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# OREGON STATE GAME COMMISSION BULLETIN

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At the present time the Bulletin is circulated free of charge to anyone forwarding a written request.

## the cover

This is part of the herd of elk doing damage along West Millicoma River in Coos County from which 14 were recently trapped and removed to more suitable habitat in the Umpqua watershed in Douglas County.  
(Photo by Milt Guymon)

## HUNTING REGULATIONS TO BE SET IN JULY

A hearing on 1958 hunting regulations by the Game Commission is scheduled for 10 a.m., Friday, July 11, at its Portland office. This is the statutory date to consider seasons, bag limits and methods of taking for game birds, game animals and furbearing animals. The hearing will be adjourned for two weeks and reconvened on July 25, at which time the final regulations will be adopted.

## Outdoor Education Leadership Workshop

Outdoor education will be the theme of the three-day leadership workshop which will convene at Camp Tsiltcoos on Siltcoos Lake on June 5, 6, 7, 1958. About sixty teachers from elementary and secondary schools in Oregon will gather to learn the techniques of safe gun handling and shooting, fishing methods, and the hows and whys of wildlife conservation.

The workshop is being sponsored by the Oregon Game Commission and the State Department of Education in cooperation with the Outdoor Project of the American Association for Health, Physical Education and Recreation. Financial support is provided by a grant from the Sporting Arms and Ammunition Manufacturers Institute, and the Associated Fishing Tackle Manufacturers. Objectives of the workshop are to encourage schools to provide more outdoor education in the school curricula, and to prepare teachers to assist in setting up the program.

Representatives from sporting arms and fishing tackle manufacturers will be on hand to assist with instruction at the clinics which are scheduled for each of the three days. The National Rifle Association will provide a safety instructor, and consultants from state and federal agencies will assist in panel discussions and conservation clinics.

## APRIL MEETING OF THE GAME COMMISSION

Among actions taken by the Game Commission at its meeting on April 25 were:

*Fish Lake:* Increased bag limit to 30 fish a day, 60 in possession, for Fish Lake in Jackson County. This was to allow anglers to take more fish in view of impending chemical treatment of the lake.

*Bids:* Accepted bid of James and Stritzke Company for \$20,849 for construction of house, roadway and pipeline at Oak Springs Trout Hatchery.

*Keep Oregon Green:* Authorized \$250 contribution to Keep Oregon Green.

*Steamboat Falls Fishway:* Authorized application for a federal Dingell-Johnson project for \$75,000 for a fishway over Steamboat Falls in Douglas County.

*Dorena Reservoir:* Authorized application for a Dingell-Johnson project in the amount of \$20,442 for chemical treatment of Dorena Reservoir and tributaries.



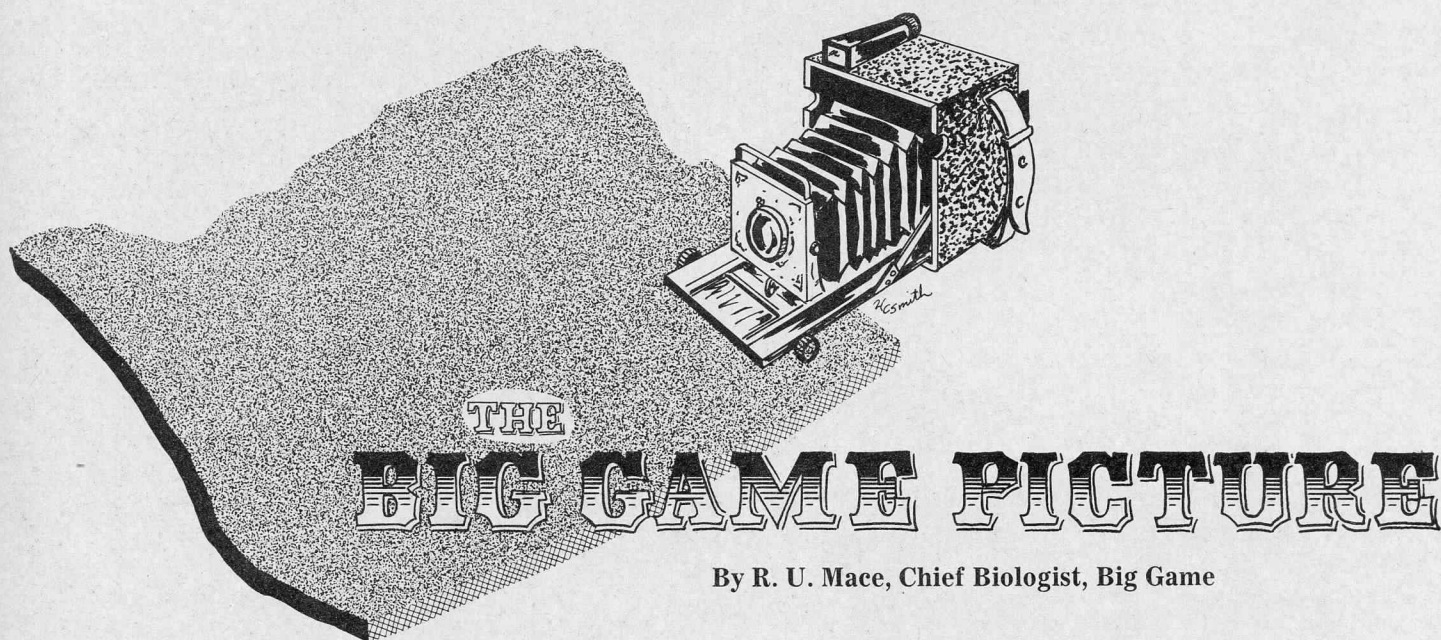
## Wolves in Oregon?

