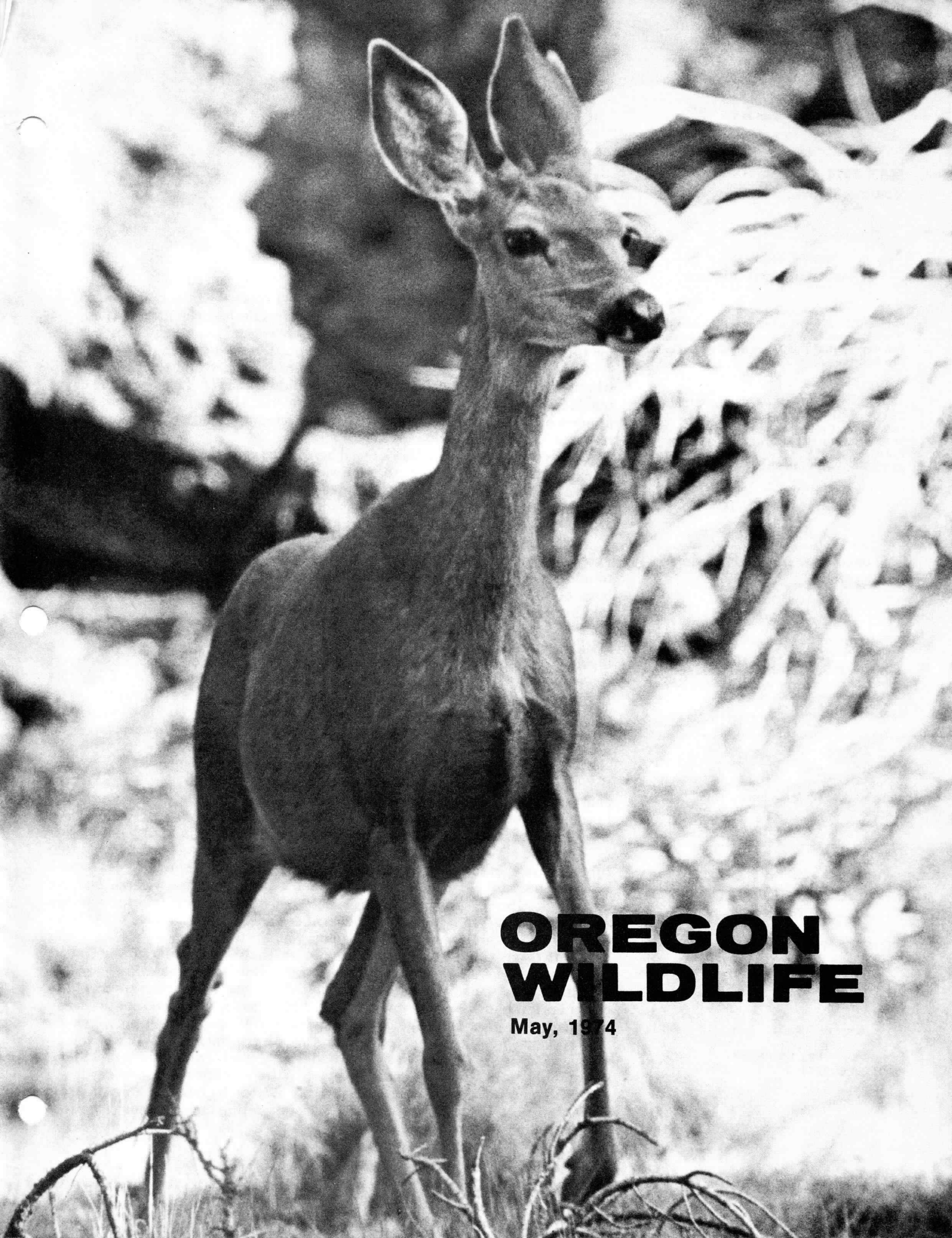

OREGON WILDLIFE

May, 1974

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The Cover

One of Oregon's protected Columbian whitetail deer along the lower Columbia River.
Photo by Al Miller

HUNTER EDUCATION PROGRAM

Instructors Approved

Month of March 14
Total To Date 3,368

Students Trained

Month of March 482
Total to Date 207,217

Firearms Hunting Casualties Reported in 1974

Fatal 0
Nonfatal 1

NO ROOM FOR WILDLIFE?

There has been much discussion concerning this year's Rocky Mountain elk season. The subject is not new, but one that has been growing over a period of years as more and more individuals become interested in and equip themselves for this rather rugged type of recreation.

Concern is expressed as to whether the herds can stand the pressure and whether this is the type of hunting that should be allowed. Is it the place of the regulatory agency to try to make rules affecting the social behaviors of the hunters or should that be left up to the participants themselves as long as the resource is not being jeopardized?

In essence, the problem being faced here in Oregon is symptomatic of a larger problem being faced throughout the world. Traditionally the economy of the United States has been built on the idea that we must have more of everything and that continued growth in all ways is a good in itself. But now the energy crunch has reared its ugly head and a time of reassessment has come about.

How does this relate to wildlife? William Towell, writing in American Forests Magazine, stated, ". . . the one inescapable truth that we must face up to and soon is population. Man is an animal. He must understand biological laws of nature that govern all life. He must learn to appreciate his own relationship to his environment, to the earth, and other living things around him."

