

OREGON WILDLIFE

MAY 1981



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OREGON FISH AND WILDLIFE COMMISSION

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Cover — Some razor clam diggers really get into their work. For more about this interesting creature (the digger or the clam, take your pick) take a look at Terry Link's article beginning on page 3.

Photo by Ken Durbin

PARTICIPATE . . . WITH FACTS

As you will note at the bottom of the page and elsewhere in this issue the Commission is holding several public hearings to obtain input concerning the big game seasons. If you have suggestions or comments on the seasons, we would urge you to attend. If you cannot attend, let your ideas be known by writing a letter. Copies of such letters are sent to all of the Commissioners to review prior to making their decisions.

Two important things are involved however, in this process of public hearings. Initially, there is participation. Quite often we have heard individuals complaining about this or that season. Too often when they are asked if they ever attended a hearing or wrote a letter, the answer is no.

The second important point is that we would hope your input would be based on facts. In recent months we have been involved in a couple of altercations that were based more on misinformation than on true disagreement. Time spent straightening out misinformation could better be spent going into all of the details of what is going on. Check your facts if you are upset about something rather than working up a good "mad" based on misinformation. Perhaps it won't be necessary to get upset at all!

And finally, concerning regulations, hearings and Commission decisions, we have too often heard the comment that nobody listens at the hearings anyway. This observation is commonly reached because the Commission didn't adopt the particular speaker's point of view.

It is easy to have tunnel vision. To present a viewpoint and then shut out what is said by everyone else. In actuality, there is no way that the Commission could adopt everyone's recommendations. Many of the viewpoints are complete opposites, some are not workable and yet others might jeopardize the future of the resource. These are all of the things that the Commissioners must take into account when making their decision. Even with the wisdom of Solomon, some folks are not going to get their way.

So I guess to summarize, we're urging your participation with comments based on facts and not rumors and after the rules come out a bit of tolerance and perhaps persistence. If your idea was sound, but was not adopted, it may be that it is too soon or that its time is still to come.

And there's one more possibility, if you think the seasons are about right, it wouldn't hurt to let that be known. At times it seems changes come about because those who are satisfied are never heard from. No matter what your persuasion, May is the month to be heard. □

R.E.S.

COMMISSION MEETINGS

The Fish and Wildlife Commission has a full docket of meetings this month. On Friday, May 8, the Commission will conduct a general business meeting. The next day, Saturday, May 9, Commissioners will meet again to hear staff recommendations for 1981 game mammal hunting seasons.

On Thursday, May 28, the Commission will conduct another general business meeting, followed the next day, Friday, May 29, by a public hearing on game mammal season proposals. The hearing will be continued on Saturday, May 30, and the regulations will be set at the conclusion of public testimony. All meetings will begin at 8 a.m. and all will be held at Fish and Wildlife Department headquarters, 506 SW Mill Street in Portland. □

HUNTER EDUCATION PROGRAM INSTRUCTORS APPROVED	
Month of March	21
Total Active	1,647
STUDENTS TRAINED	
Month of March	437
Total to Date	281,549
HUNTING CASUALTIES REPORTED IN 1981	
Fatal	0
Nonfatal	4



The knack of digging razor clams in water is one well worth learning.

THE UPS AND DOWNS OF RAZOR CLAMS

*By Terry Link
Shellfish Biologist*

Seaside, Oregon: A spring weekend starts with a sunrise lighting up acres of beach, uncovered by one of the lower tides of the year. Across the sands, a low surf washes the beach edge. Then like D-Day in reverse, an army of diggers attack the beach; pounding, stamping and digging until seemingly every foot of sand has been turned over.

One wonders how the razor clam exists through this in addition to being pursued and eaten by predators and displaced by ocean waves. But in spite of everything it does continue to exist.

Although the population fluctuates from year to year, records show the abundance and age composition of razor clams is about the
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same as it was thirty years ago. Upper areas of the beach may have fewer clams and definitely not as many older clams as in "the good old days," because of the many new diggers in the fishery today.

New diggers often lack experience needed to dig in water, so they work the upper beach areas. The increased effort quickly reduces the number of older clams, leaving only the smaller incoming year class. But the surf still yields limits of older clams for those who have learned the tricky business of digging in the water and who are willing to brave the elements.

A look at the life history of a razor clam explains many of the mysteries of its continuing existence against seemingly great odds.

Razor clams are found in stable, sandy, surf-swept beaches along the open coast and in some coastal bays. They have been found inhabiting ocean bottom areas to a depth of 24 feet. Only portions of the population living in the intertidal zone (the area covered by high tides and exposed by low tides) are available to diggers.

Although capable of vertical movement through the sand, razor clams do not move horizontally. Clams are not always found at the surface, as they spend part of their time deep in the sand protected from the surf.

A razor clam matures in the second year of its life. Males and females usually spawn in spring and summer when water temperatures

rise to about 55 degrees Fahrenheit and the microscopic organisms on which they feed are abundant. A female, depending on size, will produce six to 10 million microscopic eggs. The fertilized eggs hatch into free-swimming larvae called veligers which, depending on water temperature, develop into juvenile clams in five to 16 weeks. Juveniles resemble adults and as shells develop they settle to the bottom where they dig into the sand.

It is at this time that inshore currents, water temperature and climatic conditions have a strong bearing on the number of larvae reaching the beach and on their subsequent survival. About 95 percent of the set (juveniles reaching the beach) soon die of natural causes. Juveniles are found only in the first few inches of sand, but as they grow will dig deeper.

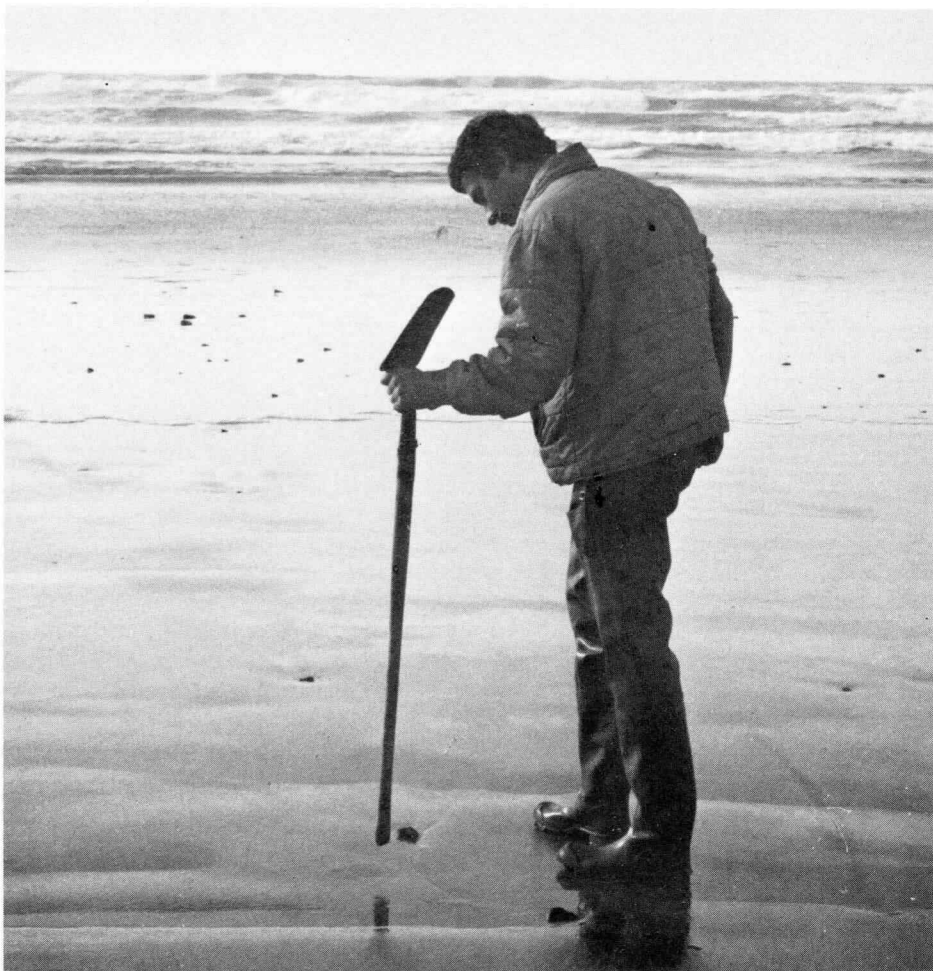
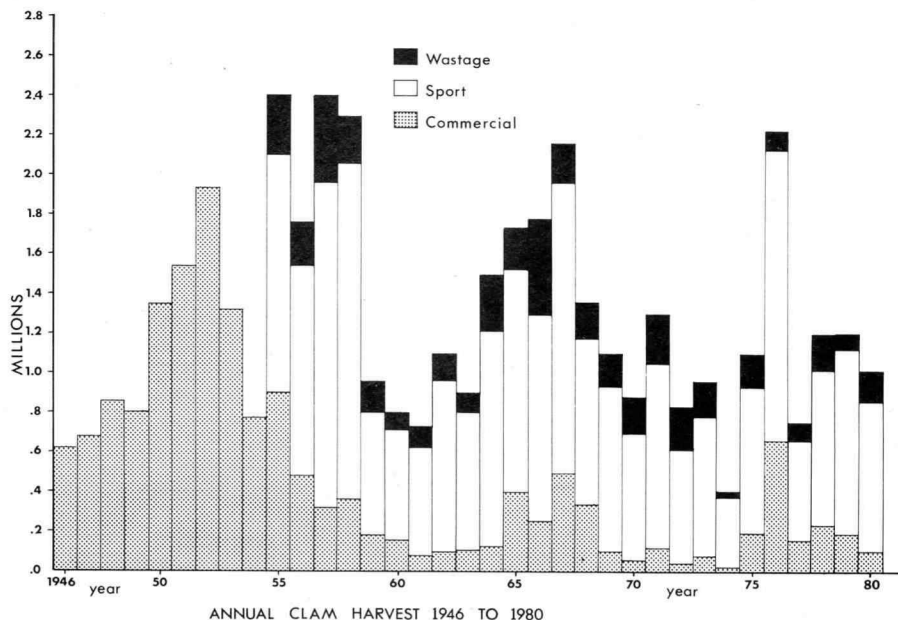
Growth is rapid during the spring and summer when plankton, their major food staple, is abundant. Growth slows during the winter. An average size of three inches is reached in one year and about 4½ inches by the second. Growth slows after the second year with clams reaching six inches during the fifth year of life.