Since mention in a recent Bulletin article that wolves were practically extinct and none had been bountied by the Game Commission for a number of years, several persons have challenged this statement. Although occasionally a coyote pelt is sent in for wolf bounty, the last one the Commission paid was in 1946 for a wolf taken in Lane County.

In the picture Cal Giesler and Ron Shay compare a coyote hide and two large wolf pelts owned by the Commission. The dark wolf pelt was taken in Oregon in the 1930's and the lighter one is from Alaska. Wolves from the same litter may vary greatly in color. Average weight of the wolf is about 100 pounds compared to 30 to 40 for the coyote.







By R. U. Mace, Chief Biologist, Big Game

**R**ESULTS of the 1957 hunting season are available and offer a lot of food for thought. Let's take a close look at what Oregon big game hunters took home during the past year and consider the future in the light of experience gained during recent years.

#### Deer Seasons:

Deer continue to be Oregon's most popular and productive game animal. The 1957 buck season extended from September 28 through October 18, followed by a three-day period when those still having tags could take a deer of either sex. Table 1 summarizes the results of the general season. The total kill of 114,515 deer is very close to the 119,741 taken in 1956. When we consider the weather problem on the opening date and the hunter's choice period being three rather than nine days in length, the comparison is very favorable. Yes, the 1957 season was most successful and represents the fifth consecutive year that the deer kill has exceeded 100,000.

Of the 266,665 hunters who purchased hunting licenses, 221,960 or 83 per cent, hunted deer. Individual hunter success averaged 52 per cent which is slightly above the 51 per cent over-all success experienced the past six years when similar seasons have been in effect.

Klamath County produced the most deer for hunters with a total of 11,946 animals. The 1957 season was the fourth consecutive year in which the Klamath County kill has led the state.

On the basis of deer taken per square mile of area, Benton County was the most productive. Approximately three deer were harvested per square mile during the 1957 season. Wheeler, Deschutes, Grant, Baker, and Klamath counties all

ranked high last fall by producing more than two deer per square mile.

The individual had the best chance of success in Baker and Wallowa counties where 73 per cent of all hunters bagged a deer. While good numbers of deer are present in northeastern Oregon, the distance from centers of population and lighter hunting pressure are the main reasons for such high success.

Nearly 70 per cent of all deer taken were bucks. A higher ratio of bucks was harvested in 1957 than the preceding two years. Stormy weather during the season encouraged the early movement of deer which may account for the higher kill of bucks.

Mule deer made up 71 per cent of the general season kill compared to 66 per cent in 1956. Antlerless animals comprised 32 per cent of the mule deer bag and 23 per cent of the blacktail harvest.

Figure 1 illustrates the kill by date throughout the 24-day season. The opening week end accounted for 17 per cent of the total compared to 20 per cent the previous year. Hunting pressure increased on the second and third week ends of

the buck season but kill during the mid-week periods was low. Approximately 56 per cent of all deer were taken during the 21-day buck season. An additional 14 per cent of the total were bucks killed during the three-day hunter's choice period. Many hunters apparently delayed their trip until both sexes were legal as 44 per cent of all deer were taken the last three days of the season.

Table 2 compares the results of general deer seasons since 1948 when a separate deer tag first made records available. From 1948 through 1951, bucks only were legal. The average annual kill was 49,565 and the individual hunter had a 29 per cent chance of being successful. Since 1952, both sexes have been legal in specified areas of the state. The hunter's choice provision has been in effect at the end of the general season and applies only to those with unused tags. During the past six years hunters have averaged 110,121 deer annually. Individual hunter success has increased to 51 per cent.