Twenty top scientists meeting recently in Washington, D.C. stressed the urgency of countering the most rapid deterioration of the earth's life support systems ever witnessed in evolutionary history. They urged the World Wildlife Fund and the conservation community at large to launch a two-pronged campaign: escalating current habitat preservation efforts; and developing new strategies to address the larger problem of man's exploitive approach to his natural environment.

The remote areas of northeastern Oregon may seem to be far removed from the human population problems of India or Asia; however, some of the characteristics are the same. We have a limited amount of elk range available. In some instances the amount of suitable range has been shrinking. Yet we have a demand for more use of this resource because of more human beings.

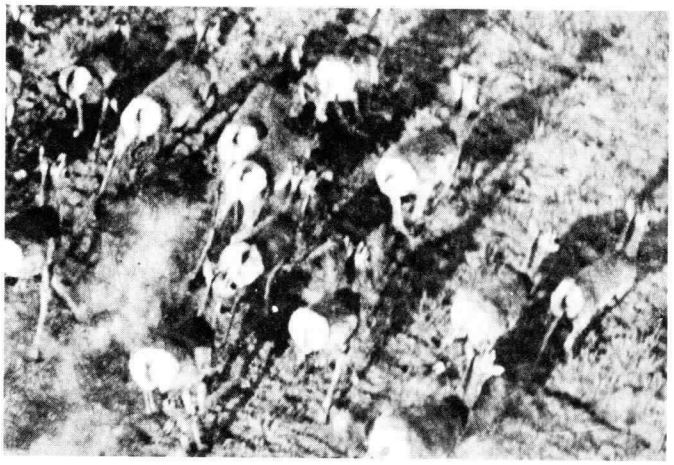
The take of elk can be fairly well controlled by lengths of seasons and other rules and yet perhaps this could lead to the ultimate of a one-day season with everyone out and the hunting stopped when a proper harvest was reached. An absurd thought, but the point things could reach if biological information only were considered. What kind of sociological considerations will have to be incorporated into future regulations and plans remain to be seen.

There is one prime consideration, however, that is applicable to the Oregon elk situation as well as any consideration of wildlife anywhere in the world. Wildlife habitat must be retained. The United Nations in its declaration of principles on the human environment states, "Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat which are now gravely imperiled by a combination of adverse factors." Wildlife can be managed as a renewable resource and an annual crop removed without threatening future populations. However, if the wildlife habitat is destroyed through pollution, poor land use, or is simply overrun by human beings, there is no way wildlife can continue to exist. A deteriorating environment or habitat with no room to live can spell doom for creatures of the wild . . . and also man.

RES □

1973 Big Game Hunting Season Report

By PAUL EBERT,
Staff Biologist,
Big Game Management



Oregon's big game hunters turned out in record numbers during the 1973 hunting season and harvested a near record number of elk and the largest take of deer since 1968. The annual hunter questionnaire which surveyed a random sample of individuals purchasing 1973 hunting licenses indicated that 401,290 licensed hunters spent 2,798,595 days afield in pursuit of big game and took 103,470 deer, 14,001 elk, 752 antelope, 2,369 bear, 16 cougar and 3 bighorn sheep.

DEER

The general deer season opened October 6 and extended through October 18 for mule deer in eastern Oregon and through November 11 for blacktails west of the Cascades. A total of 36,600 management unit permits for antlerless deer became valid on October 20 in western Oregon. No antlerless permits were authorized in eastern Oregon.

The nine-day High Cascade buck season from September 15 through the 23rd was limited to 5,000 permits to improve the quality of the hunt. Six special seasons with 5,250 permits provided additional deer hunting opportunities in agricultural and forest damage areas of western Oregon.

Extended season hunting during portions of December was allowed in the Willamette Valley and bordering foothills. Muzzleloader seasons were provided on Hart Mountain in Lake County and in the Patterson Mountain area of western Oregon.

The 296,290 deer hunters reported taking 103,470 deer of which 60 percent were black-tailed deer and 40 percent mule deer. Harvest of both blacktails and mule deer increased 41 percent above the 1972 take with total hunters also increasing at the same rate. The 170,600 black-tailed deer hunters took 62,130 deer, 31 percent of which were antlerless, while 125,690 mule deer hunters bagged 41,340 animals. Blacktail and mule deer hunters had 36 and 33 percent success ratios, respectively.

As in 1972, hunters were encouraged to participate in western Oregon where improved deer trends and a long season provided abundant opportunities. Although unfavorable weather during the first half of the season discouraged participation and influenced success, conditions improved by late October. Of the total general season black-tailed deer harvest, 76 percent were taken after October 20. Western Oregon deer hunting generated 1,298,030 days of recreation, accounting for 62 percent of the state's total.

Mule deer trends in eastern Oregon improved on most ranges but remained below average levels, warranting another conservative season in 1973. Although hunters were limited to 12 days for bucks only, the total yield increased 41 percent over 1972. Weather for hunting was generally favorable during most of the season.

ELK

General elk seasons were comparable with 1972 and provided for 19 days of hunting in eastern Oregon and 12 days in the western part of the state. As in the previous year, bulls only were legal during the general season with either sex hunting permitted in southeastern Oregon for the first nine days. Antlerless permits totalling 3,545 were issued for northeastern Oregon units and these were valid the last five days of the season. In addition, five special Roosevelt elk and six special Rocky Mountain elk seasons were held involving a total of 1,025 permits.

An all-time record number of 98,300 elk hunters participated in 1973. This represented a 24 percent increase above 1972. Prior to last fall, hunting pressure had increased at a moderate rate generally within the range of 1 to 6 percent annually. Increased interest was greatest in western Oregon with 31 percent more hunters participating than in 1972 compared with 21 percent more hunting east of the Cascades.