Tagging studies have shown that the population of one year old clams and older have about a 90 percent annual mortality rate with annual removal by diggers ranging from 18 to 65 percent. Natural losses vary from year to year and large numbers of small clams in the fall is not a sure indication the spring digging will be good. The table showing annual harvest gives a good picture of how widely the annual population fluctuates.

In Oregon, Clatsop Beach stocks are supporting a small commercial fishery and a large sport fishery. The commercial diggers take about 20 percent of the total annual harvest. This provides a small extra income to a few people and makes clams available to many people who do not or cannot dig their own.

The sport fishery averages about 937,000 clams dug on 68,000 digger trips a year. Extremes of harvest are shown by a record high catch of 1.7 million in 1958, a record low of .3 million in 1974, and the fourth highest catch of 1.4 million in 1976.

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By thumping the wet beach with his shovel, this digger causes any nearby razor clams to retract their necks or siphons, thus leaving a small dimple or "show" in the sand. Size of show gives an indication of size of clam.



This digger has used a "clam gun", a metal cylinder used to lift a whole column of sand, hopefully including a clam. Generally, beginning diggers find it easier to capture clams with a clam gun than with a shovel.



A nice mess of razor clams. Those which are small and those with broken shells should be retained by the digger, not replaced on or in the beach to die.

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The 1976 season also produced a record 119,000 digger trips.

Wastage continues to be a problem as many diggers "bend" regulations and discard or return small clams to the beach. Those discarded on the beach are invariably lost to predators, and most of the ones that are buried will die. Some diggers unknowingly return small clams thinking they are doing the clam a favor, not knowing it will die later. Others know full well what they are doing and return many small clams trying to get a limit of large "bragging" size.

For this reason there is a regulation which requires diggers to keep the first 24 clams dug, regardless of size or condition. Wastage averages 10 to 20 percent, but sometimes soars as high as 50 percent. The injured or floating clam often pricks the digger's conscience, but once a small or damaged clam is buried the digger often has little remorse — "out of sight, out of mind." Perhaps conscientious diggers need to remind those who are returning small clams that they are wasting next year's crop.

The summer closure on Clatsop Beach, July 15 through August 31, was initiated to reduce wastage losses. A majority of clams at this time of year are smaller than most diggers want to keep. The closure gives them growing time until they have reached a more acceptable size.

How can you minimize your catch of smaller clams? For one thing, be flexible. If you dig several small clams, don't continue to dig there. Move to another area. Try to dig only the larger "shows" (depressions left in the sand when a clam retracts its siphon.) Smaller clams leave smaller shows and with experience you can learn to avoid them.

Not much is known about what proportion of the population is taken by the fishery. The dynamic nature of the beach areas causes clam availability to change. Because clams do not move laterally most of the availability is dependent on the annual beach cycle that moves sand shoreward during the spring and offshore in the fall. This movement builds bars in the breaker zone, making the beach wider or

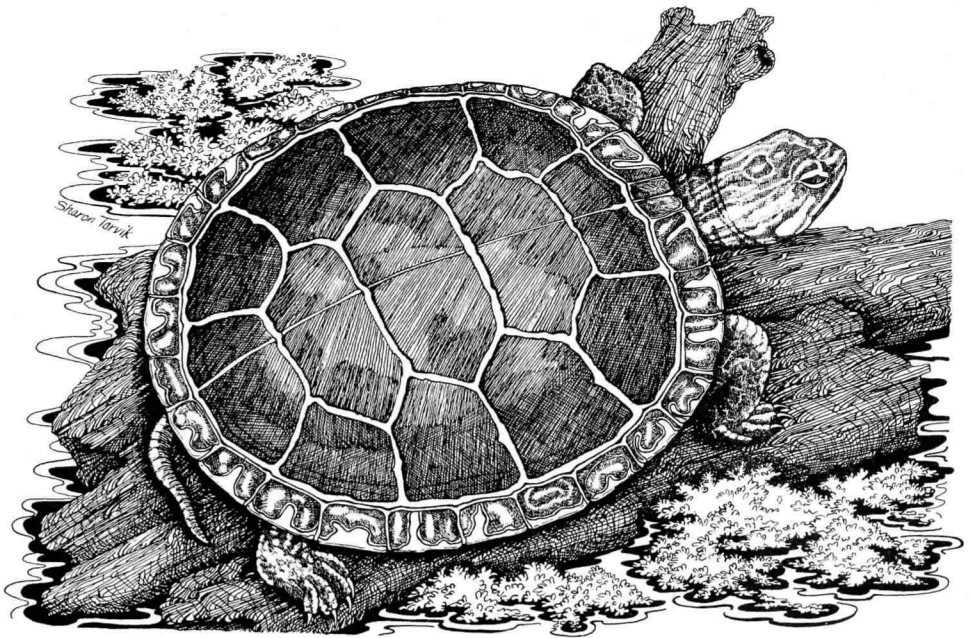
narrower and the variability of this process has major impact on the number of clams available for digging in any year.

Washington is better known for its excellent razor clam digging than our state and Oregon clam diggers often ask why. Part of it is due to our much narrower beach zones (100 to 200 feet). This is simply a geographic difference between our states. Because our beaches are narrower, Oregon has less dry digging than Washington which has much wider beaches. This difference may also have some effect on survival of clams since Washington clam survival seems to be higher than Oregon's. Also, Oregon has only 25 miles of producing beach to Washington's 60 miles.

Although Clatsop Beach produces 90 percent of Oregon's clams, many other beaches often have harvestable quantities at least temporarily. Due to beach instability the populations may be short lived. For those exploring diggers the beach with a few clams and fewer diggers is heaven indeed! Areas which produce clams are Meyers Creek Beach (Gold Beach); Whiskey Run Beach and Bastendorff Beach (Coos Bay); North Beach and South Beach (Newport); Short Sands Beach, Cove Beach, Cannon Beach, and Indian Beach (Cannon Beach).

