

A black and white photograph of a deer with large antlers standing in a field of dry grass. The deer is shown in profile, facing right. The antlers are large and have several points. The background is a field of dry grass.

OREGON STATE  
GAME COMMISSION

# BULLETIN

MARCH-APRIL, 1965

# OREGON STATE GAME COMMISSION BULLETIN

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## The Cover

Roosevelt bull elk photographed near Clatskanie, Columbia County.  
Photo by Ray Wood.

## BULLETIN HUNTER SAFETY TRAINING PROGRAM

### Instructors Approved

Month of January .....	17
Month of February .....	31
Total to Date .....	3,357

### Students Trained

Month of January .....	264
Month of February .....	595
Total to Date .....	77,884

### Firearms Casualties Reported 1965 NONE

### Firearms Casualties Reported 1964

Fatal .....	9
Nonfatal .....	56

## BIG GAME REGULATIONS HEARING SET FOR MAY 21

The annual hearing on big game regulations will be held by the Game Commission on May 21 at its Portland headquarters, 1634 S.W. Alder Street. The meeting will convene at 10 a.m.

Regulations governing the taking of deer, antelope, elk, and bear (where classified as game animal) will be considered.

After tentative regulations are set, the hearing will be adjourned until 10 a.m. June 4. At this time final regulations will be adopted.

## MARCH MEETING OF THE GAME COMMISSION

The Game Commission met March 1 in Klamath Falls and considered the following matters.

**Flood damage.** The staff reviewed its investigations of the amount of damage incurred as a result of floods this winter and the possibility of financial assistance. While it appeared that funds would be available for some of the losses, the major portion of the damage suffered would not be covered unless other sources of financial aid developed.

A survey of coast streams to determine amount of clearance work necessary had been made by the department as part of a coordinated statewide program under the Governor's task force.

Of the Commission's permanent facilities, the most extensive damage occurred at the Rock Creek Hatchery (Umpqua River). Commission requested a thorough study of the conditions at the hatchery and estimate of cost of repairs.

**Pheasant allocation.** Allocation of estimated production of 20,000 pheasants from the Wilson Game Management Area was approved. The proposed distribution of birds is based on percentage of population and percentage of hunting pressure in each region.

**Pelton Reservoir.** Release of 100,000 kokanee in Pelton Reservoir this season was approved.

**Fishery rehabilitation.** Staff is to make a study of Blue Lake (Multnomah County) and of Hart Lake (Lake County) preliminary to possible treatment.

**Public Law 537.** Administrative problems encountered in management of lands acquired under Public Law 537 were discussed. Information and sugges-

## 1964 FISH RELEASES EXCEED MILLION POUNDS

Streams and lakes of Oregon were stocked with a total of 1,097,000 pounds of fish from the Game Commission hatcheries during 1964. Although production of catchable size fish had been cut 20 percent, the 1964 poundage figure exceeded that of 1963 because the December flood forced a premature release of 379,400 fish.

## TURKEYS TRANSPLANTED

Grant County received 9 Merriam's turkeys this winter from the White River Management Area. Last year 12 birds were released in the County. Since the original introduction of 58 birds in the White River area, the flocks have increased and provide a source of birds for distribution to other parts of the State.

tions for solution were to be forwarded to Congressional delegates.

**Option.** Option on Smutz tract within Ladd Marsh Management Area was exercised.

**Steelhead and coho allocation.** Approved release schedule for 1,359,000 steelhead and coho yearlings. Yearling spring chinooks normally released in spring were prematurely released because of flood conditions at Butte Falls and Rock Creek Hatcheries.

**Hermiston Game Farm.** It was decided to advertise for sale one 5-acre tract and residence at the Hermiston farm and lease balance of the property for one crop year.

**Willamette Hatchery.** Securing bids for drilling of a well at the Willamette Hatchery was authorized.

Game Commission's exhibit at the recent Portland Boat and Sports Show.





By Dave Luman, Chief Biologist, Big Game

**T**HE 1964 BIG GAME SEASONS resulted in a harvest of 160,558 big game animals and provided Oregon hunters with approximately 1,859,000 days of outdoor recreation. The reported harvest of approximately 143,000 deer by 271,339 tag holders is the fourth highest on record. The reported harvest of 17,157 elk by 62,898 elk tag holders exceeds all previous records for both participation and yield.