Controlled deer seasons continue to be

(Continued on Page 4)

Table 2 SUMMARY OF GENERAL DEER SEASONS

Year	Tags Issued	Kill				Total	Per Cent of Hunters Successful
		Mule Deer		Black-tailed Deer			
		Bucks	Antlerless	Bucks	Antlerless		
1948	166,618	23,141	—	16,644	—	39,785	23.9
1949	163,628	36,865	—	20,395	—	57,260	35.0
1950	173,429	26,471	—	17,580	—	44,051	25.4
1951	171,252	37,850	—	19,312	—	57,162	33.4
1952	188,250	32,366	20,426	19,657	5,210	77,659	41.3
1953	204,808	39,916	24,652	27,623	13,045	105,236	51.4
1954	215,047	54,357	22,384	27,702	8,043	112,486	52.3
1955	230,585	51,933	35,570	30,203	13,385	131,091	56.9
1956	233,842	47,155	32,309	26,937	13,340	119,741	51.2
1957	221,960	54,829	26,044	25,282	8,360	114,515	51.6



**Table 1 1957 GENERAL DEER SEASON**

County	Number of Hunters	Kill			Per Cent of Hunters Successful	County Area in Square Miles	Deer Harvested Per Square Mile
		Bucks	Antlerless	Total			
Baker	8,893	4,569	1,947	6,516	73.3	3,084	2.1
Benton	4,014	1,079	774	1,853	46.2	647	2.9
Clackamas	3,851	598	333	931	24.2	1,890	0.5
Clatsop	3,031	674	—	674	22.2	820	0.8
Columbia	2,516	349	339	688	27.3	646	1.1
Coos	5,324	1,736	470	2,206	41.4	1,611	1.4
Crook	6,862	2,740	153	2,893	42.2	2,980	1.0
Curry	1,555	703	200	903	58.1	1,622	0.6
Deschutes	17,887	5,153	2,880	8,033	44.9	3,041	2.6
Douglas	9,210	3,997	817	4,814	52.3	5,062	1.0
Gilliam	994	443	226	669	67.3	1,211	0.6
Grant	16,962	7,684	3,579	11,263	66.4	4,532	2.5
Harney	9,790	4,681	1,475	6,156	62.9	10,132	0.6
Hood River	1,947	321	108	429	22.0	529	0.8
Jackson	7,052	2,573	281	2,854	40.5	2,817	1.0
Jefferson	2,964	1,180	189	1,369	46.2	1,794	0.8
Josephine	2,335	694	135	829	35.5	1,625	0.5
Klamath	19,309	8,037	3,909	11,946	61.9	5,973	2.0
Lake	16,842	6,690	4,264	10,954	65.0	8,270	1.3
Lane	14,606	3,497	2,125	5,622	38.5	4,494	1.2
Lincoln	2,634	843	398	1,241	47.1	1,006	1.2
Linn	5,860	1,338	747	2,085	35.6	2,294	0.9
Malheur	5,964	2,938	981	3,919	65.7	9,870	0.4
Marion	3,181	509	316	825	25.9	1,173	0.7
Morrow	3,515	1,322	884	2,206	62.8	2,059	1.1
Multnomah	294	55	18	73	24.8	424	0.2
Polk	3,421	965	317	1,282	37.5	739	1.7
Sherman	1,008	363	202	565	56.1	830	0.7
Tillamook	4,275	1,039	—	1,039	24.3	1,115	0.9
Umatilla	7,245	2,327	1,138	3,465	47.8	3,231	1.1
Union	6,344	2,547	1,199	3,746	59.0	2,032	1.8
Wallowa	5,863	3,187	1,074	4,261	72.7	3,178	1.3
Wasco	4,894	1,409	906	2,315	47.3	2,387	1.0
Washington	1,670	246	115	361	21.6	716	0.5
Wheeler	7,738	3,179	1,642	4,821	62.3	1,707	2.8
Yamhill	2,110	446	263	709	33.6	709	1.0
TOTALS & AVERAGES	221,960	80,111	34,404	114,515	51.6	96,350	1.2

## Big Game Picture

(Continued from Page 3)

necessary on certain problem ranges. Eight such hunts were held in 1957. The 4,300 tag holders bagged 1,894 deer for an average success of 44 per cent. Table 3 summarizes the results.

Archery enthusiasts were privileged to participate in more hunts than any previous year. The kill as reported by archers on their return cards is presented in Table 4.

Considering all seasons, a grand total of 116,589 deer was bagged during 1957.

### Elk Seasons:

The general elk season opened on October 26 and extended through November 11 along the coast, ending on November 24 elsewhere. Bulls with three or more points per antler were legal in the north coastal area while any bull with antlers could be taken in the south coast, Cascades, and northeastern sections. Both sexes were legal in southeastern Oregon. Legalizing spikes along the south coast was the major change from 1956.

