HARVEST OF INTERTIDAL, NONFOOD INVERTEBRATES 1978

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 analyzing index species, harvest and number of collectors.

Results and Discussion

In 1978, 204 permits were issued. Collecting reports were returned by 48 percent of the permitees. Reports showed a total harvest of 65,604 animals taken by 82 collectors (Table 1).

Table 1. Summary of Intertidal, Non- Permits Issued, Collecting R Reported, 1978.	and the second s	-
Educational permits issued	201	98.5%
Commercial permits issued	3	1.5
Collecting reports returned	98	48.0
Collecting reports showing no harvest	: 16	16.3
Collecting reports showing harvest	82	83.7
Educational harvest	10,054	15.3
Commercial harvest	55,550	84.7
Total harvest	65,504	

Table 2. Intertidal nonfood invertebrates harvested by educational collectors along the Oregon coast by area and taxonomic groups in 1978.

Animal Group	Haystack Rock	Boiler Bay	Shell Cove (Depoe Bay)	Yaquina Head	Neptune State Park	Sunset Bay - Cape Arago	Harris Beach Permit Area	North Coast1/	Central Coast ² /	South Coast <u>3</u> /	Tota1	Percentage
Coelenterata Sea anemones	O	21	0	54	140	92	4 .	0	62	3	376	3.7
Annelida		•		÷								
Marine worms	0	163	0	46	0	487	0	0	33	59	788	7.8
Arthropoda Hermit & porcel crabs	ain 0	7 7	0	123	0	181	24	1,221	19	13	1,658	16.5
Ghost and mud	U		O	123	U	101	27	1,221	1.5	1.0	1,000	10.5
shrimp	0	6	0	13	0	39	0	0	18	10	86	.9
Shore, spider a	ınd								-			
kelp crabs	0	29	0	84	0	121	18	0	8	12	272	2.7
Mollusca												
Chitons	0	72	0	73	4	111	37	0	13	5	315	3.1
Snails & limpet	:s 0	866	0	207	4	2,130	59	0	23	3	3,292	32.8
Sea slugs or nudibranchs	0	72	0	65	0	75	10	0	18	3	243	2.4
nuurbi anchs	U	. 12		05		7.5	10	U	10	3	273	2.7
Echinodermata												
Sea stars	0	62	0	92	0	69	16	0	14	6	259	2.6
Sea urchins	0	1,122	0	918	0	82	10	0	6	6	2,144	21.3
Sand dollars	0	0	0	. 0	0	10	0	0	0	. 0	10	.1
Brittle stars	0	. 1	0	4	0	28	1	0	0	5	39	. 4
Sea cucumbers	0	` 9	0	18	0	200	2	0	18	1	248	2.5
Other groups	0	38	0	58	2	158	2	0	3	54	315	3.0
Total	0	2,538	0	1,755	150	3,783	183	1,221	235	180	10,045	100.0
Percentage	0	25.3	0	17.5	1.5	37.7	1.8	12.1	2,3	1.8	100.0	

 $[\]frac{1}{2}$ Columbia River to Tillamook Bay $\frac{2}{2}$ Tillamook Bay to Coos Bay

Coos Bay to California border

Commercial Harvest

Commercial collectors harvested 55,550 animals from the central Oregon coast open area. Collectors took 20,750 snail and limpets, 16,000 shore, spider and kelp crab, 11,000 sea stars, 5,000 hermit and porcelain crabs, 2,750 sea urchins and 50 chitons. The commercial catch was 84.7 percent of the total harvest.

Educational Harvest

Collectors concentrated on taking snails and limpets, sea urchins and hermit and porcelain crabs which accounted for 70.6 percent of the 10,054 harvested animals. Collectors took 37.6 percent of the catch from Sunset Bay - Cape Arago permit area and 12.2 percent from the north coast open area. Table 2 lists numbers of animals by taxonomic groups and harvest areas. Yaquina Head and Sunet Bay - Cape Arago were the most used permit areas and the central coast was the most often visited open coastal area, Table 3.

Table 3. Educational Collecting	g Intensity by Area, Oregon Co	ast, 1978.
Location	Permitees Collecting in Area	Percentage
Boiler Bay	24	23.5
Yaquina Head	37	36. 3
Neptune State Park	2	2.0
Sunset Bay - Cape Arago	24	23.5
Harris Beach	3 .	2.9
North Coast	1	1.0
(Columbia River - Tillamook Ba	ay)	
Central Coast	9	8.8
(Tillamook Bay - Coos Bay)		
South Coast	2	2.0
(Coos Bay - California border)) .	
Total	102	100.0

Table 3. Intertidal Nonfood Invertebrates Harvested by Commercial Collectors
Along the Oregon Coast, by Area and Taxonomic Group, 1978.

		AREA			
Animal Group	North Coast	Central Coast	South Coast	Total	Percentage
Coelenterata	; ·				
Sea anemone	0	0	0		
Annelida					
Marine worms	0	0 .	0		
Arthropoda Hermit & porcelain	•				
crabs	0	5,000	0	5,000	9.0
Shore, spider and kelp crabs	0	16,000	0	16,000	28.8
Mollusca	•				
Chitons	0	50	0	50	.01
Snails and limpets	0	20,750	0	20,750	37.4
Sea slugs	0	0	0		
Echinodermata		-	i .		
Sea stars	0 .	11,000	0 .	11,000	19.8
Sea urchins	0	2,750	0 1	2,750	5.0
Sand dollars	0 .	0	0	•	
Brittle stars	0	0	0		. '
Sea cucumbers	0	. 0	0		
Other groups	0	0	0		
Total	0	55,550	0	55,550	
Percentage	0.0	on the same of	terrolliste saming by menning sections and an experience	100.0	

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