#### Deer Seasons

The 1964 general deer season extended from October 3 through October 25, with unit permits for antlerless deer becoming valid on October 17. Unit permits totaled 95,700 as compared with 97,350 in 1963 and 135,100 in 1962. Nine controlled seasons were held in 1964. Only 4,404 of the 4,450 authorized controlled season tags were actually issued. Hunters reported a take of 2,573 deer during the nine controlled seasons. There were 14,402 deer taken on early and extended seasons throughout the State.

The general deer season opened with dry conditions that prevailed throughout most of the season. Field reports showed the blacktail opening weekend success to be slightly below the 9 percent average for 1963. No migrations were noted in central and eastern Oregon until very late in the season. With the exception of the Ochoco Mountains area, hunter pressure appeared to be below normal in most

mule deer areas. Hunters had been warned of winter losses in units along the Snake River, and both hunter numbers and harvest indicated lighter hunting effort in those areas.

The total harvest of 143,023 deer was 12 percent above that of 1963 and 3 percent above the 1962 total. The mule deer success averaged 60 percent as compared with a 50 percent average in 1963, and black-tailed deer hunters increased their success average to 45 percent. Antlerless animals constituted 23 percent of the mule deer taken and 32 percent of the blacktails. Both figures are below the average for the previous five years because of conservative regulations. In yield of deer the McKenzie unit was well above any other with a total of 10,730 harvested during general early, extended, and controlled seasons. Hunter success in the Southwest Region was 52 percent as compared with 40 percent in the general season in the northwest quarter of the State.

In eastern Oregon, hunters experienced over 70 percent success in both the Wheeler and Chesnimnus units with several other northwestern Oregon units following closely. In numbers of deer taken, the Klamath unit led with 5,295 deer, followed closely by the Wheeler unit with almost 5,000 deer harvested.

Figure 1 shows mule deer populations and harvests for the past 17 years. The

1964 population trend data shows densities to be above the long-time average of approximately 12 deer per census mile. Harvest during the past season approaches the high kill of the years of 1959, 1960, and 1961. The 1964 antlerless take represents less than 25 percent of the total.

Buck seasons prior to 1952 provided an annual harvest of about 30,000 mule deer per year, and hunter success averaged about 30 percent. With uncontrolled antlerless hunting from 1952 through 1957, the annual harvest increased to about 75,000 mule deer. The antlerless take was close to 40 percent and hunter success about 50 percent. Under unit management from 1958 through last season, the mule deer harvest has averaged over 80,000 deer per year with the antlerless take making up about 27 percent of the total. Hunter success has been at the 60 percent level.

Early and extended deer seasons accounted for 10 percent of the total harvest, 19 percent of the deer kill in northwestern Oregon, and for over 50 percent of the McKenzie unit total. The Northwest agricultural season held in the Willamette Valley resulted in a harvest of over 3,000 deer and a hunter success of 58 percent. Statewide, 7,264 bucks and 7,138 antlerless deer were taken during early and extended seasons.

