

FISH COMMISSION OF OREGON
TRAWL INVESTIGATION

Report of Cruise 67-12, Dover Sole

Vessel: MV Sunrise, chartered trawler

Date: November 21-22, 1967

Objectives: To tag Dover sole for scale and aging studies

Methods: Nine tows were made using two different nets. Tow no. 1 was made with a 41-foot semi-balloon shrimp trawl with 1/2-inch mesh liner in the cod end. Tows 2-9 were made with a small mesh trawl with 47-foot headrope and a 62-foot ground rope. Wings and body were made of 2 1/2-inch mesh (stretched measure) and the cod end was of 1 1/2-inch mesh. Each wing was connected to its respective otter board by a 30-foot bridle. A 5/16 inch, 60-foot tickler chain completed the net. Tows were made south of the Columbia River lightship in depths from 40 to 58 fathoms (Table 1).

Dover sole were tagged with D-67 anchor tags (Floy Tag and Mfg. Co., Seattle). Twenty per cent of the fish were double tagged with 5/8-inch diameter Petersen disc tags.

Results: There were 127 fish tagged in 9 tows. Length of fish tagged ranged from 16 cm to 40 cm (Table 2). Scales were placed in vials and preserved in 15% iso-propyl alcohol later mounted between glass slides. Because of the poor catch rate, further tagging will be postponed until April when Dover sole again appear in inshore waters.

Personnel: Robert Demory, Party Chief
Terry Link, Aquatic Biologist
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Robert Demory
Oregon Fish Commission
December 18, 1967

Table 1. Tow data and numbers of Dover sole tagged by station, Cruise 67-12

Tow no.	Depth (fm)	Time (min)	Loran		No. tagged
			Start-end 2H4	Start-end 2H5	
1	47	30	3468-3452	3465-3465	26
2	54-58	23	3452-3460	3455-3455	20
3	50	30	3470-3448	3458-3458	16
4	45-50	30	3475-3488	3466-3466	3
5	46-48	42	3475-3460	3463-3463	12
6	46-47	30	3435-3418	3464-3464	21
7	46-47	30	3400-3380	3464-3464	2
8	46-47	30	3384-3392	3464-3464	10
9	50	15	3382-3389	3458-3458	17

Table 2. Length-frequency distribution of Dover sole tagged on Cruise 67-12.

Length (cm)	Frequency
16	1
17	1
18	1
19	2
20	4
21	6
22	3
23	3
24	5
25	7
26	8
27	6
28	14
29	10
30	11
31	10
32	11
33	4
34	7
35	6
36	5
37	
38	1
39	
40	1
Total	127