Advice for successful clam digging: Know what beaches are producing. Try to dig on low tides that are still receding and start two hours before low water. Make sure you have the right time for low water and try all methods of digging as sometimes this will enable you to get a limit.

Remember clams are often reluctant to show just before or during periods of bad weather or rough ocean conditions. They often go down after being dug over for several days. Larger clams are usually dug in April and May whereas smaller clams begin appearing in June and July. By October and November clams, although small (3½-inches) are thought to be satisfactory by most diggers. But even the most experienced digger can't find the elusive critter all the time, so a well thought up alibi is good to have! □



PAINTED TURTLE

A sunny day spent on a backwater pond or slough along the Willamette or Columbia rivers may yield some positive results like warm-water fish for supper or good photos of young ducklings paddling in a line behind their parents.

The visitor to the pond may also spot a row of turtles on a log basking in the sun. The view is likely to be brief as the turtles sense an intruder and return to the water with a plop.

The painted turtle, one of two turtle species found in Oregon, is a wary creature that is quite at home in the ponds, small lakes, marshes and even irrigation ditches along the Columbia and Willamette. They are colorful turtles, well deserving of their name, with yellow lines against a dark background on their heads and limbs. Viewers who get a closer look may also see the red blotch behind the eyes that make this turtle distinctive.

The shell may measure almost 10 inches in length and is usually dark brown, black or olive colored with a relatively smooth surface over the shields that make up the shell. The shields are often edged in yellow. The shell may also have a yellow stripe down the back.

Known scientifically as *Chrysemys picta*, the Oregon variety is one of several painted turtle subspecies found throughout North America. Regardless of where they live, painted turtles share several characteristics. They live in slow moving or still fresh water. They spend most of their time in the water and do most of their feeding under water on aquatic plants, fish, shellfish and frogs.

Although most of the time is spent in or very near the water, the painted turtle lays its eggs on land. The female uses her hind feet to dig a well-designed nest cavity in dirt close to the water, but above the water line. She then lays six to 12 small, white eggs and carefully covers her deposit. The eggs usually hatch in about two months, but in some cases they may stay in the ground through the winter and emerge the next spring.

Spring and summer is the only time for viewing these turtles since they spend the late fall and winter in hibernation. The turtles burrow into the muddy bottoms of their waterhole and do not return to the surface until the winter cold is on the way out in March and April. □



Black-tailed deer

1980 BIG GAME SEASONS

*by Paul Ebert
Research and Development Supervisor*

Record deer and elk tag sales in 1980 indicated continued increasing interest in deer and elk hunting in spite of below average mule deer herd levels and continued efforts to reduce elk hunter concentrations during the opening weekend. State-wide bowhunting opportunities for both deer and elk continued to attract more individuals who were willing to trade their right to hunt with a rifle for bowhunting only. Interest in the hunting of antelope, bear, bighorn sheep and cougar remains similar to that of the previous year.

Weather again was a big factor influencing hunter success during the eastern Oregon deer season and most of the western Oregon deer season. Although conditions were closer to normal during both the

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Rocky Mountain and Roosevelt elk seasons, little snow occurred prior to or during the seasons. Oregon big game hunters enjoyed 2,998,511 hunter days in the field during the 1980 seasons and harvested an estimated 112,245 deer, 22,800 elk, 893 antelope, 958 bear, 32 cougar and 19 bighorn sheep.

Deer

An estimated 312,437 deer hunters harvested 112,245 deer in 1980, an increase of 12,543 over the 1979 harvest. Hunters continued to prefer the longer and more liberal western Oregon deer season over the shorter and less successful east side season. Fifty-four percent of the hunters reported hunting the west side.

A total of 158,962 hunters partic-

ipated in the 32-day general western Oregon rifle deer season, including the five-day hunter's choice season, and took a total of 47,537 deer and averaged 30 percent success. The harvest consisted of 32,252 bucks, two point or larger, taken under the general buck hunting regulations and 15,285 spike buck and antlerless deer taken during the hunter's choice season. Western Oregon controlled antlerless deer seasons allowed permit holders to harvest another deer over and above that allowed by the general tag. A total of 9,527 hunters participated in the season and took 5,652 deer. Also, the High Cascade buck hunters took 334 deer, the muzzleloader hunters took 60 deer and bowhunters took 2,201 deer in western Oregon.

1980 DEER SEASON

Units by Area or Zone	General and Unit Controlled Seasons					Additional Harvest			Total All Seasons	
	Number of Hunters	Bucks 2 pt. +	Spikes & Antlerless	Total Harvest	Percent Hunter Success	Early	Rifle Season Late	Bow Harvest	Total Harvest	Hunter Days
Scappoose	4,873	446	274	720	15	0	0	48	768	29,901
Saddle Mountain	9,455	1,097	1,199	2,296	24	0	0	286	2,582	74,004
Wilson	8,003	822	823	1,645	21	0	0	96	1,741	44,062
Trask	15,845	1,611	1,851	3,462	22	0	8	120	3,590	102,279
Stott Mountain	5,776	617	411	1,028	18	0	0	24	1,052	33,583
Alsea	19,362	3,256	2,365	5,621	29	0	0	120	5,741	132,815
Siuslaw	7,745	1,131	480	1,611	21	0	0	72	1,683	47,460
Willamette	32,496	2,605	3,804	6,409	20	0	0	24	6,433	169,398
NORTH COAST AREA TOTALS	81,611*	11,585	11,207	22,792	28	0	8	790	23,590	633,502
Tioga	8,551	1,577	318	1,895	22	0	0	311	2,206	63,634
Sixes	4,905	1,405	145	1,550	32	0	86	48	1,684	34,015
Powers	4,582	960	199	1,159	25	0	0	24	1,183	28,996
Chetco	4,001	1,097	204	1,301	27	0	0	0	1,301	27,476
Applegate	7,454	1,062	562	1,624	22	0	12	24	1,660	49,616
Evans Creek	6,906	1,028	680	1,708	25	0	0	0	1,708	47,347
Melrose	9,487	1,919	621	2,540	27	0	0	193	2,733	70,211
SOUTHWEST AREA TOTALS	37,465*	9,048	2,729	11,777	32	0	98	600	12,475	321,295
Santiam	20,556	2,296	1,268	3,564	17	117	0	238	3,919	132,507
McKenzie	17,135	1,783	1,919	3,702	22	167	0	48	3,917	110,387
Indigo	8,842	1,405	1,454	2,859	32	50	40	24	2,973	56,579
Dixon	11,133	2,468	681	3,149	28	0	0	167	3,316	74,410
Rogue	16,393	3,667	1,593	5,260	32	0	0	334	5,594	143,825
CASCADES AREA TOTALS	65,799*	11,619	6,915	18,534	28	334	40	811	19,719	517,708
WESTERN OREGON DEER TOTALS	158,962*	32,252	20,851	53,103	33	334	146	2,201	55,784	1,472,505
Minam	1,749	601	0	601	34	0	129	48	778	8,903
Imnaha	2,260	655	0	655	29	0	0	96	751	8,513
Catherine Creek	3,282	843	552	1,395	43	0	0	24	1,419	14,934
Keating	2,825	762	294	1,056	37	0	80	144	1,280	11,641
Pine Creek	1,533	376	0	376	25	0	0	24	400	5,379
Lookout Mountain	1,614	430	731	1,161	72	0	0	48	1,209	6,666
WALLOWA ZONE TOTALS	11,836*	3,667	1,577	5,244	44	0	209	384	5,837	56,036
Snake River	1,049	134	0	134	13	0	0	0	134	4,229
Chesnimnus	1,829	359	193	552	30	0	0	72	624	8,582
Sled Springs	3,282	896	517	1,413	43	0	0	96	1,509	17,164
Wenaha	1,211	134	94	228	19	0	19	168	415	9,712
Walla Walla	1,318	134	117	251	19	0	0	0	251	6,394
Mt. Emily	4,385	816	288	1,104	25	0	0	72	1,176	20,075
WENAH-SNAKE ZONE TOTALS	11,944*	2,473	1,209	3,682	31	0	19	408	4,109	66,156
Starkey	2,771	520	0	520	19	0	0	144	664	17,513
Ukiah	3,685	628	0	628	17	0	0	0	628	16,388
Sumpter	5,353	1,406	473	1,879	35	0	0	120	1,999	26,002
Desolation	2,313	403	0	403	17	0	0	48	451	14,125
Heppner	6,483	1,460	132	1,592	25	0	0	48	1,640	25,922
Fossil	4,600	1,219	212	1,431	31	0	0	24	1,455	18,321
Columbia Basin	1,399	436	104	540	39	0	0	24	564	4,852
UMATILLA-WHITMAN ZONE TOTALS	24,184*	6,072	921	6,993	29	0	0	408	7,401	123,123
Northside	6,268	1,353	1,509	2,862	46	0	0	24	2,886	33,858
Murderer's Creek	5,595	1,272	1,054	2,326	42	0	32	48	2,406	28,913
Beulah	5,542	2,105	420	2,525	46	0	0	72	2,597	22,248
Malheur River	5,811	2,588	0	2,588	45	0	0	24	2,612	23,191
Silvies	6,080	1,890	0	1,890	31	0	0	120	2,010	28,834
Ochoco	11,083	2,185	0	2,185	20	0	0	120	2,305	50,751
Grizzly	4,223	1,057	0	1,057	25	0	0	48	1,105	15,358
Moury	1,802	305	0	305	17	0	0	0	305	5,435
OCHOCO-MALHEUR ZONE TOTALS	41,454*	12,755	2,983	15,738	38	0	32	456	16,226	208,588
BLUE MOUNTAIN AREA TOTALS	82,181*	24,967	6,690	31,657	39	0	260	1,656	33,573	453,903
Biggs	1,506	440	150	590	39	0	0	24	614	6,850
Maupin	995	252	62	314	32	0	0	0	314	3,564
Hood	1,426	134	22	156	11	0	125	48	329	8,046
White River	3,551	681	248	929	26	0	182	72	1,183	21,787
Metolius	3,847	789	801	1,590	41	0	0	214	1,804	20,061
Paulina	11,325	2,455	618	3,073	27	0	0	72	3,145	53,520
Upper Deschutes	7,236	1,944	345	2,289	32	0	0	358	2,647	42,647
Fort Rock	7,801	2,346	795	3,141	40	0	0	120	3,261	40,987
Silver Lake	5,622	1,353	554	1,907	34	0	0	0	1,907	26,926
Sprague	1,506	520	0	520	35	0	0	0	520	6,317
Klamath Falls	4,385	1,243	0	1,243	28	28	26	144	1,441	23,886
Keno	1,345	215	0	215	16	0	0	285	500	15,236
Interstate	5,568	1,380	0	1,380	25	0	0	96	1,476	27,790
Warner	2,771	752	0	752	27	0	154	0	906	12,321
CENTRAL AREA TOTALS	50,707*	14,504	3,595	18,099	36	28	487	1,433	20,047	309,938
Wagontire	1,399	349	0	349	25	0	0	24	373	5,135
Beaty's Butte	995	349	91	440	44	0	0	48	488	5,310
Juniper	699	269	0	269	38	0	0	24	293	3,054
Steens Mountain	1,310	507	96	603	46	0	0	0	603	6,940
Whitehorse	1,103	483	0	483	44	0	0	0	483	4,825
Owyhee	1,372	601	0	601	44	0	0	0	601	5,067
HI-DESERT AREA TOTALS	6,613*	2,558	187	2,745	42	0	0	96	2,841	30,331
EASTERN OREGON DEER TOTALS	135,444*	42,029	10,472	52,501	39	28	747	3,185	56,461	794,172
GENERAL SEASON TOTALS	294,406*	74,281	31,323	105,604	36					
EARLY SEASON TOTALS	2,578						362			
LATE SEASON TOTALS	1,468						893			
BOW SEASON TOTALS	17,307*									
STATE GRAND TOTALS	312,437*									
								5,386	112,245	2,266,677