Results of the general season are presented in Table 5. More hunters bought

tags than in any previous year with a record of 37,995 being sold. The kill of 1,655 elk in western Oregon is the highest on record with nearly half of the total coming from Coos County. Over a third of the Coos County kill were spikes, which accounts for the increase.

Wallowa, Umatilla, and Union counties continued to furnish most of the eastern Oregon kill. Few antlerless elk were taken in the southeastern area, making up but 6 per cent of the eastern Oregon total.

**Table 3 CONTROLLED DEER SEASONS**

Area	Dates	No. of Tags Issued	Kill			Per Cent of Tag Holders Successful
			Bucks	Antlerless	Total	
Alfalfa, 12/7-12/31		200	58	83	141	70.5
Corvallis Watershed, 10/22, 10/23, 11/30, 12/1		200	61	112	173	86.5
Eastern Lane, 11/16-11/17		2,000	406	405	811	40.6
Lookout Mountain, 12/7-12/9		500		275	275	55.0
Minam, 9/28-10/21		500		146	146	29.2
Newbridge, 12/7-12/31		200	43	80	123	61.5
Pine Grove, 11/30-12/2		200		69	69	34.5
Snake River, 9/28-10/21		500		156	156	31.2
TOTALS and AVERAGES		4,300	568	1,326	1,894	44.0

Figure 2 illustrates the kill by date. The opening week end accounted for 30 per cent of the total with 58 per cent being taken the first nine days.

Either-sex permits were issued in four areas primarily to control crop damage. In addition, permits were issued for nine units to secure the controlled harvest of antlerless elk on northeastern Oregon ranges. The unit permits became valid on the fourth week end in order to spread hunting pressure more uniformly. Table 6 summarizes the results. Of the 2,075 permits issued, 922 hunters bagged an elk for an average success of 44 per cent.

Archers reported bagging four animals. The combined kill for all seasons totaled 7,506 elk which is the highest on record with the exception of 1949.

### Conclusions:

Now that we have presented all the figures, let's consider their meaning. In the case of elk, the harvest is quite uniform although the number of hunters increases each year. Individual hunter success is expected to decline under these conditions since the amount of elk range is limited. The most productive ranges in northeastern Oregon are being managed as units to control the harvest of antlerless animals. This program is designed to maintain stable numbers in balance with range carrying capacities. It is anticipated that such action will eliminate the need for drastic reductions at intervals as in the past.

Our remaining comments will concern deer which are of interest to most big game hunters. The thing most obvious is the high level of kill being maintained in recent years. Despite a much shorter hunter's choice period in 1957 and a large closure in central Oregon, the general season kill almost equalled that of the previous year. The average annual kill has more than doubled since both sexes became legal and the individual hunter has nearly twice as great a chance of being successful.

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# Let's Teach in the Out-of-Doors

Luther Burbank once said, "Every child should have mud pies, grasshoppers, waterbugs, tadpoles, frogs, mud turtles, elderberries, wild strawberries, acorns, chestnuts, trees to climb, brooks to wade in, water lilies, wood chucks, bats, bees, butterflies, various animals to pet, hayfields, pine cones, rocks to roll, sand, snakes, huckleberries, and hornets, and any child who has been deprived of these has been deprived of the best part of his education."

Most conservationists and many educators undoubtedly agree with Burbank, and as a result of the cooperative effort of a few, outdoor education through school camping has arrived in Oregon. It is one of the newest teaching techniques, providing youngsters with rich learning experiences in the outdoor laboratory. Outdoor education may be defined as "effective use of the out-of-doors to help promote the growth, welfare, and total education of children." It is a practical approach to those subjects which are normally taught only in an indoor classroom. In the outdoor laboratory the learner may, through first hand observation and direct experience, develop appreciations, skill, and understandings that will supplement the curricula of the public schools.

A pilot project in outdoor education through school camping has just been completed with a sixth grade in the Crooked River Elementary School at Prineville. Thirty-four students and their teacher, Mrs. Ellen McCormack, spent a week in an outdoor classroom at Camp Tamarack in the Cascade Mountains near Sisters. Before taking her class into the out-of-doors, Mrs. McCormack asked herself this question, "What things can we do in camp which will add to, enrich, and reinforce the learnings which have already taken place in the classroom?" Without a clear-cut, definite relationship to the regular school curriculum, school camping would find little acceptance in the eyes of parents or educators. One youngster remarked after helping the forester measure the height, circumference and board feet in a large Ponderosa pine, "Now I can see why arithmetic is important."

The idea of outdoor education through school camping as an enrichment of the curriculum first started in Michigan about 1940. The W. K. Kellogg Foundation helped establish the first public school camp, and by 1950 Michigan had more than 60 schools that provided a

week or more of outdoor education for their children.

San Diego followed suit in 1945 with its city-county school camp, and by 1950, New York, Texas and Washington were giving outdoor education a try. More than half the states in the U. S. now have school camping programs in their elementary schools. California schools send more than 30,000 sixth graders to school camps.