Continued on Page 6

**TABLE I**  
**1964 DEER HARVEST**

Units by Region	Number of Unit Permits	GENERAL SEASON					Early & Extended Seasons	Con- trolled Seasons	TOTALS		
		Hunters	Bucks	Antlerless	Total	% Hunter Success			Deer	Hunter Days	Deer per Sq. Mile
Alsea .....	10,000	10,237	3,119	1,505	4,624	45	3,812		8,436	79,137	4.9
Clatsop .....	1,500	4,957	1,415	508	1,923	39			1,923	34,387	2.3
McKenzie .....	11,000	12,500	3,936	1,378	5,314	42	5,416		10,730	111,794	3.8
Nestucca .....	2,000	1,022	254	327	581	57			581	4,951	2.1
Polk .....	2,500	3,539	744	453	1,197	34	398		1,595	21,569	3.3
Santiam .....	8,500	14,243	2,956	1,632	4,588	32	1,534		6,122	94,773	2.0
Siuslaw .....	2,000	3,043	1,360	290	1,650	54	397		2,047	18,504	2.3
Trask .....	3,500	7,385	1,832	1,124	2,956	40	399	317	3,672	38,995	4.4
Willamette .....	7,000	3,134	598	200	798	25	797		1,595	22,134	2.4
Wilson .....	2,500	5,752	1,505	961	2,466	43		556	3,022	31,797	5.2
<b>NORTHWEST</b> .....	<b>50,500</b>	<b>65,812</b>	<b>17,719</b>	<b>8,378</b>	<b>26,097</b>	<b>40</b>	<b>12,573</b>	<b>873</b>	<b>39,723</b>	<b>458,041</b>	<b>3.2</b>
Applegate .....	800	2,890	1,143	254	1,397	48			1,397	18,952	1.3
Chetco .....	500	2,131	943	181	1,124	53			1,124	14,455	0.7
Dixon .....	1,500	4,490	2,086	580	2,666	59	324		2,990	28,863	1.3
Elkton .....	400	1,398	580	127	707	51			707	8,143	0.8
Evans Creek .....	600	1,816	671	218	889	49			889	10,918	1.3
Melrose .....	500	2,643	1,233	200	1,433	54			1,433	15,253	2.0
Powers .....	500	2,142	943	272	1,215	57			1,215	12,006	1.3
Rogue .....	1,000	7,154	2,648	544	3,192	45			3,192	43,310	3.0
Sixes .....	2,000	3,233	1,378	472	1,850	57			1,850	18,336	2.4
Tioga .....	500	1,872	744	181	925	49			925	11,625	1.1
<b>SOUTHWEST</b> .....	<b>8,300</b>	<b>29,769</b>	<b>12,369</b>	<b>3,029</b>	<b>15,398</b>	<b>52</b>	<b>324</b>		<b>15,722</b>	<b>181,861</b>	<b>1.5</b>
Deschutes .....	0	6,642	2,412	0	2,412	36			2,412	35,493	1.9
Fort Rock .....	1,500	5,087	2,430	472	2,902	57	254		3,156	27,712	1.7
Grizzly .....	800	3,830	1,959	472	2,431	63			2,431	16,504	3.3
Hood River .....	0	813	200	0	200	25			200	4,063	0.6
Keno .....	500	2,761	1,088	163	1,251	45			1,251	17,175	1.5
Klamath .....	1,200	8,785	4,697	598	5,295	60			5,295	47,499	5.3
Maupin .....	500	1,495	725	345	1,070	71	91		1,161	6,762	4.6
Maury .....	500	1,670	725	363	1,088	65			1,088	7,255	2.0
Metolius .....	0	1,906	617	0	617	32		154	771	9,449	1.4
Ochoco .....	1,000	9,514	3,645	617	4,262	45			4,262	44,289	3.0
Paulina .....	0	4,416	2,104	0	2,104	48		205	2,309	24,556	1.5
Sherman .....	500	2,829	1,705	218	1,923	68			1,923	11,099	2.0
Sprague .....	0	3,124	1,850	0	1,850	59			1,850	13,947	2.0
Wasco .....	1,500	5,128	1,741	562	2,303	45	310	143	2,756	26,443	3.0
<b>CENTRAL</b> .....	<b>8,000</b>	<b>58,000</b>	<b>25,898</b>	<b>3,810</b>	<b>29,708</b>	<b>51</b>	<b>655</b>	<b>502</b>	<b>30,865</b>	<b>292,246</b>	<b>2.6</b>
Baker .....	500	4,570	1,959	526	2,485	55	19		2,504	23,722	2.8
Catherine Cr. ....	500	1,548	871	127	998	64			998	8,869	3.5
Chesnimnus .....	1,000	1,859	889	435	1,324	71			1,324	10,301	2.3
Columbia Basin ..	400	522	200	54	254	49			254	2,956	0.9
Desolation .....	700	1,902	871	308	1,179	62			1,179	9,340	1.9
Heppner .....	2,500	6,366	2,938	1,179	4,117	65			4,117	27,005	3.1
Imnaha .....	500	1,761	834	345	1,179	67	87		1,266	10,112	3.2
Keating .....	500	1,681	725	327	1,052	62		218	1,270	9,222	2.3
Lookout Mtn. ....	500	1,409	544	236	780	55		86	866	5,824	2.7
Minam .....	500	615	254	109	363	59	204		567	4,741	0.7
Murderer's Cr. ....	2,500	4,729	1,814	1,233	3,047	64			3,047	24,937	3.1
Northside .....	2,000	5,128	2,448	1,016	3,464	67		826	4,290	25,285	5.7
Sled Springs .....	750	1,847	689	435	1,124	61			1,124	10,338	1.6
Snake River .....	300	1,233	707	54	761	57			761	6,547	1.0
Starkey .....	700	1,885	653	399	1,052	56			1,052	10,156	0.9
Ukiah .....	1,500	3,071	1,124	689	1,813	59			1,813	16,685	3.4
Umatilla .....	1,200	3,028	1,070	417	1,487	49			1,487	17,429	3.3
Walla Walla .....	800	993	363	127	490	49	18		508	4,607	2.5
Wenaha .....	500	913	381	91	472	52			472	5,532	1.3
Wheeler .....	2,500	6,936	3,809	1,088	4,897	71		68	4,965	26,525	5.0
<b>NORTHEAST</b> .....	<b>20,350</b>	<b>51,996</b>	<b>23,143</b>	<b>9,195</b>	<b>32,338</b>	<b>62</b>	<b>328</b>	<b>1,198</b>	<b>33,864</b>	<b>260,133</b>	<b>2.6</b>
Beulah .....	2,500	6,322	2,648	1,164	4,262	67			4,262	27,930	3.2
Hart Mtn. ....	0	417	181	0	181	43			181	2,213	0.2
Interstate .....	1,000	5,965	3,428	635	4,063	68			4,063	32,283	2.5
Juniper .....	0	323	145	0	145	45			145	889	0.2
Malheur River ....	1,000	4,320	2,122	689	2,811	65			2,811	22,779	1.4
Owyhee .....	0	843	472	0	472	56			472	2,702	0.8
Silver Lake .....	2,500	7,635	3,192	1,251	4,443	58	342		4,785	38,595	6.1
Silvies .....	800	3,815	1,795	526	2,321	61			2,321	19,025	1.9
Steens Mtn. ....	500	1,869	1,088	73	1,161	62			1,161	9,159	0.9
Wagontire .....	0	459	254	0	254	55			254	1,904	1.7
Warner .....	250	2,975	1,850	181	2,031	68			2,031	15,307	3.8
Whitehorse .....	0	603	363	0	363	60			363	2,720	0.3
<b>SOUTHEAST</b> .....	<b>8,550</b>	<b>35,546</b>	<b>17,538</b>	<b>4,969</b>	<b>22,507</b>	<b>63</b>	<b>342</b>		<b>22,849</b>	<b>175,506</b>	<b>1.8</b>
<b>GRAND TOTALS</b> .....	<b>95,700</b>	<b>***241,123</b>	<b>96,667</b>	<b>29,381</b>	<b>126,048</b>	<b>52</b>	<b>14,402</b>	<b>*2,573</b>	<b>143,023</b>	<b>1,367,787</b>	<b>**2.4</b>