*Totals omit duplication of hunters participating in more than one unit, area or zone.

DEER HUNTING TRENDS 1952-1980

STATE TOTALS						MULE DEER				BLACK TAILED DEER					
Year	Hunters	Deer Harvested	Percent Hunter Success	General Season Hunters	Number Harvested	Percent Hunter Success	Percent of Total	Antler-less Harvest	Percent Antler-less	General Season Hunters	Number Harvested	Percent Hunter Success	Percent of Total	Antler-less Harvest	Percent Antler-less
1952	188,250	77,897	41	126,719	53,030	61	68	20,570	39	61,531	24,867	40	32	5,210	21
1953	204,808	105,275	51	121,356	64,607	53	61	24,652	38	83,552	40,668	49	39	13,045	32
1954	215,047	112,622	52	134,617	76,877	57	68	22,410	29	80,430	35,745	44	32	8,043	22
1955	230,585	133,834	58	148,566	90,126	61	67	37,752	42	81,919	43,708	53	33	13,446	31
1956	233,842	146,568	54	146,568	85,394	58	68	37,978	44	87,274	40,277	46	32	13,340	33
1957	221,960	116,409	52	140,627	81,873	58	70	26,853	33	81,333	34,626	43	30	8,877	26
1958	233,885	116,251	50	139,183	71,250	51	61	19,308	27	94,702	45,001	47	39	15,251	34
1959	248,701	146,003	59	138,856	88,261	64	61	23,685	27	104,750	56,670	54	39	20,108	35
1960	259,739	157,504	61	141,102	96,122	68	61	28,254	29	110,725	61,382	55	39	20,133	33
1961	265,326	163,939	62	147,597	97,951	66	60	30,538	31	101,971	65,988	65	40	24,529	37
1962	263,838	139,712	53	143,580	76,776	53	55	24,977	32	108,343	62,936	58	45	21,932	35
1963	258,375	117,619	45	136,676	64,678	47	55	15,403	24	105,603	52,941	50	45	16,754	32
1964	249,080	143,023	57	148,215	84,665	57	59	19,931	23	110,555	58,358	53	41	18,807	32
1965	267,840	119,369	45	143,618	71,637	50	60	19,242	27	108,281	47,732	44	40	13,348	27
1966	270,770	147,975	55	147,975	88,516	56	60	22,821	26	110,384	59,459	52	40	14,687	25
1967	272,150	142,000	52	153,950	87,180	57	61	29,518	34	109,250	54,820	50	39	15,089	27
1968	284,600	151,380	53	163,260	89,020	55	59	23,374	26	111,940	62,360	56	41	16,586	27
1969	264,900	101,500	38	166,350	68,860	41	68	14,265	21	88,850	32,640	37	32	5,757	18
1970	282,000	101,600	36	180,150	72,200	40	71	14,453	20	92,050	29,400	32	29	4,347	15
1971	279,220	87,800	31	162,180	47,240	29	54	7,840	17	109,120	40,560	37	46	7,990	20
1972	245,770	73,400	30	110,700	29,380	27	40	95	0	127,200	44,020	35	60	7,970	18
1973	296,290	103,470	35	124,040	41,340	33	40	62	1	153,360	62,130	41	60	19,099	31
1974	286,560	76,400	27	118,980	30,960	26	41	1,018	3	155,420	45,440	29	59	10,511	23
1975	251,930	54,980	22	112,430	23,620	21	43	390	2	151,430	31,360	21	57	2,230	7
1976	246,850	80,700	33	116,980	44,030	38	55	3,630	8	122,000	36,670	30	45	4,530	12
1977	292,470	129,120	44	141,740	79,650	56	62	9,400	12	127,460	49,470	39	38	10,844	22
1978	315,382	124,001	39	152,029	60,197	40	49	19,386	32	135,935	63,804	47	51	21,572	34
1979	300,982	99,702	33	140,098	44,619	32	45	6,806	15	160,884	55,104	34	55	14,808	27
1980	312,437	112,245	36	145,309	56,461	39	46	12,728	23	166,404	55,784	34	54	17,360	31