The story of how Mrs. McCormack took her class to Camp Tamarack for a week in the outdoor classroom is an interesting one. Here is a teacher who dared to accept the principle so long preached by Dr. L. B. Sharp that "Things which can best be taught in the outdoors should there be taught." With encouragement and support from her principal, Lloyd Lewis, and the county school superintendent, Cecil Sly, Mrs. "Mac," as she was affectionately known in camp, enthusiastically worked the three R's into the whole outdoor education program. Before the youngsters ever left the classroom they had learned enough about weather in their science studies to really want to know how to predict weather with the equipment available to them in camp. With the help of student-counselors from the public school camping class at Oregon State College, they constructed wind vanes, simple anemometers, and temperature and humidity gauges.

Conservation of natural resources received major emphasis and in this area of study the teacher had assistance from resource consultants of the Oregon Game Commission, the U. S. Forest Service, and the Soil Conservation Service. These agencies helped to coordinate the learning activities in the outdoors with those

at school. Before the week was over the youngsters were beginning to understand that soil, water, plants and animals have "interdependency," and that man's careless use of one may destroy all the rest. They began to see that conservation means not only wise use, but also careful use and scientific management.

A typical day at the school camp included plenty of other learning activities. From the time the bugle sounded in the morning until the singing of the friendship song around the evening campfire, students were learning. Sometimes the learning was related more to the simple problems of getting along with people.

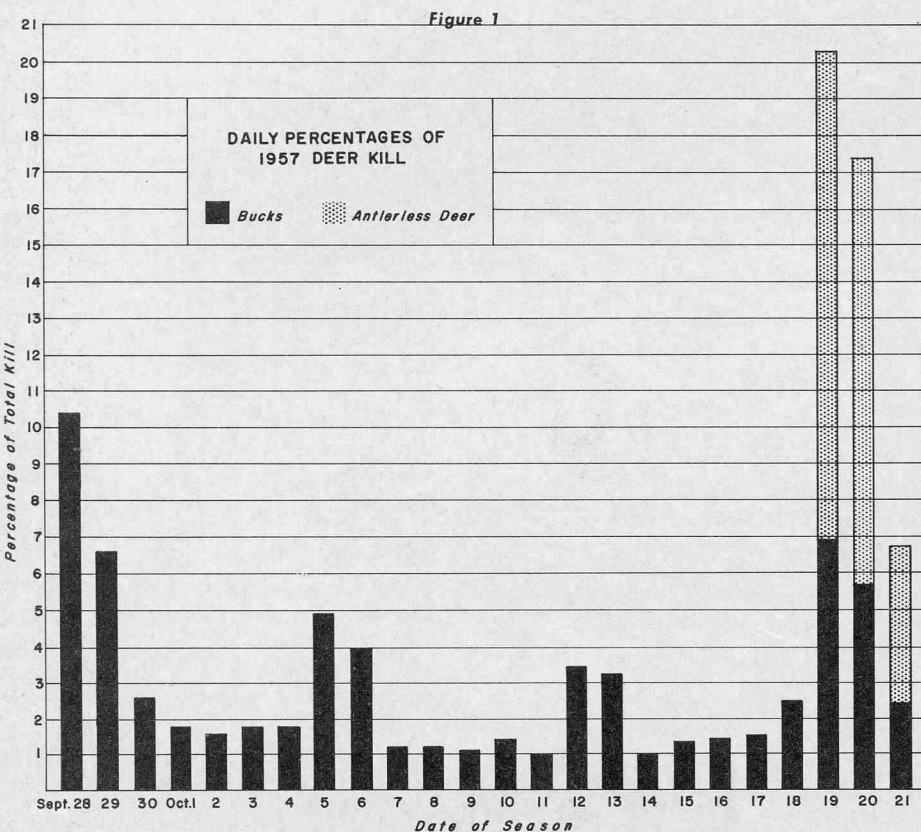
Recreation had its place in the school camp. Every afternoon there was time in the schedule for games, a scavenger hunt, folk dancing or a similar activity. Cook-outs were part of the instruction, but it was easy to see that the children considered them fun. As part of the arts and crafts study they made plaster casts of deer tracks around a pond, and this appeared to be fun, also.

Dr. Elmo Stevenson, President of Southern Oregon College, has this to say about outdoor education. "In an age of expanding leisure, millions of people are seeking the out-of-doors. Thousands of them will be denied the full measure of enjoyment of outdoor experiences because they lack basic attitudes, knowledges, skills and appreciations. These may be learned and developed through a sound school program of outdoor education. Thus the school has a vital responsibility for equipping every youth with these basic requisites so essential for life-long enjoyment of the out-of-doors." If other educators will accept the responsibility for and see the value of this learning experience, outdoor education through school camping will be here to stay. - - Austin Hamer.