(Continued on Back Page)

SUMMARY — 1973 DEER SEASON

Units By Region	GENERAL DEER SEASON					ADDITIONAL DEER HARVEST		ALL SEASONS	
	Number of Hunters	Bucks	Antlerless	General Season Total	Percent Hunter Success	Early Seasons	Late Seasons	Total Harvest	Total Hunter Days
Alsea	20,930	4,620	2,720	7,340	35	350	690	8,380	137,320
Clatsop	8,730	1,290	450	1,740	20	0	0	1,740	57,200
McKenzie	23,910	4,370	2,810	7,180	30	160	220	7,560	153,710
Nestucca	3,390	660	280	940	28	0	0	940	17,180
Polk	7,750	960	530	1,490	19	0	280	1,770	39,380
Santiam	18,240	2,290	660	2,950	16	250	1,300	4,500	112,740
Scappoose	3,660	520	60	580	16	0	0	580	24,810
Siuslaw	7,960	1,470	310	1,780	22	0	160	1,940	46,570
Trask	13,990	2,260	470	2,730	20	30	1,040	3,800	77,810
Willamette	18,390	1,570	160	1,730	9	30	3,240	5,000	145,520
Wilson	8,160	1,150	350	1,500	18	0	0	1,500	37,620
NORTHWEST REGION TOTALS *	107,700	21,160	8,800	29,960	28	820	6,930	37,710	849,860
Applegate	9,220	1,580	800	2,380	26	90	100	2,570	61,620
Chetco	4,600	1,420	190	1,610	35	30	30	1,670	32,910
Dixon	9,850	2,440	0	2,440	25	0	250	2,690	53,900
Elkton	3,990	1,040	0	1,040	26	0	0	1,040	22,320
Evans Creek	4,350	850	470	1,320	30	100	30	1,450	25,970
Melrose	10,540	2,990	1,000	3,990	38	30	60	4,080	64,640
Powers	2,910	790	0	790	27	0	0	790	13,880
Rogue	13,240	2,550	530	3,080	23	100	160	3,340	97,370
Sixes	7,350	1,840	590	2,430	33	30	440	2,900	51,000
Tioga	3,980	1,230	0	1,230	31	0	160	1,390	24,560
SOUTHWEST REGION TOTALS *	54,000	16,730	3,580	20,310	38	380	1,230	21,920	448,170
Deschutes	10,960	1,010	0	1,010	9	120	0	1,130	54,630
Grizzly	4,340	1,470	0	1,470	34	0	0	1,470	15,390
Hood River	1,970	390	0	390	20	0	0	390	6,810
Keno	3,060	340	0	340	11	0	0	340	10,000
Klamath	8,590	2,380	0	2,380	28	0	0	2,380	37,230
Maupin	1,130	250	0	250	22	0	0	250	4,510
Maury	2,290	370	0	370	16	0	0	370	8,130
Metolius	2,110	280	0	280	13	0	0	280	6,130
Ochoco	11,780	2,640	0	2,640	22	0	0	2,640	49,060
Paulina	7,780	1,070	0	1,070	14	0	0	1,070	29,860
Sherman	2,730	930	0	930	34	0	0	930	10,550
Sprague	4,410	660	0	660	15	0	0	660	15,250
Wasco	8,180	1,480	0	1,480	18	130	160	1,770	43,660
CENTRAL REGION TOTALS *	61,700	13,270	0	13,270	22	250	160	13,680	291,210
Baker	6,240	1,030	0	1,030	17	100	0	1,130	32,010
Catherine Creek	3,040	650	0	650	21	0	0	650	12,000
Chesnimnus	1,340	370	0	370	28	0	0	370	5,400
Columbia Basin	730	190	0	190	26	0	0	190	2,880
Desolation	2,570	750	0	750	29	0	0	750	9,240
Heppner	7,070	1,850	0	1,850	26	0	0	1,850	26,720
Imnaha	1,740	660	0	660	38	0	0	660	6,770
Keating	2,860	740	0	740	26	60	0	800	14,540
Lookout Mountain	1,540	90	0	90	6	0	0	90	5,090
Minam	2,270	630	0	630	28	30	0	660	9,810
Murderer's Creek	6,070	2,060	0	2,060	34	60	0	2,120	28,730
Northside	4,800	1,520	0	1,520	32	0	0	1,520	19,490
Pine Creek	530	280	0	280	53	0	0	280	2,420
Sled Springs	3,140	650	0	650	21	0	0	650	13,360
Snake River	1,400	710	0	710	51	0	0	710	5,310
Starkey	3,760	620	0	620	16	30	0	650	18,770
Ukiah	3,690	900	0	900	24	0	0	900	16,560
Umatilla	4,650	1,040	0	1,040	22	100	0	1,140	21,010
Walla Walla	1,280	340	0	340	27	0	0	340	5,410
Wenaha	1,810	470	0	470	26	0	0	470	9,540
Wheeler	5,590	2,150	0	2,150	38	0	0	2,150	20,300
NORTHEAST REGION TOTALS *	54,500	17,700	0	17,700	32	380	0	18,080	285,360
Beaty's Butte	940	90	0	90	10	0	0	90	4,690
Beulah	4,500	1,220	0	1,220	27	0	0	1,220	16,420
Fort Rock	5,210	1,190	0	1,190	23	0	0	1,190	23,730
Interstate	6,550	1,560	0	1,560	24	0	0	1,560	31,160
Juniper	440	60	0	60	14	30	0	90	2,030
Malheur	5,430	1,510	0	1,510	28	0	0	1,510	24,450
Owyhee	2,120	690	0	690	33	0	0	690	7,890
Silver Lake	7,450	1,650	0	1,650	22	0	0	1,650	32,230
Silvies	4,620	1,440	0	1,440	31	0	0	1,440	19,840
Steens Mountain	3,570	970	0	970	27	0	0	970	14,130
Wagontire	910	310	0	310	34	0	0	310	3,300
Warner	3,640	920	0	920	25	30	0	950	17,580
Whitehorse	1,640	410	0	410	25	0	0	410	7,320
SOUTHEAST REGION TOTALS *	42,700	12,020	0	12,020	28	60	0	12,080	204,770
GENERAL SEASON TOTALS *	277,400	80,880	12,380	93,260	34				
EARLY SEASON TOTALS	20,790					1,890			
LATE SEASON TOTALS	27,650						8,320		
GRAND TOTALS *	296,290				35			103,470	2,079,370

