2	1	2		1					8	2.4
46				1	4	4	2	2			1				14	4.2
47					1	2	3								6	1.8
48					3	3		2	2						10	3.0
49						1	1	3	3		1	1			9	2.7
50					1	1	3	2							7	2.1
51							2			1					3	0.9
52								1	3						4	1.2
53							1		1			1			3	0.9
54								1	2		2				5	1.5
55							1		2		1	1			5	1.5
56									1	1				1	3	0.9
57									1		1		2		4	1.2
58										1	1				2	0.6
59											2				2	0.6
60									1						1	0.3
61										1	1				2	0.6
62																
63									1						1	0.3
No.	1	6	26	68	81	60	33	18	18	6	10	2	3	1	333	
Per cent	0.3	1.8	7.8	20.4	24.3	18.0	9.9	5.4	5.4	1.8	3.0	0.6	0.9	0.3		99.9
Average length	34.0	34.8	37.3	38.9	40.0	42.3	45.1	46.9	51.6	53.3	55.2	54.0	51.3	56.0	42.5	

Average age of sample = 8.7 years.

Average length of sample = 42.5 cm.

Table 29. Age-length frequency distribution of male Dover sole, 1964.

Age	4	5	6	7	8	9	10	11	12		
Year class	1960	1959	1958	1957	1956	1955	1954	1953	1952		
Length (cm)										No.	Per cent
28				1						1	0.5
29											
30				2						2	0.9
31		1	1		1	1	1			5	2.3
32			4	4	2					10	4.7
33	1	1	3	3	1	2			1	12	5.6
34		1	2	4	7	1				15	7.0
35		3	2	7	5	1		1		19	8.8
36		1	7	5	8	4			1	26	12.1
37		1	1	7	8	4	1	1		23	10.7
38		1	2	4	8	3		1	1	20	9.3
39		1	1	3	15	4	1			25	11.6
40			2	4	4	1	8			19	8.8
41			1		4	7	1	1		14	6.5
42				1		4	2			7	3.3
43						1	2		1	4	1.9
44				1	3	1	2			7	3.3
45				1				1		2	0.9
46							1			1	0.5
47							1	1		2	0.9
48											
49					1					1	0.5
No.	1	10	26	47	67	34	20	6	4	215	
Per cent	0.5	4.7	12.1	21.9	31.2	15.8	9.3	2.8	1.9		100.1
Average length	33.0	35.3	35.4	36.1	37.6	38.5	40.9	40.5	37.5	37.4	
Average age of sample = 7.9 years.											
Average length of sample = 37.4 cm.											

Table 30. Age-length frequency distribution of female Dover sole, 1964.

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18		No.	Per cent
Year class	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946			
Length (cm)															No.	Per cent	
29	1															1	0.3
30																	
31			2	1												3	0.8
32	1	1	2													4	1.1
33	1	2	1	1	1	1										7	2.0
34	1	10	2	5	2											20	5.6
35		7	7	3	4											21	5.9
36	1	4	6	5	3		2									21	5.9
37		3	10	9	7	2										31	8.7
38		1	9	8	7	1	1	1								28	7.8
39		3	8	11	4	5										31	8.7
40			6	14	4	3										27	7.6
41		1	4	6	5	7	3		1							27	7.6
42			4	6	9	2	1		1							23	6.4
43			3	3		4										10	2.8
44			2	2	5	2	1									12	3.4
45			1	2	1	3	3									10	2.8
46			1	2	1	4	2									10	2.8
47				1		7	2	2	1							13	3.6
48					2	2	4									8	2.2
49							2	3	1							6	1.7
50						3	1	1	1	1						7	2.0
51					1	1	3									6	1.7
52				1			2			1						4	1.1
53					1				2	1	1					5	1.4
54						1	1	1	2							5	1.4
55								3	2			1				6	1.7
56						1		2	1		1					5	1.4
57										1						1	0.3
58										1						1	0.3
59								1		2						3	0.8
60																	
61												1				1	0.3
No.	5	32	68	80	57	49	28	14	12	7	2	2		1	357		
Per cent	1.4	9.0	19.0	22.4	16.0	13.7	7.8	3.9	3.4	2.0	0.6	0.6		0.3		100.1	
Average length	32.8	35.7	38.1	39.3	40.1	43.8	46.1	51.4	50.8	55.4	54.5	58.0		51.0	41.3		

Average age of sample = 8.8 years.