\* Prorated into units.

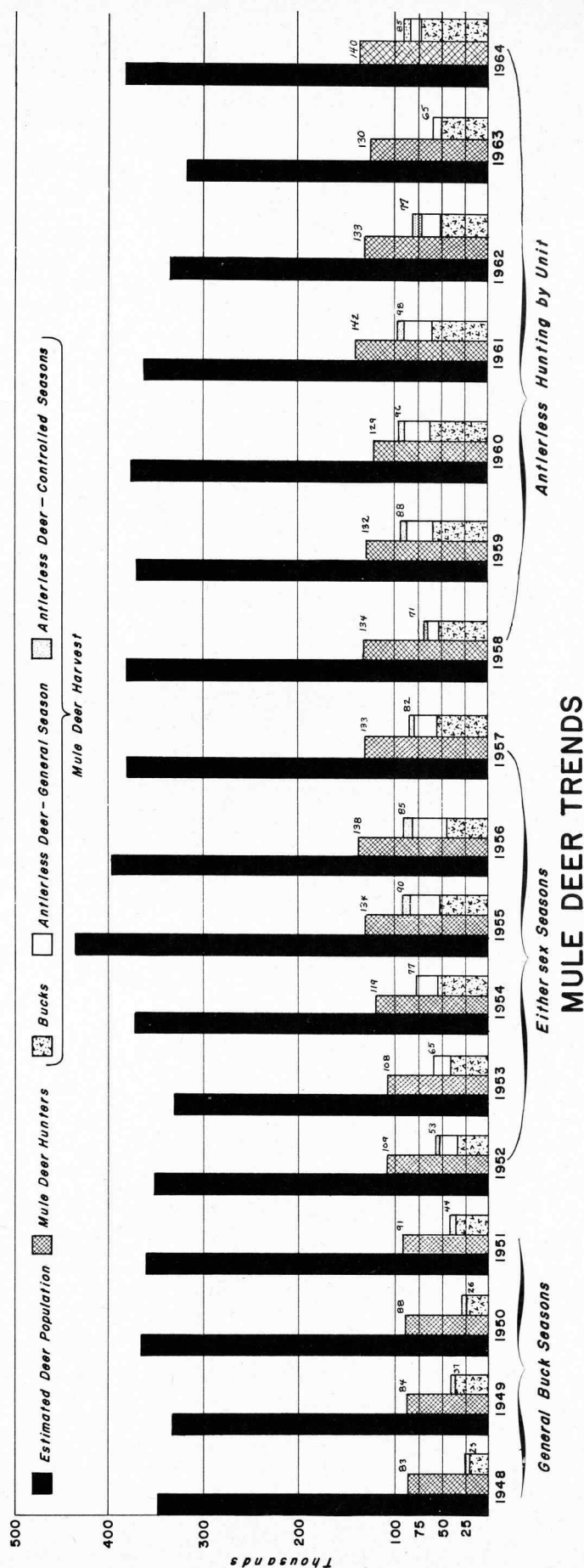
\*\* Based on productive habitat in the unit.