*Total omits duplication of hunters participating in more than one unit or season.

1973 ELK SEASON

Unit By Region	Number of Hunters	Hunter Days	ELK HARVEST			Percent Hunter Success	Percent Yearling Bulls
			Bulls	Antlerless	Total		
Alsea	1,420	6,240	148	0	148	11	50
Clatsop	10,700	52,950	1,121	60	1,181	12	76
McKenzie	2,600	12,390	280	0	280	12	49
Nestucca	800	2,460	19	0	19	3	71
Polk	180	710	9	0	9	8	33
Santiam	290	1,120	72	0	72	31	54
Scappoose	670	2,740	89	41	130	33	57
Siuslaw	390	1,540	30	0	30	8	50
Trask	2,670	9,160	133	33	166	8	70
Willamette	340	1,660	26	0	26	8	66
Wilson	4,630	19,880	338	0	338	9	78
NORTHWEST REGION TOTALS *	22,220	110,850	2,265	134	2,399	11	69
Dixon	1,750	7,320	154	0	154	10	79
Elkton	2,350	9,810	172	39	211	10	63
Evans Creek	30	60	0	0	0	0	0
Melrose	1,860	6,290	87	0	87	6	81
Powers	900	3,050	88	0	88	11	85
Rogue	1,070	5,360	86	0	86	9	50
Sixes	310	830	13	0	13	6	25
Tioga	5,000	23,640	589	6	595	14	65
SOUTHWEST REGION TOTALS *	11,640	56,360	1,189	45	1,234	11	68
Deschutes	250	980	0	0	0	0	0
Keno	90	150	4	0	4	13	0
CENTRAL REGION TOTALS *	340	1,130	4	0	4	2	0
ROOSEVELT ELK TOTALS *	33,200	168,340	3,461	178	3,640	11	68
Grizzly	120	580	9	7	16	12	33
Hood River	640	2,260	25	4	29	6	25
Maury	90	280	3	2	5	6	0
Metolius	60	240	0	0	0	0	0
Ochoco	1,850	8,390	53	58	111	8	29
Wasco	2,290	11,860	120	71	191	10	68
CENTRAL REGION TOTALS *	4,850	23,610	210	142	352	9	51
Baker	4,990	26,920	496	207	703	17	57
Catherine Creek	1,910	10,090	86	73	159	10	76
Chesnimnus	5,640	28,700	572	120	692	14	95
Desolation	4,670	28,670	613	71	684	17	59
Heppner	4,490	24,880	430	118	548	13	66
Imnaha	2,730	16,090	215	71	286	13	75
Keating	1,390	7,720	115	102	217	22	53
Lookout Mountain	90	370	6	9	15	25	100
Minam	3,110	16,820	268	102	370	17	50
Murderer's Creek	2,000	9,030	123	80	203	12	35
Northside	2,430	10,480	141	116	257	15	39
Pine Creek	940	5,220	59	16	75	8	85
Sled Springs	5,250	30,150	430	245	675	15	84
Snake River	1,950	11,200	262	122	384	27	78
Starkey	7,620	42,860	911	312	1,223	20	72
Ukiah	5,850	37,380	727	205	932	19	76
Umatilla	6,840	36,810	810	7	817	15	76
Walla Walla	2,620	13,930	320	134	454	20	70
Wenaha	4,960	28,080	668	303	971	23	82
Wheeler	820	3,960	15	29	44	8	60
NORTHEAST REGION TOTALS *	59,430	389,360	7,267	2,442	9,709	17	72
Beulah	1,650	8,490	76	102	178	14	0
Malheur	970	5,560	52	29	81	9	41
Silvies	450	1,960	24	18	42	15	75
SOUTHEAST REGION TOTALS	2,980	16,010	152	149	301	12	27
ROCKY MOUNTAIN ELK TOTALS *	65,100	428,980	7,626	2,735	10,361	16	71
STATE TOTALS *	98,300	597,320	11,087	2,913	14,001	14	70

*Total omits duplication of hunters participating in more than one unit.