ELK HUNTING TRENDS 1933-1980

STATE TOTAL						ROCKY MOUNTAIN ELK					ROOSEVELT ELK				
Year	Hunters	Bulls	Antlerless	Total Harvest	Percent Hunter Success	Hunters	Bulls	Antlerless	Number Harvested	Percent Hunter Success	Hunters	Bulls	Antlerless	Number Harvested	Percent Hunter Success
1933 . . .	2,440	579	0	579	24	2,440	579	0	579	24	No Open Season				
1940 . . .	6,152	1,350	1,179	2,529	41	4,809	1,152	1,179	2,331	48	1,343	198	0	198	15
1945 . . .	8,597	2,398	67	2,465	29	7,270	2,176	67	2,243	31	1,327	222	0	222	17
1950 . . .	22,802	3,157	2,234	5,391	24	16,726	2,210	1,234	3,444	21	6,076	947	1,000	1,947	32
1955 . . .	27,709	4,228	1,855	6,083	22	21,504	3,361	1,749	5,110	24	6,205	867	106	973	16
1961 . . .	51,349	9,707	2,384	12,091	24	36,514	7,098	1,863	8,961	25	14,835	2,609	521	3,130	21
1962 . . .	52,991	7,998	2,178	10,176	19	39,432	6,460	1,925	8,385	21	13,559	1,538	253	1,791	13
1963 . . .	54,724	10,082	3,606	13,688	25	41,216	6,959	3,606	10,565	26	13,508	3,125	0	3,123	23
1964 . . .	62,898	11,846	5,311	17,157	27	41,010	7,576	4,879	12,455	30	21,888	4,270	432	4,702	21
1965 . . .	67,387	8,066	4,200	12,266	18	47,651	5,768	3,594	9,362	20	19,736	2,298	606	2,904	15
1966 . . .	68,178	8,030	3,372	11,402	17	49,504	5,529	3,189	8,718	18	18,674	2,501	183	2,684	14
1967 . . .	64,200	7,660	2,870	10,530	16	46,100	5,220	2,690	7,910	17	18,100	2,440	180	2,620	14
1968 . . .	65,900	7,160	2,250	9,410	14	45,600	4,170	1,980	6,150	13	20,300	2,990	270	3,260	16
1969 . . .	66,000	7,800	2,118	9,918	15	46,300	5,800	2,080	7,880	17	19,700	2,000	38	2,038	10
1970 . . .	73,560	10,150	2,530	12,680	17	52,190	6,920	2,420	9,340	18	21,370	3,230	110	3,340	16
1971 . . .	74,550	7,830	2,440	10,270	14	51,640	5,330	2,260	7,590	15	22,910	2,500	180	2,680	12
1972 . . .	79,100	8,075	2,235	10,310	13	53,700	5,742	2,188	7,930	15	25,400	2,333	47	2,380	9
1973 . . .	98,300	11,087	2,913	14,001	14	65,100	7,626	2,735	10,361	16	33,200	3,461	178	3,640	11
1974 . . .	106,200	9,527	4,543	14,070	13	69,100	6,628	4,036	10,664	15	37,600	2,899	507	3,406	9
1975 . . .	110,830	11,481	3,870	15,351	14	73,280	7,393	3,476	10,869	15	37,550	4,087	395	4,482	12
1976 . . .	98,510	9,767	3,423	13,190	13	64,970	7,389	2,838	10,227	16	33,800	2,378	585	2,963	9
1977 . . .	112,340	13,270	4,503	17,773	16	73,580	9,318	3,696	13,014	18	38,760	3,952	807	4,759	12
1978 . . .	100,949	9,699	6,298	15,997	16	67,389	7,287	5,063	12,350	18	33,560	2,412	1,235	3,647	11
1979 . . .	110,642	9,647	6,481	16,128	15	68,718	6,444	5,091	11,535	17	41,924	3,203	1,390	4,593	11
1980 . . .	119,270	13,626	9,174	22,800	19	74,655	9,279	6,672	15,951	21	44,615	4,347	2,502	6,849	15

Eastern Oregon deer hunters were again allowed a 12-day season. The bag limit remained a two-point buck or larger except in two limited entry areas where the minimum bag was a four-point buck. Individuals receiving a permit for the limited entry four-point areas were restricted to hunting in only the area allowed by the permit. Warm, dry weather prior to and during the season, wide dispersal of the herds and below average buck numbers limited hunter success.

The 135,444 eastern Oregon general rifle deer hunters took 42,029 bucks and averaged 31 percent success. This was 5,253 more hunters, 5,808 more bucks and three percent better success than was reported in 1979.

Eastern Oregon controlled antlerless deer hunters were also allowed to take another deer over and above that allowed by the general tag and 13,820 of these hunters took 11,072 deer last season. Bowhunters took another 3,185 deer and muzzleloader hunters took 173 deer in eastern Oregon.

Elk

Elk hunters were again required to choose between Roosevelt elk hunting and Rocky Mountain elk hunting and between one of two hunt periods when purchasing their elk tag. This was the second year hunters were required to select between two hunt periods to reduce hunter concentrations in the more popular hunting areas. Also, hunters who received a controlled antlerless permit were required to turn in their general season tag, which restricted them to hunting in the controlled hunt only. Four units, two in eastern Oregon and two in western Oregon, were again under the Limited Entry Permit System. Only hunters with permits could hunt one of these units and only that unit. Thirty-eight percent of Oregon general season rifle elk hunters hunted Roosevelt elk and 62 percent hunted Rocky Mountain elk.

Roosevelt elk rifle hunters had to choose between a four-day first period or a seven-day second period. Fifty-six percent hunted the first period and 44 percent the second

period. This was a moderate change from the 47-53 percent split reported for the 1979 season. A total of 34,083 hunters harvested 3,896 bulls during both periods and averaged 11 percent success. This was 1,579 more hunters, 1,075 more bulls and two percent better success than reported for the 1979 season. Hunter success in 1980 averaged 13 percent success during the first period and nine percent for the second period.

Hunters were again limited in Saddle Mountain and Tioga units by a permit quota and the bag limit was a three-point bull or larger. A total of 4,432 hunters took 688 bulls in the Saddle Mountain Unit and averaged 16 percent success while 3,255 hunters took 552 bulls in the Tioga Unit and averaged 17 percent success. Controlled antlerless hunters totaling 2,384 harvested another 1,796 elk and bowhunters took 1,157 elk out of the Roosevelt elk area.

Rocky Mountain elk rifle hunters had to choose between a five-day first period and a nine-day second period. Sixty-five percent of the hunters selected the first period and 35 percent the second period in 1980 as compared to a 55-45 percent split during the 1979 season. A total of 56,902 hunters harvested 8,967 bulls and averaged 16 percent success during the 1980 Rocky Mountain elk rifle season. This was 1,198 more hunters, 2,723 more bulls and five percent better success than reported during the 1979 season. First period hunters averaged 17 percent success compared

to 13 percent success for the second period.

Hunters were limited in the Chesnimnus and Snake River units by permit quotas and the Snake River bag limit required a three-point bull or larger. The 2,223 hunters in the Chesnimnus Unit harvested 447 bulls and averaged 20 percent success while 950 hunters in the Snake River Unit harvested 253 bulls and averaged 27 percent success. The 13,170 controlled antlerless hunters took 6,215 elk while bowhunters took another 774 elk in the Rocky Mountain elk area.

Bear

Bear hunters were allowed a statewide 100-day season starting on August 23. Bear hunters totaling 11,072 remained at a level comparable to that reported for the 1979 season while the harvest increased from the 812 reported in 1979 to 958 taken during the 1980 season. Hunter success averaged nine percent in 1980.

Antelope

Buck antelope hunters had a five-day season in 21 areas in eastern Oregon where 1,300 tags were allowed. Report card returns indicate a minimum harvest of 660 bucks and an average hunter success of 76 percent. Compared to the 1979 season, 10 percent more buck antelope were taken in 1980. An additional 59 antelope with horns shorter than the ears were taken by 130 doe permittees and four bucks taken by the 285 bowhunters.



