

HARVEST OF INTERTIDAL, NONFOOD INVERTEBRATES
1979

A collecting permit from the Oregon Department of Fish and Wildlife is required to take intertidal non-food 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 area.

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 analysing index species, harvest and number of collectors.

Results and Discussion

In 1979, 186 collecting permits were issued. Collecting reports were returned by 53 percent of the permittees. Reports showed a total harvest of 27,761 animals taken by 98 collectors (Table 1).

Table 1. Summary of Intertidal, Non-food Invertebrate Collecting Permits Issued, Collecting Reports Returned and Harvests Reported, 1979.

Educational permits issued	186	97.4%
Commercial permits issued	5	2.6
Collecting reports returned	98	53.0
Collecting reports showing no harvest	23	23.0
Collecting reports showing a harvest	75	77.0
Educational harvest	19,711	71.0
Commercial harvest	8,050	29.0
Total harvest	27,761	

Commercial Harvest

One commercial collector harvested 5,000 hermit and porcelain crabs, 3,000 sea stars, starfish and 50 sea urchins from the central Oregon coast open area. The commercial catch was 29 percent of the total harvest.

Educational Harvest

Of 186 permits issued, only 97 were used, collectors concentrated on taking snails and limpets, sea urchins and marine worms which account for 87 percent of 19,711 animals harvested. Collectors took 17 percent of the harvest from Yaquina Head permit area and 64 percent from the central coast area. Table 2 lists numbers of animals by taxonomic groups and by harvest area. Yaquina Head was the most often visited permit area and the central coast was the most often used open area (Table 3).

Table 3. Educational Collecting Intensity by Area, Oregon Coast, 1979.

<u>Location</u>	<u>Permitees Collecting in Area</u>	<u>Percent</u>
Boiler Bay	18	18.6
Yaquina Head	33	34.0
Neptune State Park	3	3.1
Sunset Bay-Cape Arago	23	23.7
Harris Beach	2	2.1
North Coast ^{1/}	1	1.0
Central Coast ^{2/}	13	13.4
South Coast ^{3/}	4	4.1
TOTAL	97	

^{1/} Columbia River - Tillamook Bay

^{2/} Tillamook Bay - Coos Bay

^{3/} Coos Bay - California border

Table 2. Intertidal Nonfood Invertebrates Harvested by Educational Collectors Along the Oregon Coast, by Area and Taxonomic Group, 1977.

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 ^{1/}	Central Coast ^{2/}	South Coast ^{3/}	Total	Percentage
Coelenterata												
Sea anemones	0	27	0	40	16	75	14	0	217	4	393	2.0
Annelida												
Marine worms	0	63	0	32	4	82	0	0	768	15	964	4.9
Arthropoda												
Hermit & Porce-lain crabs	0	44	0	130	8	112	13	2	71	2	382	1.9
Ghost & mud shrimp	0	0	0	1	0	36	2	0	116	0	155	.8
Shore, spider & kelp crabs	0	26	0	74	0	89	24	0	78	6	297	1.5
Mollusca												
Chitons	0	27	0	46	7	81	44	0	167	21	393	2.0
Snails, limpets	0	664	0	1423	608	339	18	0	10,804	30	13,886	70.4
Sea slugs or nudibranchs	0	21	0	16	2	34	7	0	7	3	90	.5
Echinodermata												
Sea stars or star fish	0	40	0	42	6	112	6	2	69	20	297	1.5
Sea urchins	0	441	0	1608	51	168	16	0	3	0	2287	11.6
Sand dollars	0	0	0	0	0	0	0	0	20	0	20	.1
Brittle stars	0	2	0	8	0	22	9	0	1	0	42	.2
Sea cucumbers	0	12	0	5	2	14	2	0	281	10	326	1.7
Other groups	0	43	0	19	9	103	2	0	0	3	179	.9
Total	0	1410	0	3444	713	1267	157	4	12,602	114	19,711	
Percentage	0	7.2	0	17.5	3.6	6.4	.8	T	63.9	.6		

^{1/} Columbia River to Tillamook Bay

^{2/} Tillamook Bay to Coos Bay

^{3/} Coos Bay to California border