DEER HUNTING TRENDS
1952 - 1973

	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

ELK HUNTING TRENDS
1933 - 1973

	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

1973 ANTELOPE SEASON
(77% Return)

Management Units	Tags Issued	Report Cards Received	Number Did not Hunt	Number Hunted	Reported Harvest	Percent Success	Hunter-Days
Beulah	75	62	0	62	46	74	139
Fort Rock-Silver Lake	25	16	0	16	7	44	36
Hart Mountain	160	131	6	125	69	55	303
Interstate (Lake County)	50	40	0	40	20	50	100
Juniper	125	98	7	91	57	63	208
Malheur	150	112	4	108	74	69	219
Maury	75	59	6	53	19	36	149
Murderer's Creek	15	11	1	10	10	100	13
Ochoco	50	35	0	35	19	54	93
Owyhee	150	108	5	103	40	39	341
Paulina-Wagontire	125	100	4	96	36	38	269
Silvies	75	60	2	58	34	59	154
Steens Mountain	160	124	7	117	59	52	296
Warner	115	89	2	87	33	38	250
Whitehorse	250	188	6	182	101	55	467
National Antelope Refuge	15	15	0	15	13	87	30
TOTALS	1,615	1,248	50	1,198	637	53	3,067
Gerber Res. Archery	65	38	4	34	2	6	153

Estimated total harvest — 749.

This and That

compiled by Ken Durbin

A soft drink can dropped in the woods on Labor Day 1972 will likely be completely degraded by Labor Day 2473, a scientist at Pennsylvania State University recently reported. The prediction flows from a study a university group has undertaken on the life expectancy of litter. A conventional plastic wrapper would be fully degraded by late 2200 "or thereabouts". A glass bottle would not be broken down until 1,001,972 and this was a guarded estimate because glass-like rocks, such as obsidian, may be as old as the earth. Decay rates vary with local conditions and in a tropical rain forest the numbers should be reduced by a hundred years.

Conservation-oriented organizations and individuals who want a comprehensive list of groups and individuals "concerned with natural resource use and management" will find the National Wildlife Federation's CONSERVATION DIRECTORY a welcome addition to their library. This 200-page directory is available for $2 from the National Wildlife Federation, 1412 - 16th Street NW, Washington, D.C. 20036. Send payment and request "Item 79525".

A $10 Golden Eagle Passport for people under 62 and a free Golden Age Passport for senior citizens are now available at more than 70 national parks and recreation areas where they provide admission. The Passports can also be obtained at first and second class post offices.

Good for one year, the Passport offers purchaser and all accompanying him or her in a single, private, noncommercial vehicle access without additional charge to national parks and other recreation sites in 24 states, from Massachusetts to California, where federal entrance fees are levied. Park visitors may elect to pay single-visit entrance fees instead of purchasing an annual Passport.

While the Golden Eagle Passport does not cover camping or other special recreation use fees, the Golden Age Passport permits free entry and a 50 percent discount on camping and other special use fees. For more information, write to the National Park Service, U.S. Department of the Interior, Washington, D.C. 20240.

A recent study at Utah State University on financing nonconsumptive use of a local elk herd expectedly revealed that consumptive users — hunters — provide the bulk of money used for necessary management, according to the Wildlife Management Institute. However, the study uncovered preferences of nonconsumptive users for ways to pay their share if forced to.

Most visitors to the area enjoyed their stay but there was evidence that sportsmen enjoyed their visit more. Although most visitors did not object to license fees being used for managing the area, the most popular alternative (55%) was an admission charge. Thirty percent of the visitors interviewed selected general fund money as the most acceptable alternative.

The Better Business Bureau of Lubbock, Texas reports that an article contained in its publication *The Brief*, and which was reprinted in the March issue of this magazine, was incorrect. In that article, BBB/Lubbock claimed an organization called the Animal Protection Institute of America spent only 9 percent of some $167,000 in donations for its stated purposes of "eliminating or alleviating fear, pain and suffering among animals".

In its retraction the Bureau points out that API's primary activity is its advertising campaigns designed to promote humane treatment of animals and that the bulk of its funds are spent in this way. Funds for the Animal Protection Institute are raised through advertising and special mail appeals to members.

The following clipping was from a Manchester, Iowa newspaper dated March 16, 1885.

"The recent frightful accident which happened to a stage in southern Oregon cannot fail, says the New York Times, to call attention of the state authorities to the necessity of protecting settlers against the attacks of salmon. The stage in question was crossing Applegate Creek when it was suddenly attacked by a drove of salmon. The stage was instantly overturned, and the hungry fish swarmed over it, while the stage driver, with great presence of mind, cut the traces of the horses, and throwing himself across the off wheel horse, a powerful animal formerly the property of Doctor Goodrich, of Olympia, managed to escape. The dispatch which conveys to us this painful story says nothing of the fate of the stage passengers, but, unfortunately there is every reason to believe that they fell victims to the salmon.

"The Oregon salmon has long been regarded by experienced western hunters as the most dangerous animal infesting this continent. It is much larger than the salmon of the Atlantic coast, and unlike the latter, which is timid and inoffensive, this fish is fearless and aggressive."

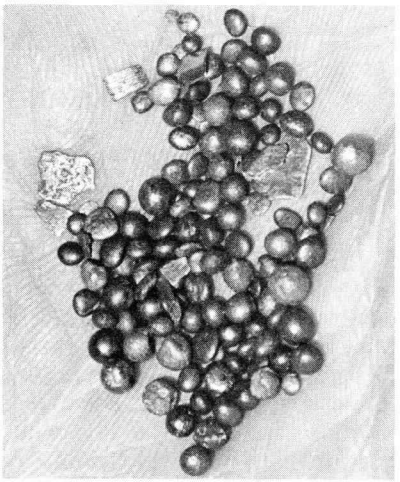
Here's the latest accounting of the American hunters' financial support for conservation: Their license fees currently are providing more than $107 million a year for conservation of both game and nongame species. Since 1923, hunting license revenue has raised $1.08 billion for conservation.