*Prineville sixth-graders learn to build fire trail at school camp in the Cascades.*







**Table 4** **ARCHERY SEASONS**

Area	Dates	Deer Kill			Elk Kill		
		Bucks	Antlerless	Total	Bulls	Antlerless	Total
Baker, 8/31-9/22		9	10	19		2	2
Canyon Creek, 8/31-10/21		4	11	15			
Century Drive, 8/31-9/22		2	11	13			
Eagle Creek, 8/31-9/22		1	1	2			
Hart Mountain, 9/7-9/10 & 9/21-9/24		13	11	24			
Kansas Creek, 9/28-9/29 & 10/5, 6, 12, 13		8	11	19			
Malheur Refuge, 9/14-9/16		15	41	56			
McDonald Forest, 9/28-9/29 & 10/5-10/6		8	9	17			
Mt. Emily, 8/31-9/22		5	4	9	1		1
Rogue River, 12/7-12/22		1		1			
White River, 8/31-9/22		2	3	5	1		1
<b>TOTALS</b>		<b>68</b>	<b>112</b>	<b>180</b>	<b>2</b>	<b>2</b>	<b>4</b>

**Table 6** **CONTROLLED ELK SEASONS**

Area	Dates	No. of Permits Issued	Kill			Per Cent of Permit Holders Successful
			Bulls	Antlerless	Total	
Chesnimnus	11/16-11/24	100	2	63	65	65.0
Clatsop	11/23-11/24	250	5	53	58	23.2
Desolation	11/16-11/24	100	3	39	42	42.0
Heppner	11/16-11/24	250	4	114	118	47.2
Loon Lake	9/14- 9/16	75	9	16	25	33.3
Mill Creek	11/ 9-11/17	100	22	43	65	65.0
Minam	11/16-11/24	100	5	31	36	36.0
Shaw Mountain	12/14-12/18	100		29	29	29.0
Starkey	11/16-11/24	200	2	106	108	54.0
Ukiah	11/16-11/24	300	5	123	128	42.7
Umatilla	11/16-11/24	150	4	75	79	52.7
Walla Walla	11/16-11/24	250		113	113	45.2
Wenaha	11/16-11/24	100	2	54	56	56.0
<b>TOTALS and AVERAGES</b>		<b>2,075</b>	<b>63</b>	<b>859</b>	<b>922</b>	<b>44.4</b>

## Big Game Picture

(Continued from Page 4)

Have more liberal regulations affected total deer numbers? We are reminded that the objective of the hunter's choice season was to reduce wintering populations of deer in eastern Oregon and control agricultural damage problems west of the Cascades. In recent years most mule deer herds had reached the saturation point as far as winter range food supplies were concerned. Annual reproduction has been balanced by winter die-off and other losses. An important effect of excessive shrub use on winter ranges has been a reduction in the ability of such ranges to support deer. By harvesting some females it was planned to relieve the heavy pressure on the winter ranges and utilize the deer crop more efficiently.

The effect of recent hunting seasons has been less than expected. It is emphasized that mild weather the past several years has encouraged the maximum survival of deer. Winter losses have been light, thus minimizing the effects of hunting on total numbers. Mule deer herds have shown some decline but remain above the average for the past ten years. Deer living on the most open ranges have supported the heaviest kill but these animals represent only a portion of each herd. Those deer which summer in dense cover and do not reach the open winter ranges by the end of hunting season are lightly hunted. Western Oregon black-tails continue to thrive in dense cover despite hunting and crop damage remains a serious problem.

As far as the hunter is concerned, more effort and skill has become necessary since the first year or two of the hunter's choice season. Deer have an amazing ability to take care of themselves and the doe has become a good game animal. Fewer deer have the habit of standing along roads during the hunting season. Curiosity has been replaced by the sense of self-preservation. This is most desirable from the standpoint of both the deer and the hunter.

Deer have indicated an ability to withstand heavy hunting pressure. The animals have a high reproductive rate. This was very apparent in Crook County which was closed during the 1957 hunter's choice season in order to encourage hunting farther to the east. Approximately 30 per cent fewer deer were found on the three main herd ranges following the 1956 season. After the closure last fall the herds increased nearly to the level of two years ago.