\*\*\*Does not include 30,216 early and extended season hunters.

TABLE II  
SUMMARY TOTAL DEER HARVEST  
1952 - 1964

Year	Deer Tags Issued	Total Deer Harvested	MULE DEER				BLACK-TAILED DEER							
			Hunters	Number	Percent Hunter Success	Percent of Total	Antlerless Harvest	Percent Antlerless	Hunters	Number	Percent Hunter Success	Percent of Total	Antlerless Harvest	Percent Antlerless
1952	188,250	77,897	126,719	53,030	61	68	20,570	39	61,531	24,867	40	32	5,210	21
1953	204,808	105,275	121,356	64,607	53	61	24,652	38	83,552	40,668	49	39	13,045	32
1954	215,047	112,622	134,617	76,877	57	68	22,410	29	80,430	35,745	44	32	8,043	22
1955	230,585	133,834	148,566	90,126	61	67	37,752	42	81,919	43,708	53	33	13,446	31
1956	233,842	125,671	146,568	85,394	58	68	37,978	44	87,274	40,277	46	32	13,340	33
1957	221,960	116,409	140,627	81,873	58	70	26,853	33	81,333	34,626	43	30	8,877	26
1958	233,885	116,251	139,183	71,250	51	61	19,308	27	94,702	45,001	47	39	15,251	34
1959	248,701	145,823	135,848	88,261	65	61	23,686	27	112,853	56,670	50	39	20,108	35
1960	259,739	157,504	140,068	96,122	69	61	28,254	29	119,671	61,382	51	39	20,133	33
1961	265,326	163,939	142,193	97,951	68	60	30,538	31	123,133	65,988	54	40	24,529	37
1962	263,838	139,712	133,567	76,776	53	55	24,977	32	130,271	62,936	47	45	21,932	35
1963	258,375	117,619	129,840	64,678	50	55	15,403	24	128,535	52,941	41	45	16,754	32
1964	271,339	143,023	141,038	84,665	60	59	19,931	23	130,301	58,358	45	41	18,807	32

Figure 1



**TABLE III  
ELK HUNTING TRENDS  
1933 - 1964**

Year	State Total					Rocky Mountain Elk					Roosevelt Elk				
	Hunters	Bulls	Cows	Total	Success	Hunters	Bulls	Cows	Total	Success	Hunters	Bulls	Cows	Total	Success
1933	2,523	579	0	579	23%	2,440	579	0	579	23%	No Open Season				
1940	6,152	1,340	1,179	2,529	41%	4,809	1,152	1,179	2,331	48%	1,343	198	0	198	15%
1945	12,625	7,270	2,243	2,465	20%	7,270	2,176	67	2,243	30%	1,327	222	0	222	17%
1950	24,713	3,157	2,234	5,391	22%	16,726	2,210	1,234	3,444	21%	6,076	947	1,000	1,947	32%
1955	29,309	4,228	1,855	6,083	21%	21,504	3,361	1,749	5,110	24%	6,205	867	106	973	16%
1961	51,349	9,707	2,384	12,091	23%	36,514	7,098	1,863	8,934	24%	14,835	2,609	521	3,130	22%
1962	52,983	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	3,123		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%

