

HARVEST OF INTERTIDAL, NONFOOD INVERTEBRATES  
1981

A collecting permit from the Oregon Department of Fish and Wildlife is required to take intertidal nonfood invertebrates from permit areas or in excess of personal bag limits (10 animals). Upon expiration of a permit, harvesters are required to report kinds and numbers of animals taken by areas.

Collecting reports are analyzed to determine commercial and educational harvest and number of animals taken by taxonomic groups by area. Collecting trends are determined by analyzing index species, harvest and number of collectors.

Results and Discussion

In 1981, 130 collecting permits were issued. Collecting reports were returned by 52 percent of the permittees. Reports showed a total harvest of 6852 animals taken by 55 collectors (Table 1).

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Table 1. Summary of Intertidal, Nonfood Invertebrate Collecting Permits Issued, Collecting Reports Returned and Harvests Reported, 1981.

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Educational permits issued	130	100%
Commercial permits issued	0	0%
Collecting reports returned	67	52%
Collecting reports showing no harvest	12	18%
Collecting reports showing a harvest	55	82%
Educational harvest	6,852	100%
Commercial harvest	0	0%
Total harvest	6,852	

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### Commercial Harvest

No commercial permits were applied for in 1981.

### Educational Harvest

A harvest of 6,852 were taken by 55 collectors. Harvesters concentrated on taking sea urchins, <sup>snails</sup> ~~sea urchins~~ and limpets which accounted for 42 percent of the harvest. Table 2 lists the number of animals by taxonomic groups and harvest area. The percentage of the "others" category increased over last year (0.8% to 28.6%) due to a large collection of mussels in the Sunset area and a large collection of clams in the Central coast area. The harvest was more evenly distributed throughout all areas than last year with Sunset Bay - Cape Arago receiving the heaviest pressure taking 41% of the harvest. Yaquina Head was the most visited permit area and the central coast was the most frequently used open area (Table 3).

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Table 3. Educational Collecting Intensity by Area, Oregon Coast, 1981.

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<u>Location</u>	<u>Permittees Collecting in Area</u>	<u>Percentage</u>
Boiler Bay	8	11.8
Shell Cove	1	1.5
Yaquina Head	25	37.8
Neptune State Park	3	4.4
Sunset Bay-Cape Arago	16	23.5
Harris Beach	1	1.5
North Coast (Columbia River - Tillamook Bay)	2	2.9
Central Coast (Tillamook Bay -- Coos Bay)	10	14.7
South Coast (Coos Bay - California border)	2	2.9
TOTAL	<u>68</u>	

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Table 2. Intertidal Nonfood Invertebrates Harvested by Educational Collectors Along the Oregon Coast, by Area and Taxonomic Group, 1981.

Animal Group	Haystack Rock	Boiler Bay	Shell Cove (Depoe Bay)	Yaquina Head	Neptune State Park	Sunset Bay-Cape Arago	Harris Beach Permit Area	North Coast <sup>1/</sup>	Central Coast <sup>2/</sup>	South Coast <sup>3/</sup>	Total	Percentage
Coelenterata												
Sea anemones	0	12	0	72	0	68	0	1	7	0	160	2.3
Annelida												
Marine worms	0	23	0	89	14	126	0	1	21	2	276	4.0
Arthropoda												
Hermit & Porcelain crabs	0	27	0	117	10	51	0	0	7	3	215	3.1
Ghost & mud shrimp	0	0	0	20	0	5	0	0	44	0	69	1.0
Shore, spider & kelp crabs	0	13	0	102	1	32	0	1	55	4	208	3.0
Mollusca												
Chitons	0	16	0	72	7	543	0	1	8	4	651	9.5
Snails, limpets	0	670	4	265	7	624	0	25	11	6	1612	23.5
Sea slugs or nudibranchs	0	16	0	54	5	8	0	0	2	4	89	1.3
Echinodermata												
Sea stars or star fish	0	23	1	97	5	64	0	2	7	9	208	3.0
Sea urchins	0	676	0	422	4	196	0	0	1	2	1301	19.0
Sand dollars	0	0	0	0	0	20	0	0	0	0	20	.3
Brittle stars	0	1	0	11	3	7	0	0	0	0	22	.3
Sea cucumbers	0	0	0	14	1	25	0	0	3	19	62	.9
Other groups	0	17	0	127	1	1041	25	0	746	2	1959	28.6
Total	0	1494	5	1462	58	2810	25	31	912	55	6852	
Percentage	0	21.8	0.1	21.3	0.8	41.0	0.4	0.5	13.3	0.8	100	

1/ Columbia River to Tillamook Bay

2/ Tillamook Bay to Coos Bay

3/ Coos Bay to California border

INTERTIDAL NONFOOD INVETEBRATES 1981

	HAYSTACK	BOILER	BSHELL CO	YAQUINA	NEPTUNE	SUNSET	HARRIS	NORTH	CENTRAL	SOUTH	TOTAL	PERCENT
ANEMONES	12			72		68		1	7		160	2.3
WORMS	23			89	14	126		1	21	2	276	4.0
HERMIT C	27			117	10	51			7	3	215	3.1
G.SHRIMP				20		5			44		69	1.0
SHORE C.	13			102	1	32		1	55	4	208	3.0
CHITONS	16			72	7	543		1	8	4	651	9.5
LIMPETS	670	4		265	7	624		25	11	6	1612	23.5
NUDIBRAN	16			54	5	8			2	4	89	1.3
SEA STAR	23	1		97	5	64		2	7	9	208	3.0
URCHINS	676			422	4	196			1	2	1301	19.0
S.DOLLAR						20					20	.3
BRITTLE	1			11	3	7					22	.3
CUCUMBER				14	1	25			3	19	62	.9
OTHER	17			127	1	1041	25		746	2	1959	28.6
TOTAL	1494	5		1462	58	2810	25	31	912	55	6852	
PERCENT	21.8	0.1		21.3	0.8	41.0	0.4	0.5	13.3	0.8	100	