1980 ELK SEASON

Units by Area or Zone	General Bull Season			Other Harvest		Total All Seasons	
	Number of Hunters	Bull Harvest	Percent Hunter Success	Controlled Antlerless	Bowhunting Harvest	Total Harvest	Hunter Days
Scappoose	1,384	184	13	89	9	282	8,240
Saddle Mountain	4,432	688	16	1,410	216	2,314	39,097
Wilson	6,530	633	10	0	224	857	37,585
Trask	3,873	372	10	62	72	506	15,585
Stott Mountain	841	27	3	0	18	45	4,149
Alsea	1,778	217	12	0	63	280	14,708
Siuslaw	811	52	6	16	9	77	3,887
Willamette	401	27	7	3	0	30	2,437
NORTH COAST AREA TOTALS	19,135*	2,200	11	1,580	611	4,391	125,688
Tioga	3,255	552	17	144	501	1,197	38,165
Sixes	563	27	5	0	0	27	2,214
Powers	2,297	117	5	23	18	158	10,639
Chetco	484	66	14	0	0	66	1,894
Applegate	39	0	0	0	0	0	39
Evans Creek	164	0	0	0	0	0	681
Melrose	652	25	4	0	18	43	2,841
SOUTHWEST AREA TOTALS	7,288*	787	11	167	537	1,491	56,473
Santiam	1,926	132	7	21	0	153	10,674
Metolius	32	0	0	0	0	0	82
McKenzie	1,986	274	14	0	0	274	7,092
Upper Deschutes	223	0	0	0	0	0	3,164
Indigo	2,180	181	8	0	0	181	9,992
Fort Rock	63	6	10	0	0	6	613
Dixon	1,425	99	7	0	9	108	6,831
Sprague	64	8	13	0	0	8	397
Rogue	2,447	209	9	28	0	237	12,086
Keno	196	0	0	0	0	0	1,026
CASCADES AREA TOTALS	9,815*	909	9	49	9	967	51,957
ROOSEVELT ELK TOTALS	34,083*	3,896	11	1,796	1,157	6,849	234,118
Minam	1,960	390	20	252	27	669	13,596
Imnaha	2,129	282	13	128	18	428	12,597
Catherine Creek	1,272	134	11	123	27	284	8,440
Keating	713	112	16	205	18	335	6,027
Pine Creek	1,091	202	19	165	0	367	7,151
Lookout Mountain	267	56	21	37	0	93	1,238
WALLOWA ZONE TOTALS	7,066*	1,176	17	910	90	2,176	49,049
Snake River	950	253	27	541	9	803	15,237
Chesnimus	2,223	447	20	454	72	973	14,956
Sled Springs	3,919	585	15	765	126	1,476	25,175
Wenaha	5,341	888	17	365	90	1,343	28,249
Walla Walla	2,101	325	15	203	27	555	11,446
Mt. Emily	6,399	1,011	16	444	63	1,518	34,276
WENAH-SNAKE ZONE TOTALS	20,356*	3,509	17	2,772	387	6,668	129,339
Starkey	6,957	1,235	18	541	81	1,857	43,020
Ukiah	5,566	593	11	696	36	1,325	31,966
Sumpter	3,231	358	11	382	45	785	21,253
Desolation	4,354	477	11	310	72	859	27,072
Heppner	4,466	729	16	166	9	904	23,871
Fossil	524	67	13	28	9	104	2,476
UMATILLA-WHITMAN ZONE TOTALS	23,800*	3,459	15	2,123	252	5,834	149,658
Northside	1,567	190	12	92	0	282	8,157
Murderer's Creek	1,079	67	6	24	18	109	6,421
Beulah	1,021	122	12	54	9	185	5,516
Malheur River	859	111	13	0	0	111	3,754
Silvies	566	33	6	0	0	33	2,803
Ochoco	1,053	111	11	0	9	120	6,241
Grizzly	166	22	13	0	0	22	614
Maury	88	11	13	0	0	11	350
OCHOCO-MALHEUR ZONE TOTALS	5,691*	667	12	170	36	873	33,856
BLUE MOUNTAIN AREA TOTALS	55,549*	8,811	16	5,975	765	15,551	361,902
Hood	358	22	6	6	0	28	1,817
White River	981	90	9	229	9	328	12,674
Fort Rock	44	11	25	0	0	11	222
Silver Lake	56	15	27	0	0	15	141
Sprague	11	4	36	0	0	4	58
Klamath Falls	34	0	0	0	0	0	160
Interstate	122	14	11	0	0	14	461
Steens Mountain	33	0	0	0	0	0	200
CENTRAL & HI DESERT AREA TOTALS ..	1,339*	156	12	235	9	400	15,733
ROCKY MOUNTAIN ELK TOTALS	56,902*	8,967	16	6,210	774	15,951	377,435
GENERAL BULL SEASON TOTALS	90,985*	12,863	14	0	0	0	0
CONTROLLED ANTERLESS TOTALS	15,554	0	0	8,006	0	0	0
BOWHUNTING TOTALS	12,731*	0	0	0	1931	0	0
STATE GRAND TOTALS	119,270*	0	0	0	0	22,800	611,553

*Totals omit duplication of hunters participating in more than one unit, area or zone.

1980 General Elk Season By Hunt Period

Units by Area or Zone	First Period Hunt Results				Second Period Hunt Results			
	Number of Hunters	Percent of Hunters	Number of Bulls Harvested	Percent Hunter Success	Number of Hunters	Percent of Hunters	Number of Bulls Harvested	Percent Hunter Success
Scappoose	813	59	147	18	571	41	37	6
Saddle Mountain	3,289	74	568	17	1,143	26	120	10
Wilson	3,518	54	356	10	3,012	46	277	9
Trask	1,925	50	207	11	1,948	50	165	8
Stott Mountain	451	54	17	4	390	46	10	3
Alsea	1,233	69	181	15	545	31	36	7
Siuslaw	421	52	32	8	390	48	20	5
Willamette	271	68	10	4	130	32	17	13
NORTH COAST AREA	11,396*	60	1,518	13	7,739*	40	682	9
Tioga	2,232	69	372	17	1,023	31	180	18
Sixes	316	56	20	6	247	44	7	3
Powers	1,186	52	78	7	1,111	48	39	4
Chetco	237	49	50	21	247	51	16	6
Applegate	39	100	0	0	0	0	0	0
Evans Creek	79	48	0	0	85	52	0	0
Melrose	474	73	20	4	178	27	5	3
SOUTHWEST AREA	4,527*	62	540	12	2,761*	38	247	9
Santiam	930	48	102	11	996	52	30	3
Metolius	0	0	0	0	32	100	0	0
McKenzie	811	41	91	11	1,175	59	183	16
Upper Deschutes	94	42	0	0	129	58	0	0
Indigo	1,030	47	114	11	1,150	53	67	6
Fort Rock	31	49	6	19	32	51	0	0
Dixon	468	33	29	6	957	67	70	7
Sprague	0	0	0	0	64	100	8	13
Rogue	811	33	90	11	1,636	67	119	7
Keno	36	18	0	0	160	82	0	0
CASCADES AREA	4,028*	41	432	11	5,787*	59	477	8
ROOSEVELT ELK TOTALS	18,968*	56	2,490	13	15,115*	44	1,406	9
Minam	1,218	62	191	16	742	38	199	27
Imnaha	1,605	75	216	13	542	25	66	13
Catherine Creek	672	53	68	10	600	47	66	11
Keating	342	48	79	23	371	52	33	9
Pine Creek	774	71	180	23	317	29	22	7
Lookout Mountain	125	47	45	36	142	53	11	8
WALLOWA ZONE	4,599*	65	779	17	2,467*	35	397	16
Snake River	475	50	139	29	475	50	114	24
Chesnimnus	1,900	85	365	19	323	15	82	25
Sled Springs	3,199	82	485	15	720	18	100	14
Wenaha	4,599	86	822	18	742	14	66	9
Walla Walla	1,446	69	248	17	655	31	77	12
Mt. Emily	4,576	72	800	17	1,823	28	211	12
WENAH-SNAKE ZONE	15,903*	78	2,859	18	4,453*	22	650	15
Starkey	4,599	66	957	21	2,358	34	278	12
Ukiah	3,165	57	394	12	2,401	43	199	8
Sumpter	1,878	58	225	12	1,353	42	113	10
Desolation	2,368	54	269	11	1,986	46	208	10
Heppner	2,447	55	405	17	2,019	45	324	16
Fossil	240	46	23	10	284	54	44	15
UMATILLA-WHITMAN ZONE	14,206*	60	2,273	16	9,594*	40	1,186	12
Northside	672	43	113	17	895	57	77	9
Murderers Creek	501	46	23	5	578	54	44	8
Beulah	421	41	56	13	600	59	66	11
Malheur River	455	53	56	12	404	47	55	14
Silvies	228	40	11	5	338	60	22	7
Ochoco	398	38	45	11	655	62	66	10
Grizzly	68	41	11	16	98	59	11	11
Maury	23	26	0	0	65	74	11	17
OCHOCO-MALHEUR ZONE	2,493*	44	315	13	3,198*	56	352	11
BLUE MOUNTAIN AREA TOTAL	36,468*	66	6,226		19,081*	34	2,585	14
Hood	205	57	11	5	153	43	11	7
White River	239	24	23	10	742	76	77	10
Fort Rock	0	0	0	0	44	100	11	25
Silver Lake	34	61	11	32	22	39	4	18
Sprague	11	100	4	36	0	0	0	0
Klamath Falls	34	100	0	0	0	0	0	0
Interstate	57	47	7	12	65	53	7	11
Steens Mountain	11	33	0	0	22	67	0	0
CENTRAL & HI-DESERT AREAS	546*	41	56	10	993*	59	100	10
ROCKY MOUNTAIN ELK TOTALS	36,939*	65	6,282	17	19,963*	35	2,685	13
GENERAL BULL SEASON TOTALS	55,907*	61	8,772	16	35,078*	39	4,091	12