**TABLE IV  
1964 ELK SEASONS**

Units by Region	Number of Hunters	Harvest			Percent	
		Bulls	Antlerless	Total	Hunter Success	Spike Bulls
Alsea .....	715	147	—	147	20	49
Clatsop .....	8,701	1,641	227	1,868	21	56
McKenzie .....	1,128	255	—	255	23	54
Nestucca .....	28	8	—	8	28	67
Santiam .....	136	28	—	28	21	80
Siuslaw .....	42	6	—	6	14	50
Trask .....	467	108	—	108	23	72
Willamette .....	75	14	—	14	19	0
Wilson .....	3,091	633	111	744	24	51
<b>NORTHWEST</b> .....	<b>14,383</b>	<b>2,840</b>	<b>338</b>	<b>3,178</b>	<b>22</b>	<b>54</b>
Chetco .....	43	5	—	5	12	0
Dixon .....	428	119	—	119	28	23
Elkton .....	655	122	—	122	19	50
Melrose .....	620	113	—	113	18	61
Powers .....	439	58	—	58	13	57
Rogue .....	175	17	—	17	10	17
Sixes .....	62	6	—	6	10	0
Tioga .....	4,533	927	94	1,021	22	60
<b>SOUTHWEST</b> .....	<b>6,955</b>	<b>1,367</b>	<b>94</b>	<b>1,461</b>	<b>21</b>	<b>55</b>
Deschutes .....	137	8	—	8	6	67
Grizzly .....	75	5	6	11	15	0
Hood River .....	34	3	—	3	9	0
Keno .....	44	8	—	8	18	33
Maury .....	35	6	8	14	40	50
Ochoco .....	589	45	83	128	22	31
Wasco .....	335	44	—	44	13	37
<b>CENTRAL</b> .....	<b>1,249</b>	<b>119</b>	<b>97</b>	<b>216</b>	<b>17</b>	<b>38</b>
Baker .....	2,286	365	219	584	26	47
Catherine Creek .....	685	158	61	219	32	56
Chesnimnus .....	2,661	471	238	709	27	64
Desolation .....	3,045	725	293	1,018	33	46
Heppner .....	2,267	305	174	479	21	53
Imnaha .....	758	177	75	252	33	48
Keating .....	435	46	42	88	20	36
Lookout Mountain .....	84	19	45	64	76	33
Minam .....	1,261	390	150	540	43	43
Murderer's Creek .....	625	86	94	180	29	26
Northside .....	1,540	133	434	567	37	35
Sled Springs .....	3,237	642	562	1,204	37	72
Snake River .....	701	324	—	324	46	46
Starkey .....	5,783	866	564	1,430	25	59
Ukiah .....	3,777	653	523	1,176	31	53
Umatilla .....	3,893	850	282	1,132	29	67
Walla Walla .....	1,841	341	282	623	34	77
Wenaha .....	3,465	786	351	1,137	33	65
Wheeler .....	345	25	100	125	36	33
<b>NORTHEAST</b> .....	<b>38,689</b>	<b>7,362</b>	<b>4,489</b>	<b>11,851</b>	<b>31</b>	<b>57</b>
Beulah .....	922	97	213	310	34	40
Malheur River .....	435	25	36	61	14	67
Silvies .....	265	36	44	80	30	46
<b>SOUTHEAST</b> .....	<b>1,622</b>	<b>158</b>	<b>293</b>	<b>451</b>	<b>28</b>	<b>46</b>
<b>GRAND TOTALS</b> .....	<b>62,898</b>	<b>11,846</b>	<b>5,311</b>	<b>17,157</b>	<b>27</b>	<b>54</b>

## 1964 Big Game Harvest

Continued from Page 3

Nine controlled seasons were held to help alleviate specific problems. A total of 2,573 deer, including 354 bucks and 2,219 antlerless deer, was taken during these seasons by 4,404 tag holders. The average success was 46 percent. The highest number of deer taken was on the Northside John Day area where hunters reported harvesting 826 antlerless deer.

Both extended season and controlled season harvests are shown in Table I in the summary of kill by unit. Forty-eight percent of the reporting controlled season tag holders indicated that they had also killed a deer during the general season.

Table I shows the yield of deer per square mile of habitat by unit. The average was 2.4 deer per square mile. The Wilson unit, with an average yield of 5.2 blacktails per square mile, was the most productive in western Oregon; and the Silver Lake unit, with an average yield of 6.1 deer per square mile, was the highest for mule deer.

### Elk Season

Analysis of elk card returns and the questionnaire survey showed a record harvest of 17,157 elk by 62,898 tag holders and a high hunter success of 27 percent. This is a record number of elk hunters as well as elk harvested. Comparative data is shown in Table III.

The general elk season opened on October 31 and extended through November 22 for western Oregon hunters and through November 29 east of U. S. Highway 97. In most units the general season bag limit was for a bull elk with antlers longer than the ears. Some south-eastern units had an either-sex bag limit.