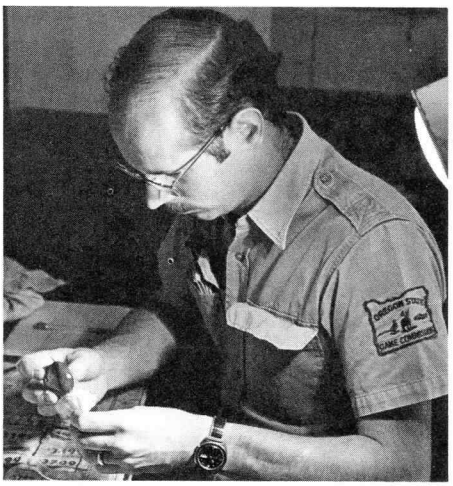
Hunters are now contributing more than $47 million a year for this effort through the federal excise tax on sporting arms and ammunition, which, since 1937, has raised more than $595 million.

At present, those who hunt contribute almost $11 million a year through duck stamp purchases. The stamps have brought in $143 million for waterfowl conservation since 1934.

In less than 50 years these sportsmen, whom anti-hunters say have no reverence for animal life, have provided the massive total of $2.5 billion for conservation and wildlife development. □

Lead Shot May Be Banned On Sauvie Island Management Area





Some of the worn shot removed from duck gizzards by biologist Al Smith working at Sauvie Island.

The Oregon Wildlife Commission announced last Friday its intention to require the use of steel shot for waterfowl hunting on Sauvie Island Wildlife Management Area beginning this fall. The decision came as a result of a recent study which indicates a very high incidence of lead poisoning among the more prevalent waterfowl species using the area.

Wildlife Commission staff will be investigating the commercial availability of shotgun ammunition loaded with steel shot and developing other details of the proposed regulation during the next few weeks. A public hearing to consider the proposal will be held June 1. At that time the Commission will welcome comment and discussion on the proposal.

Lead poisoning in waterfowl has caused a growing alarm among both waterfowl hunters and wildlife managers across the nation in the past 15 years.

It occurs when waterfowl pick up spent lead shot pellets found in their environment and swallow them. This happens when the birds feed in certain areas where there has been heavy shooting over a period of years. These pellets are often retained in the gizzard along with the grit waterfowl swallow to help grind up their food. Unfortunately, the powerful gizzards also wear down the lead pellets, allowing the lead to enter the bloodstream.

Substantial losses of waterfowl in some parts of the country have been linked to lead poisoning and many studies have been conducted in attempts to learn more about the problem, especially in the east and midwest where the problem first came to light and where it seems to be at its worst.

Most studies conducted in the Pacific Flyway show it to be a less significant problem here. But a study completed during the last waterfowl season by Wildlife Commission biologist Allan Smith indicates Sauvie Island is an exception.

Unlike most western waterfowl areas, Sauvie Island is underlain with a heavy layer of clay which apparently keeps lead shot from settling out of reach of feeding ducks. Thus lead pellets remain readily available to waterfowl, even in refuge portions of the island where hunting has not been allowed for many years.

Smith's study was conducted during the 1973-74 waterfowl season and in a sample of more than 900 hunter-killed ducks he found that alarming numbers of some species — especially mallards and pintails — contained lead shot in their gizzards.

The gizzards were taken from ducks checked through the two Sauvie Island check stations at a rate of about 80 a week throughout the 12-week season. While the study concerned itself primarily with the more commonly shot dabbling ducks — mallards, pintails, greenwing teal, and American widgeon — samples of diving ducks were also taken. In addition, gizzards were removed from a separate sample of ducks that were in obviously poor or sick condition to determine if lead poisoning was the cause.

Of the mallards sampled, 42 percent contained shot in their gizzards. The same was true of 35 percent of the pintails checked. Teal and widgeon gizzards had a much lower incidence of shot with 12 percent in the teal and 3 percent in the widgeon. By contrast, 84 percent of the sick ducks and those in poor condition contained lead shot pellets.

These differences between species may be due to a preference for different sizes of grit. Widgeon, for example, eat a higher percentage of leafy vegetation than other species and they prefer a fine sand for grit. Teal also select finer grit than the larger mallards and pintails. The sizes of shot usually used by waterfowl hunters are larger than the grit preferred by widgeon and teal and this may be the reason they pick it up less frequently.

Compounding the problem, there are relatively few sources of grit on Sauvie Island and Smith feels the birds probably pick up the pellets on purpose for grit. Some may also be picked up accidentally as the birds feed on vegetation from the bottom of shallow lakes.

The greatest number of shot found in one duck by Smith was 40 in a lesser scaup. He also found pieces of glass, bits of steel and brass, and other unusual materials. In a prior study a mallard gizzard was found that contained an amazing 241 lead pellets.

How many pellets constitute a fatal dose for a duck? Studies conducted elsewhere in the country in which pen-raised mallards were fed controlled numbers of shot pellets showed that ducks usually died when they were fed eight or more pellets. Some ducks died with fewer pellets.

Diet seems to play an important role in lead shot poisoning. In areas where ducks feed primarily on large hard grains such as corn, they are apparently more susceptible to the effects of lead poisoning. Probably this is because the harder and larger

grain wears the lead pellets away quickly.