Winter ranges recover slowly from  
(Continued on Page 7)



Table 5

## 1957 GENERAL ELK SEASON

County	Number of Hunters	Kill			Per Cent of Hunters Successful
		Bulls	Antlerless	Total	
Benton	9	1		1	11.1
Clatsop	4,275	415		415	9.7
Columbia	169	13		13	7.7
Coos	3,882	804		804	20.7
Curry	48	12		12	25.0
Douglas	1,299	265		265	20.4
Jackson	7	1		1	14.3
Klamath	60	3		3	5.0
Lane	843	92		92	10.9
Lincoln	163	33		33	20.2
Marion	37	2		2	5.4
Tillamook	136	13		13	9.6
Wasco	65	1		1	1.5
WESTERN ORE. SUBTOTALS	10,993	1,655		1,655	15.1
Baker	2,013	206	84	290	14.4
Crook	339	14	6	20	5.9
Grant	3,606	438	147	585	16.2
Harney	352	27	13	40	11.4
Malheur	281	17	10	27	9.6
Morrow	1,660	242		242	14.6
Umatilla	7,309	1,195		1,195	16.3
Union	5,629	944		944	16.8
Wallowa	5,434	1,518		1,518	27.9
Wheeler	379	48	16	64	16.9
EASTERN ORE. SUBTOTALS	27,002	4,649	276	4,925	18.2
TOTALS and AVERAGES	37,995	6,304	276	6,580	17.3

## Big Game Picture

(Continued from Page 6)

overuse and experience emphasizes the need to continue a liberal harvest program. Such management not only benefits the ranges but will provide hunters their proper share of deer being produced.

## Predictions on the Future:

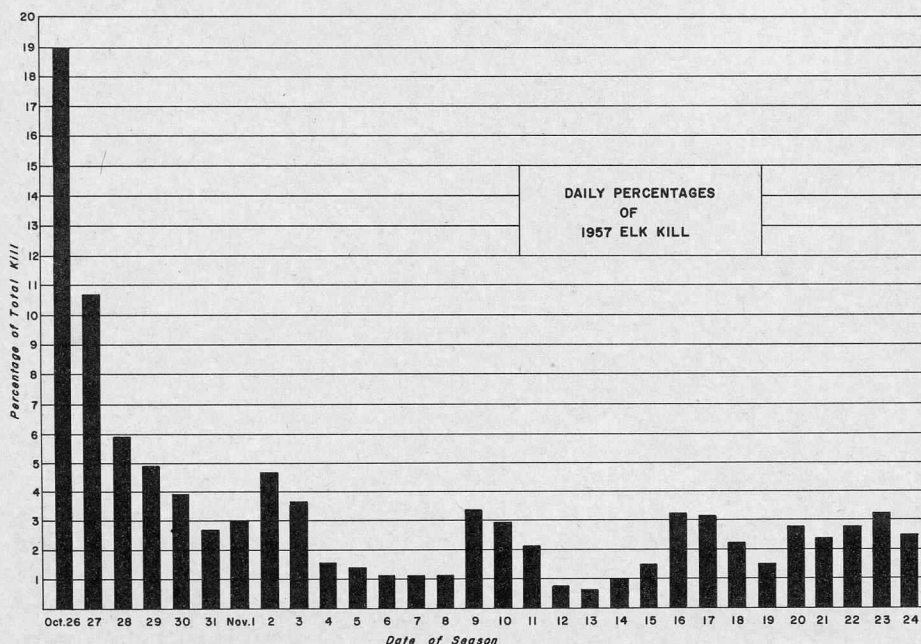
When the hunter's choice season was

proposed, the problem of controlling hunter distribution was recognized. To provide as much freedom as possible, few restrictions were placed on the choice of hunting areas. The Game Commission realized that the more accessible ranges would be hunted heavily, thus requiring future controls.

The predictions were correct as hunters concentrated on the central Oregon

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Figure 2



The Game Commission last month awarded the general contract for construction of Gnat Creek Hatchery in Clatsop County to C. M. Corkum Company, whose low bid was \$416,745. The new hatchery, which is being financed by federal funds received under the Columbia River Fishery Development Program, will be used to rear steelhead trout for the Columbia system.

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"Materials for Teaching Conservation and Resource-Use" a 55-page bulletin, has been prepared by the National Association of Biology Teachers and is now available for 35 cents from Interstate Printers and Publishers, Inc., Danville, Illinois.

The bulletin includes listings of free and inexpensive materials from state and national agencies, selected references, films and film strips, prepared by the Conservation Committee of NABT.

\* \* \*

Oregon trappers reported taking 12,865 beavers during the past winter. This is the third highest catch recorded during the seven years of open seasons. High again was Lane County which led with 1,666 beavers trapped. Tillamook County, all of which was open for the first time, yielded 1,032. It was fourth on the list, following Douglas County with 1,421 and Clatsop County with 1,097.