The regulations required hunters to decide whether they wanted to hunt Roosevelt or Rocky Mountain elk. U. S. 97, The Dalles-California Highway, was the boundary between the two hunting areas. No person was permitted to hunt both areas. The objective of this regula-

Continued on Page 8

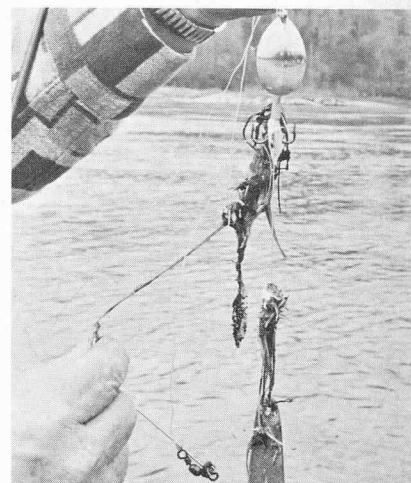
# FIGHT DIRTY WATER

PUBLIC AWARENESS AND SUPPORT  
OF POLLUTION CONTROL PROGRAMS  
WILL HELP ELIMINATE THESE  
PROBLEMS AND CLEAN UP OUR  
DIRTY WATERS

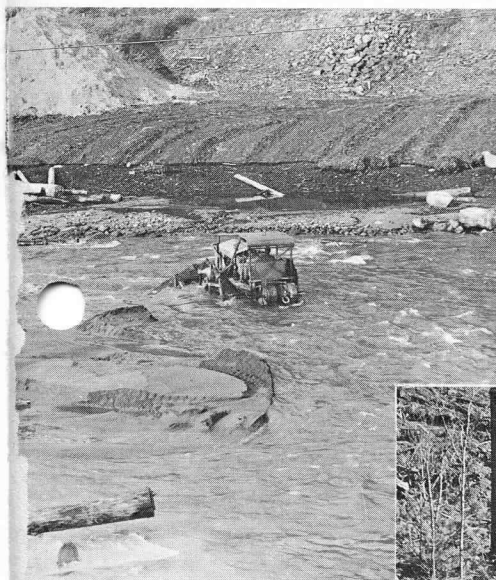


Industrial waste discharges of this type often cause oxygen depletion which in turn could directly affect fish life. It is also conducive to a slime growth in the water.

Raw waste discharge creates a health hazard to humans as well as being harmful to wildlife.



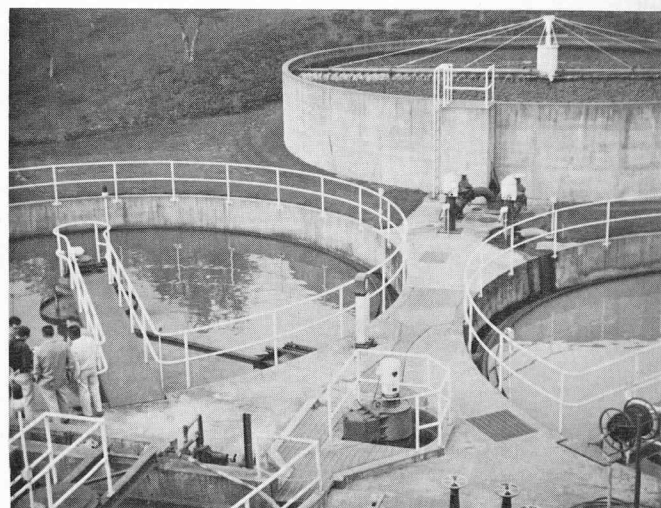
This nuisance to fishermen is the result of pollutants in the water.



Gravel removal may destroy fish spawning areas and create a heavy silt load which could suffocate eggs and fish downstream.



Poor logging practices often contribute a destructive silt load to streams.



Proper construction and operation of waste treatment plants are helping correct many of these problems.

Oregon State Sanitary  
Authority Photos

## NATIONAL WILDLIFE WEEK

March 13-20, 1965

GAME BULLETIN



Elk being marked with an ear tag for future identification. More than 200 elk were trapped this winter at the Wenaha Game Management Area near Troy. The elk are marked with ear tags and bright collars as part of a program to study distribution and range of these animals. Observations and kill information by hunters on elk marked in previous years indicate that individual animals travel widely to summer ranges. They have been recorded as far south as Meacham as well as the northern extremities of the Blue Mountains in Washington. About sixty miles as the crow flies has been the greatest distance of travel so far recorded.