Smith found noticeably poor body condition in nearly all of the Sauvie Island ducks that had ingested five or more pellets. The number of ducks that may actually die from lead poisoning at Sauvie Island is unknown. Not many are observed. But there are high predator populations on the island and many lead poisoned ducks may escape notice because they don't remain in the environment very long. In addition, it is possible that ducks suffering the effects of lead poisoning are taken more often by hunters.

A similar study of lead poisoning was conducted at Sauvie Island in 1963. Although a smaller number of ducks were examined, its conclusions were nearly identical to Smith's. Apparently the problem is not a new one, but in the past there was not much that could be done short of stopping all hunting and discouraging duck use of the area.

Ammunition companies have made progress in the past few years toward development of lead shot substitutes, the most promising experiments in this country being with steel shot. Tests have revealed that there is little difference in killing power between lead shot and lead shot substitutes within 40 yards.

A major disadvantage is that steel shot seems to be most practical in 12 gauge shells or larger. Because of its greater volume for a given weight, efforts to develop effective waterfowl loads for the smaller gauges have been discouraging. Although there have been fears of long-term damage to gun barrels through the use of steel shot, several ammunition companies have found the damage to be negligible in modern shotguns.

Evidence to date indicates no need for a widespread adoption of lead shot substitutes in the Pacific Flyway as has been considered for the Atlantic and other flyways. In most western waterfowl areas the shot apparently works its way into the soft bottoms of waterfowl marshes where it becomes unavailable to feeding ducks.

Since this does not take place at Sauvie Island because of the hard clay layer there, the Commission feels a switch to nonlead shot is a first step towards alleviating a serious waterfowl health problem. □

BRYCE POWELL RECEIVES AWARD

It has been said that the rotary fish screens in the state save as many fish as all of the hatcheries produce. No one has made a count, but there is no question that these ingenious devices do keep many a small fish on the proper route downstream.

Bryce Powell for some 20 years has been screen maintenance foreman in the John Day area. It is through the efforts of Bryce and his crew that the screens are maintained and kept functioning. Well known to the landowners of the area, Bryce is responsible for seeing the many hundred screens are working at saving fish and not interfering with the irrigation of the landowners.

The above photo shows Bryce receiving the Shikar-Safari Club International award as Oregon's Wildlife Conservation Officer of the Year. Presenting the award certificate to Bryce is well-known astronaut Wally Schirra. The presentation was made last month in Seattle where the individual from Washington state was also honored.

Below is one of the typical screen installations of northeastern Oregon. It is placed in an irrigation diversion. The water is diverted from a stream at the left and is headed for the fields on the right. Small salmon and steelhead moving downstream are shunted via a tunnel back to the stream by the round screen drum in the water. The paddle wheel keeps the drum rotating so leaves and other debris will be washed off and not clog the screen and hence the water supply in the ditch.

Izaak Walton League Sponsors Snake River Tour

A rare adventure is being offered to the public, featuring a white water boat trip into the spectacular Hells Canyon of the Snake River, the deepest gorge in North America.

The trip will include charter bus pickup from Roseburg, Eugene, Salem, Portland and other points along the route. The group will travel up the scenic Columbia River Gorge to Lewiston, Idaho. The next morning the party will board the "Idaho Queen" and Capt. Dick Rivers will navigate the scenic 100 river miles to the head of navigation.

For two nights the group will be guests at the Devil's Doorway Lodge. From this point there will be horseback or helicopter rides to points of interest within the canyon. There will also be conducted hikes and fishing.

Cooperating in the trip, the Oregon Wildlife Commission, the Forest Service and other agencies will provide interpretation related to the wildlife, Indian culture, land and water resources of this unique area where four life zones are compressed into the steep confines of the canyon walls.

Costs for the nonprofit trip will be a maximum of $188, depending upon the participant's point of departure. All will enjoy five delightful days with over 200 miles of comfortable river cruise and from 700 to 1,000 scenic miles of land travel.

The charter bus pickup will begin at Roseburg, Oregon, at 7 a.m. on May 14. All voyagers will be returned to their point of departure by the evening of May 18. The tour will be limited to the first 30 persons to apply.

Anyone interested in making the trip should at once write or call:
PACIFIC WEST REGION
Izaak Walton League
P.O. Box 1003,
Roseburg, Ore. 97470
Phone: (503) 673-7491 □

1973 BIRD SEASONS

By CHESTER E. KEBBE
Staff Biologist, Small Game Management

Upland game bird and waterfowl hunters enjoyed fair hunting in 1973 but with a harvest of birds slightly below the take of 1972. This was confirmed by an annual questionnaire survey which randomly sampled Oregon's 401,289 licensed hunters. Results of the survey indicate that 82,500 upland bird hunters spent 572,000 days afield and bagged 751,-200 birds while 48,800 waterfowl hunters took 552,800 ducks, geese and snipe.

An accompanying table presents the harvest and hunting pressure by county on the major species of game birds.

Upland Game

Pheasant hunting success and hunting pressure in 1973 show a direct correlation with the decline in statewide pheasant populations during the past 16 years. The number of pheasant hunters dropped slightly but the number of birds bagged declined from 179,000 in 1972 to 169,-000 last season.

Quail populations are severely affected by prolonged periods of cold winter weather but recover rapidly with favorable nesting conditions. This was the situation in eastern Oregon in 1973. A quail population reduced by winter losses brought off fair-sized broods. Hunting pressure remained moderate during a shortened season but hunters were less successful. One hundred fifty-six thousand quail were taken compared with 190,000 in 1972.