*Totals omit duplication of hunters participating in more than one unit, area or zone.

1980 ANTELOPE SEASON

(68% Report Card Return for Rifle Buck Antelope Hunters)

Hunt Number	Name of Area	Tags Issued	Report Cards Received	Number Did Not Hunt	Number Hunted	Reported Harvest	Percent Success	Hunter Days
435A	Paulina-North Wagonire Units	50	41	0	41	35	85	85
436	Maury Unit	50	29	0	29	19	66	74
437	Ochoco Unit	80	48	0	48	39	81	95
446	Murderer's Creek Unit	50	34	1	33	24	73	86
451A	N. Sumpter Unit	10	10	0	10	10	100	12
451B	S. Sumpter Unit	10	9	1	8	8	100	11
464	Lookout Mountain Unit	10	7	0	7	6	86	15
465	Beulah Unit	60	40	1	39	35	90	68
466	Malheur River Unit	150	104	0	104	87	84	188
467	Owyhee Unit	75	51	1	50	44	88	86
468	Whitehorse Unit	150	101	1	100	69	69	246
469	Steens Mountain Unit	150	93	3	90	50	56	248
470A	East Beatys Butte Unit	100	70	3	67	48	72	130
470B	West Beatys Butte Unit	60	38	0	38	31	82	81
470C	National Antelope Refuge	15	11	0	11	11	100	19
471	Juniper Unit	100	72	0	72	59	82	176
472	Silvies Unit	50	27	0	27	19	70	57
473A	South Wagonire Unit	25	15	0	15	13	87	34
474	Warner Unit	35	28	2	26	21	81	57
475A	East Interstate Unit	50	36	3	33	20	61	79
476A	Fort Rock-Silver Lake Units	20	18	0	18	12	67	47
TOTALS		1,300	882	16	866	660	76	1,894
437A	Portion Ochoco Unit (Does)	30	18	0	18	15	83	33
466A	Malheur River Unit (Does)	100	63	2	61	44	70	131
TOTALS		130	81	2	79	59	75	164
475B	Gerber Reservoir (Bow)	181	144	28	116	3	3	436
475C	Gerber Reservoir (Bow)	104	86	15	71	1	1	300
TOTALS		285	230	43	187	4	2	736

ESTIMATED TOTAL HARVEST: 893

Cougar

Cougar hunters had five areas in northeastern Oregon with 120 tags and two areas in southwestern Oregon with 40 tags during the 1980 season. A one-month December season was allowed in northeastern Oregon while two months during December and January were allowed in southwestern Oregon. A total of 17 cougars was taken in northeastern Oregon while 15 were taken in southwestern Oregon. The harvest in southwestern Oregon increased from four in 1979 to 15 in 1980.

Bighorn Sheep

Twenty-four sheep tags were issued in four areas involving seven hunt periods in 1980. In southeastern Oregon, 18 California bighorn sheep hunters took 14 rams, including seven from Hart Mountain, four from the Steens Mountain and three from the Owyhee area. In northeastern Oregon, six Rocky Mountain bighorn sheep hunters took five rams from the Hurricane Divide area.

OREGON WILDLIFE

Bowhunting

Bowhunters were allowed a 37-day statewide early general season for both deer and elk plus late season opportunities. Hunters were again required to choose between rifle hunting and bowhunting when purchasing a tag.

A total of 17,307 bowhunters harvested 5,386 deer and averaged 31 percent success. Fifty-nine percent of the deer were taken in eastern Oregon and 41 percent in western Oregon with the harvest consisting of 51 percent antlerless and 49 percent antlered bucks. A total of 12,731 bowhunters harvested 1,931 elk and averaged 15 percent success. Sixty percent of the elk were taken in western Oregon and 40 percent in eastern Oregon with the harvest consisting of 63 percent antlerless and 37 percent antlered bulls.

Muzzleloader Hunting

Two controlled muzzleloader hunts were allowed in 1980 but interested individuals, for the first time, had to turn in their general

deer tag for the controlled hunt permit/tag. The most popular was the nine-day Hart Mountain hunt where 200 permits were allowed. A total of 178 hunters harvested 91 deer and averaged 51 percent success. The second hunt was a package of eight units or areas which allowed up to 25 days of hunting where 2,800 permits were allowed. Only 422 permits were taken and of these only 299 reported hunting. These hunters harvested 142 deer and averaged 48 percent success.

Harvest Data Collection

The accompanying tables show the results of the 1980 seasons. Estimates were based on projected information obtained from questionnaires mailed to a random sample of hunters who purchased deer and elk tags and individuals turning in bear and elk report cards. Controlled hunt report cards from deer, elk, antelope and cougar hunters and bighorn sheep check-out reports were used in the computations. □

THIS AND THAT

Compiled by Ken Durbin

New Hunting Dog Booklet

A new Winchester publication, "Hunting Dogs," introduces young hunters to the various types, breeds, and uses of dogs in hunting.

The 32-page booklet was written by John Madson and illustrated by Bob Hines, and includes chapters devoted to the pointing, flushing, and retrieving breeds, and both trail and sight hounds.

Copies are available from the Conservation Department, Winchester Group, Olin Corporation, East Alton, Illinois 62024, at 50 cents each. Discounts for quantity purchases are available on request.

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Cooking Up a Case

Two Missouri sheriff's deputies recently arrested a pair of men for speeding and found a freshly killed turkey in the car. They added a poaching charge to the traffic violations.

The turkey was frozen at the jail for use in court — but a jailer inadvertently cooked the evidence and served it to the prisoners.

Because the turkey couldn't be positively identified as a wild one, the poaching case was dismissed.

*Missouri Department
of Conservation,*

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Sheep vs Deer

Pampas deer, which are on the verge of extinction in Argentina, have declined in Uruguay to an estimated 1,000 animals. Mostly they occur in small scattered herds, which have survived because of their remoteness and the absence of sheep, and because a small number of landowners have protected them. Sheep, however, are likely to spread because rising oil prices have made synthetic fibres more expensive and wool more competitive. So unless reserves are proclaimed and breeding herds captured, the pampas deer could be in serious trouble.

Oryx

Pheasant Baled

Like a scene from a murder mystery, the victim was squashed inside a hay bale.

Last fall, Rod Valentine of Willow Lake, South Dakota, noticed a pair of bird feet protruding from one of the flax straw bales he was hauling. The aluminum band around one of the legs identified the bird as one of the thousands released under the Pheasant Restoration Program.

Apparently the bird Valentine found liked it so well in the flax field that when the baling equipment came through it tried to sit it out. He should have bailed out.

South Dakota Conservation Digest

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Wildlife Prints

There is some good news for anyone looking for an economical source of wildlife pictures. The U.S. Government has printed the Wildlife Portrait Series which consists of four sets of images suitable for display. Each of the sets has 10 pictures printed on high quality paper in a 16- by 20-inch format.

They can be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The subject, stock number and price of available series are below.