\* \* \*

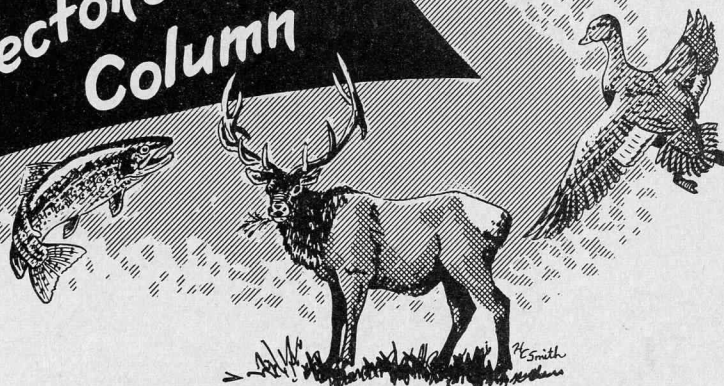
An excellent carry-over of chukars in the better chukar habitat has been observed by field agents. A check of sage grouse strutting grounds indicates this species continues to increase and possibly may be of sufficient density to provide limited hunting. Pheasants and quail inventories show substantial increase in birds but nesting success is dependent upon May and June weather conditions.

\* \* \*

Resident Canada goose numbers are high in most districts. Ample water throughout the breeding range has been conducive to good production.



# The Director's Column



One of the most pressing contemporary resource problems confronting Oregon and the Pacific Northwest states is the maintenance of our magnificent anadromous fish resource. This group of fish, of which the steelhead and several species of salmon are the most important, represents a heritage more or less taken for granted by virtue of its natural occurrence in Oregon throughout the period of state development. To be sure, much has been said and done on behalf of this resource during the past several decades. The fact remains, however, that the problems associated with its maintenance are, upon careful examination, of formidable proportions.

The essential cause of this critical situation originates with the progressively increased tempo of water development. Other directly related factors involving various land and water use practices contribute to the problem but in many of these there are opportunities for corrective measures which can and are being applied as rapidly as financial resources and fisheries technology permit.

One of the disturbing aspects of the anadromous fish maintenance-water development problem is the disposition to oversimplify the character and scope of this very basic challenge. In few areas of resource work does one have to contend with as diverse and complex a series of physical, biological and legal fields as this one. The agencies charged with responsibilities of stewardship of this public resource have likewise found it difficult to employ long-range planning

because of a constantly changing pattern of water development programming.

A delineation of the great number of specific problems in this field embraces a vast and diversified activity. Many lines of research, investigation and applied knowledge are under way in an effort to solve these problems. However, one very fundamental principle must become a part of the effort. This concerns itself with the nature of the resource at stake. These fishes are complex populations of many races, even within species, which are critically adapted to certain environmental requirements. In the course of developing techniques of protection at numerous and widely varying structures in our river systems only part of the problem is being faced. The maintenance of natural environment and the availability of that environment within the overall plan of water development must have a more positive consideration than appears probable at this time. There must be some assurance that within our river systems there be retained the necessary habitat requirements essential to this resource. Any tendency to simplify or minimize the importance of this factor or the solution of problems at existing structures is placing the resource in jeopardy.

This great challenge must also be met under a concept that these values must be increased rather than merely sustained at present levels. The fact of public demand as reflected by public use of the fisheries dictates no less.

P. W. Schneider.

## Big Game Picture

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ranges near the centers of population. Areas easily reached by road were hunted heavily in this section while counties farther to the east had fewer participants. The first change involved delaying the central Oregon hunter's choice season until the middle of the week. Heavy hunting pressure continued despite the delay. The area was closed in 1957 although the harvest of some antlerless deer would have been desirable.

To control hunting pressure on the basis of need, the Commission is considering the unit system for future deer hunting. Oregon has issued permits for taking antlerless elk on the unit basis for several years so most hunters are familiar with the program.

The same procedure would be used for deer. Those areas where the number of participants during the hunter's choice season needed controlling would be outlined with good boundaries. Hunters could apply beforehand for a permit in a particular unit with all permits issued by drawing. The unit system would not affect the buck season since hunters could go wherever they wished as before. However, possession of a permit for the particular unit as well as an unused deer tag would be necessary to participate in the hunter's choice season.

Issuance of a large number of permits would be required to secure the necessary kill of antlerless deer. On the basis of past kill records, approximately a fourth of those issued permits would kill bucks beforehand and be ineligible to hunt in the unit areas. Nearly half of the actual participants would be unsuccessful. Considering the ineligible hunters and the expected success ratio, a kill of 34,000 antlerless deer similar to the 1957 take would require issuing more than double that number of permits. When we consider that over 150,000 deer hunters were eligible for the hunter's choice season last year, the issuance of a large number of permits is justified.

An explanation of the unit system has been offered to acquaint sportsmen with the procedure. It is one means of controlling hunter distribution during the hunter's choice season. Those interested will have an opportunity to discuss this and other proposals with the Commission at the time regulations are set in July.

## Oregon State Game Commission Bulletin

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