## 1964 Big Game Harvest

Continued from Page 6

tion was to improve the distribution of hunters and alleviate concentrations that had in the past jeopardized both wildlife and recreational values. It was premised upon an observation that about one-third of the elk hunters utilized both parts of the State, thus contributing to undesirable concentrations on the coast at the start of the season and similar problems in eastern Oregon during the latter part of the season.

With no previous measure of hunter preference, the 1964 regulations provided near equal hunting opportunities in eastern and western Oregon. The controlled seasons which previously limited the number of hunters in the Clatsop, Wilson, Trask, Siuslaw, and Dixon units were eliminated.

The results are shown in Table IV.

Elk tags issued increased by 15 percent with 41,010 persons securing Rocky Mountain elk tags and 21,888, or 34.8 percent, using Roosevelt tags. Comparison of the tags issued with previous hunter distribution (as indicated by the 1963 hunter report cards) reveals an almost identical number of Rocky Mountain elk hunters and a 62 percent increase in Roosevelt elk hunters.

The reported take of 12,455 Rocky Mountain elk and 4,702 Roosevelt elk constituted a record harvest of both species.

Thirty-one percent, or 5,311 of the reported elk, were antlerless animals. A total of 3,243 antlerless elk was reported taken by the 5,600 persons receiving antlerless elk permits, and 1,063 antlerless animals were reported taken in the either-sex area in Grant, Crook, Wheeler, Baker, Harney, and Malheur Counties.

The increased interest in elk hunting and the preference for Roosevelt elk hunting were not anticipated. It follows that 1964 regulations did not resolve the crowding and game waste problems that have been a matter of concern to many people. It appears that opening of the popular Clatsop, Wilson, and Trask units to unlimited hunting pressure provided a substantial attraction for hunters that will not exist next year. The 30 percent success of Rocky Mountain elk hunters compared with the 21 percent success of Roosevelt elk hunters should provide an incentive for improved distribution if the system is continued in 1965.

Hunter reports indicated that 54 percent of the bulls taken were spikes or yearling animals. This ratio was almost identical for both Roosevelt and Rocky Mountain elk. It indicates that a high percentage of the available bulls are being taken; however, there is no evidence that there is an inadequate supply for breeding purposes.

## Bow Hunting

The questionnaire survey shows that 8,252 persons hunted as archers and that they harvested 598 deer and 73 elk.

## Antelope Season

An analysis of antelope return cards from 597 reporting hunters indicates that they harvested 378 antelope during the 1964 season. Seven antelope areas were open from August 22 through August 26. Area IV led in antelope taken with 93 animals harvested in that area which includes the Juniper, Hart Mountain, and Steens units. Highest hunter success was experienced in the Warner unit where 73 percent of reporting hunters said they were successful in bagging an antelope buck. A summary of harvest by area is shown in Table V.

## Summary

The 1964 big game seasons provided about 1,859,000 man-days of recreation for 319,272 licensed hunters. They reported taking 143,023 deer, 17,157 elk, and 378 antelope—a total of 160,558 big game animals.

A 5 percent increase in deer hunters and a 15 percent increase in elk hunters illustrate the increasing public demand for big game hunting.

The reported take of 104,000 buck deer exceeds that of all years except 1960 and 1961 when about 109,000 were reported. The take of antlerless deer was below normal because fewer antlerless deer permits and tags were issued.

In spite of a new regulation limiting an individual's elk hunting opportunities to one-half of the State, elk hunters increased 15 percent to a total of 62,898. The yield of elk increased from a record of 13,600 in 1963 to 17,157 in 1964. The greatest increase of elk hunters and elk harvest occurred in the Coast Range.

Reports from 597 of the 700 antelope tag holders indicated a yield of at least 378 buck antelope and a 63 percent success ratio.

TABLE V  
ANTELOPE SEASON - 1964  
(87% return)

Area	Units	Tags Issued	Reporting Hunters	Harvest	Percent Successful Hunters
I	Ochoco, Maury, Silvies, Murderer's Creek .....	100	87	60	69
II	Paulina, Wagonfire, Fort Rock, Silver Lake .....	75	65	38	58
III	Warner .....	100	84	61	73
IV	Juniper, Hart Mountain, Steens .....	175	153	93	61
V	Beulah, Malheur River, Owyhee .....	100	81	48	59
VI	Whitehorse .....	100	82	57	69
VII	Interstate, S. ½ of Klamath .....	50	45	21	47
TOTALS .....		700	597	378	63

## Oregon State Game Commission Bulletin

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