Average length of sample = 41.3 cm.

Table 31. Age-length frequency distribution of male Dover sole, 1965.

Age	5	6	7	8	9	10	11	12	13	14	15	16			
Year class	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949			
Length (cm)													No.	Per cent	
30			1											1	0.4
31	1	2	2											5	2.1
32	1	2	3	1										7	3.0
33		6	5	1	1									13	5.6
34	3	3	6	5	2									19	8.1
35		3	5	11	2	3		1						25	10.7
36	1	1	3	11	7	1	1							25	10.7
37	1		6	10	5	6	1							29	12.4
38		1	8	9	11	2	1							32	13.7
39			1	11	7	2	3	2	1					27	11.5
40			2	3	6		1	1						13	5.6
41			1			3		1						5	2.1
42		1		2	3	4	3	2						15	6.4
43			1		2	2	2		1					8	3.4
44					1			1		1	1			4	1.7
45					1							1		2	0.9
46															
47						2								2	0.9
48								1						1	0.4
49															
50										1				1	0.4
51															
52															
53															
54															
No.	7	20	43	64	48	25	12	9	2	2	1	1	234		
Per cent	3.0	8.5	18.4	27.3	20.5	10.7	5.1	3.8	0.9	0.9	0.4	0.4	100.0		
Average length	34.0	33.9	35.8	36.9	38.3	39.5	40.0	41.1	41.0	47.0	44.0	45.0	37.4		

Average age of sample = 8.4 years.

Average length of sample = 37.4 cm.

Table 32. Age-length frequency distribution of female Dover sole, 1965.

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	No.	Per cent
Year class	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947		
Length (cm)															No.	Per cent
30		1	1												2	0.5
31	2	2	1												5	1.2
32	4	2	2		1										9	2.2
33	1	1	1		1	1									5	1.2
34		6	6	3	1										16	3.9
35	2	4	8	8	5		1								28	6.8
36	1	3	5	15	3		1								28	6.8
37		4	11	10	9	3		2							39	9.5
38		2	6	8	9	1									26	6.3
39			12	9	8	8	6								43	10.4
40			3	9	10	5	6		1						34	8.3
41			1	10	8	11	1								31	7.5
42				3	10	6	5		1						25	6.1
43				3	6	9	7	2							27	6.6
44				4	3	3	3	1	1						15	3.6
45					2	6	5	3	1						17	4.1
46					2	6	1	4	1						14	3.4
47					1	1	1	2	1		1	1			8	1.9
48							1		3		2				6	1.5
49						1		3	1						5	1.2
50						1		4	4	1			1	1	12	2.9
51								1	1	1	1				4	1.0
52									1			1			2	0.5
53						1			1						2	0.5
54								1							1	0.2
55										1		1			2	0.5
56											1				1	0.2
57													1		1	0.2
58												1	1		2	0.5
59											1				1	0.2
60																
61												1			1	0.2
No.	10	25	57	82	79	63	38	23	17	3	6	5	3	1	412	
Per cent	2.4	6.1	13.8	19.9	19.2	15.3	9.2	5.6	4.1	0.7	1.5	1.2	0.7	0.2		99.9
Average length	32.9	34.6	36.5	38.4	39.7	42.2	42.0	46.5	47.8	52.0	51.5	54.6	55.0	50.0	40.4	
Average age of sample = 9.2 years.																
Average length of sample = 40.4 cm.																