Series 2 — #024-010-00277-8, Sport Fishes, \$4.35

Series 3 — #024-010-00388-0, Songbirds (paintings), \$3.70

Series 4 — #024-010-00530-1, Alaska Birds, \$5.00

Series 5 — #024-010-00528-9, General Wildlife, \$6.00

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Arctic Wastes

The earth's last pristine wilderness — the Arctic Ocean — is threatened by pollution from industry in Europe, America and Asia. Pollutants such as heavy metals, pesticides, sulphur oxides and even radioactive waste are increasingly finding their way into the Arctic Ocean. What makes matters worse, scientists confess that they know little about the fundamental oceanography of the Arctic, making it extremely difficult even to chart the fate of the pollutants already pouring into the ocean.

New Scientist

Trout Combating Hunger in Peru

The rainbow trout, with the help of Colorado State University and Peruvian biologists, is combating poverty and hunger in Peru. A program formulated by Colorado State University biologists to develop inland fisheries and manage trout populations has resulted in an improved economy for poor mountain regions of that South American country.

A course in trout management for Peruvian biologists was the most recent in a series of projects conducted by Colorado State University as part of the inland fisheries program. Other projects have included stream enhancement and construction of fish hatcheries and fish food plants in Peru.

Rainbows were first introduced into Peru by British miners in 1936. The new freshwater fish industry has provided needed food and jobs to the area, and other South American countries are interested in similar programs.

Colorado Outdoors

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Coming Up Short

The cost of producing food and fiber, not counting inflation, could double over the next 50 years. The primary reason is the decline in soil productivity due to erosion caused by the absence of many conservation practices in today's farming methods. If present trends continue, by the year 2030, erosion will exceed the level necessary for sustained production on 20 percent of all cropland acreage, the use of pesticides, herbicides, and fertilizers will increase 22 percent, and 50 million acres of cropland will be lost to urban sprawl. In addition, all good cropland will be in production, leaving none for more increases in demand.

Pennsylvania Game News

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Camel Power

Game wardens in Kenya are going back to using camels for tracking down poachers. Camels are not restricted to roads, can cover up to 40 miles a day, and move more silently than any four-wheel-drive.

Pennsylvania Game News

MAY 1981



Oregon's

WILDLIFE WINDOW

Like many of our citizens, not all of Oregon's wildlife residents are natives to the state. More species than most Oregonians suspect have been introduced over the past 150 years. Among the group of relatively new wild Oregonians are bullfrogs, carp, mountain goats, house sparrows, pheasants, rats, catfish, opossums and brook trout.

All of those named above and many others survive here because Oregon offers a wide range of habitat types. This provides niches similar to distant parts of this country and the world. There are places in Oregon that could accommodate still other wild forms from other places. Few are being contemplated for introduction however and those that are will get a careful premigration exam.

Very few previous introductions were the result of such careful planning. Some were the result of whim or accident. Others came as stowaways on ships and cargo from distant lands. Still others arrived by expanding their range from an accidental or intentional introduction elsewhere.

Careful consideration of potential consequences was often not a part of past introductions that were done intentionally. Some of the new arrivals made poor neighbors. They were pests, disease carriers and damaging to crops, dikes or other structures. This consideration is now high on the list when any potential new species is evaluated.

Once released, some of the new arrivals immediately began to prey on or compete with native Oregon species. This caused a loss or reduction of the native forms and the net balance in wildlife diversity simply became trading one for another. Effect on native species is another consideration given careful attention today.

Some attempts at introduction failed. For some the habitat was unsuitable. Sometimes insufficient numbers were released to get a breeding population established. Competition or predation by native species was another factor that

eliminated other potential newcomers. The end result was a major waste in time, money and effort. Today, introduction of a new species is very costly. Funds simply cannot be risked unless good advance research indicates a high probability of success.

Reintroduction of an extirpated animal like the bighorn sheep or sea otter brings many of the same concerns as a completely new species. Competition, suitability of remaining habitat and cost all play a big part in any effort to try returning a native animal to its former home. □

THIS MONTH'S WINDOW

NEW NEIGHBORS

How can you find out what wildlife species now live in your area that were not here when the first settlers came to Oregon?

Were there native species here that the new arrivals have forced out or severely reduced? How could you find out?

Design an animal to live in some kind of habitat in Oregon. See if an animal with those adaptations now exists somewhere in the world.

What might be the result if that species were introduced?

FISH AND WILDLIFE COMMISSION ADOPTS OCEAN SALMON RULES

The Oregon Fish and Wildlife Commission adopted the 1981 ocean salmon seasons for the area from the coastline out to three miles. The rules set by the Commission follow the pattern established by the Pacific Fishery Management Council in setting the regulations for the area from three to 200 miles.

The PFMC rules still have to be approved by the Secretary of Commerce and both sets of rules are subject to modification by in-season management provisions if the number of fish allocated are caught before the end of the season. Following are the seasons adopted:

1981 OREGON OCEAN SALMON REGULATIONS

Open Seasons: Chinook, Pink & Chum Salmon
All Salmon

	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
COMMERCIAL						
North of Cape Falcon	1/ 31		15	1	20 3/	
Minimum Size Limits: Chinook: 28 inch Coho, Pink: 16 inch						
South of Cape Falcon	1/ 31		1	2/	8 9	31
Minimum Size Limits: Chinook: 26 inch Coho, Pink: 16 inch						
SPORT						
North of Cape Falcon						
Minimum Size Limits: Chinook: 24 inch Coho, Pink: 16 inch						
South of Cape Falcon						
Minimum Size Limits: Chinook: 22 inch Coho, Pink: 16 inch						

NOTE: All species salmon seasons are subject to modification by in-season management provisions.

1/ Gear restrictions same as last year (see 1980 OAR 635-03-020).

2/ If there is an in-season closure for coho, then an all-species except coho season will be allowed from Cape Sebastian (below Gold Beach) to Cape Falcon, with whole bait or 5 inch plugs only, starting at the time of the closure through September 8.

3/ Coho only, maximum of 10 boats with observers; coho gear only; out to 12 miles.

4/ Oregon/California border to Cape Blanco (north of Port Orford) only; bag limit 2 fish per day.

ORCA VISITS ARE AN ANNUAL EVENT

The recent sighting of killer whales feeding on sea lions in Newport's Yaquina Bay marks the third year in a row that these seal and sea lion eating whales have stopped in at Yaquina Bay for a meal.

According to Dale Snow of the Department of Fish and Wildlife office in Newport, there are no records of killer whale sightings in Yaquina Bay prior to the first appearance three years ago.

The presence of these whales, formally known as Orcas, may coincide with the considerable in-

crease in number of California sea lions using the bay as a resting and feeding area, Snow said.

California sea lions are seasonal visitors to Oregon, found here normally between October and May.

While Orcas are often associated with more northerly ocean waters and areas such as Puget Sound, they do live in Oregon waters as well. The largest concentrations are found offshore from Port Orford and Coos Bay, according to Snow.

Five Orcas entered Yaquina Bay

BIG GAME TOWN HALL MEETINGS

The Fish and Wildlife Department will conduct three town hall meetings, two in eastern Oregon and one in the southwestern part of the state, to give sportsmen a chance to comment on 1981 big game season proposals or other matters relating to big game management or regulations.

The first will be held in Burns Friday, May 15, in the courthouse circuit court room at 7:30 p.m. The next will take place on Saturday, May 16, in Baker at 1 p.m. in the new Extension building, 2610 Grove Street.

On Saturday, May 23, a meeting will be held in Grants Pass at the Josephine County Fairgrounds, Arts & Crafts Building, beginning at 2 p.m.

The town hall meetings are in addition to public hearings held in Portland in conjunction with setting the 1981 seasons. The Commission has conducted a number of town hall meetings each of the last several years in various cities throughout the state.

At each of the meetings staff with the Fish and Wildlife Department's Wildlife Division will review staff proposals for the 1981 deer and elk seasons. □

in early April and were seen killing at least five sea lions before heading back out to sea. The group included one female over 20 feet long and weighing an estimated 20 tons.

All three Orca arrivals have been at about the same time of year. No previous sea lion kills have been documented, Snow said.

He did note that on one past occasion all the sea lions in the bay headed for the open ocean after the Orcas showed up. The sea lions were not seen in the bay again that season. □



506 S.W. MILL STREET
P.O. BOX 3503
PORTLAND, OREGON 97208