Chukar partridge production in 1973 was down sharply throughout much of its range and as a result fewer birds were available for the fall hunting season. Hunters bagged 95,600 chukars compared with 121,500 in 1972.

High populations of blue and ruffed grouse throughout forested regions in Oregon resulted in a take of 60,300 birds, the largest harvest in the past 16 years. The heavy harvest occurred in spite of fire closures of prime grouse territory in northeastern Oregon during most of the September season.

Cool weather in late August triggered an early migration of doves and band-tailed pigeons from Oregon and when the season opened on September 1 the summer population had dwindled sharply. One hundred fifty-six thousand doves and 66,000 pigeons were bagged before the birds migrated south. In 1972, 192,000 doves and 87,000 pigeons were taken.

Waterfowl

The forecast of a 12 percent decline in the size of the fall flight of ducks from Canada was apparent in Oregon as hunters reported poorer hunting and fewer birds taken last winter than during the 1972 season. Poor hunting weather, along with fewer birds, resulted in a drop in the duck harvest from 519,800 in 1972 to 459,000 last year.

Goose production was up slightly in 1973, especially in the Arctic nesting species, and resulted in fair flights of snow and Canada geese into Oregon. Hunters enjoyed good hunting during favorable weather periods and bagged 53,400 geese compared with 45,600 in 1972. □

1973 GAME BIRD HARVEST

Counties By Region	Pheasants		Mt. & Valley Quail		Chukar Partridge		Blue & Ruffed Grouse		Mourning Dove		Band-tailed Pigeon		Waterfowl		
	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	Hunters	Harvest	Hunters	Duck Harvest	Goose Harvest
Benton	1,796	1,794	619	835	94	556	427	1,158	403	2,323	210	340	1,696	21,679	2,249
Clackamas	1,691	1,701	774	1,395			929	2,231	650	6,537	556	1,763	648	3,979	31
Clatsop	93	124	31	0			638	1,474	93	62	403	2,852	1,603	25,484	678
Columbia	451	902	124	277			1,101	4,251	155	618	581	5,475	1,887	23,147	1,048
Lane	3,401	6,068	2,131	8,066	156	155	3,242	11,108	985	7,286	1,665	14,400	3,410	29,284	1,335
Lincoln	62	31	0	0			279	838	62	310	495	4,114	389	3,006	92
Linn	1,733	2,443	773	3,522			805	1,239	835	7,361	340	2,445	1,410	13,676	1,131
Marion	3,133	4,475	1,604	4,940			340	834	1,421	13,125	527	3,792	1,926	16,812	616
Multnomah	1,144	1,888	248	371			155	185	185	1,356	123	462	3,148	30,235	1,662
Polk	1,139	1,979	614	2,438			588	1,454	403	3,560	371	771	1,536	14,275	2,685
Tillamook	31	62	62	124			674	1,883	29	0	728	5,986	888	14,882	792
Washington	2,422	3,630	651	1,955			273	298	588	5,079	403	1,520	1,232	6,455	611
Yamhill	1,789	2,542	372	1,086			488	1,189	403	5,056	155	1,054	834	17,309	1,049
NORTHWEST	18,885	27,639	8,003	25,009	250	711	10,744	28,142	6,212	52,673	6,557	44,974	20,607	220,223	13,979
Coos	31	62	402	2,133			680	2,039			1,015	10,963	1,723	32,616	154
Curry	0	0	155	933			124	372	93	746	304	2,645	278	2,252	
Douglas	1,419	4,104	1,445	7,326			1,357	3,851	495	3,006	768	2,888	833	6,448	31
Jackson	4,814	9,896	2,319	12,687	94	370	959	2,041	1,920	21,070	340	927	617	2,188	
Josephine	310	775	280	2,236			248	372	155	558	402	1,892	308	1,823	62
SOUTHWEST	6,574	14,837	4,601	25,315	94	370	3,368	8,675	2,663	25,380	2,829	19,315	3,759	45,327	247
Crook	712	2,134	802	9,741	219	957	93	62	402	6,028			679	5,681	61
Deschutes	649	2,071	1,240	9,070	251	185	93	155	799	7,264			1,845	9,564	433
Hood River	124	280	93	280			180	452	91	603	62	123	31	434	
Jefferson	1,340	3,803	617	3,485	437	981	62	31	493	9,047			427	2,705	123
Klamath	2,723	6,158	744	4,961	344	1,300	403	712	867	7,872	62	1,668	7,537	64,790	11,634
Sherman	1,206	3,614	524	4,968	1,337	6,057	31	93	216	2,497			401	3,328	3,077
Wasco	2,061	5,312	1,083	7,314	1,557	6,057	371	711	672	6,814	93	247	586	7,565	924
CENTRAL	8,815	23,372	5,103	39,819	4,145	15,537	1,233	2,216	3,540	40,125	217	2,038	11,506	94,067	16,252
Baker	2,651	8,875	1,395	10,541	3,859	32,762	922	2,969	521	4,339			1,019	9,701	365
Gilliam	241	520	273	994	708	2,866	31	124	93	590			31	1,239	494
Grant	402	616	650	3,800	401	526	674	2,663	155	651			302	746	216
Morrow	1,625	5,147	826	3,241	963	4,297	92	247	31	124			246	3,969	1,292
Umatilla	6,399	29,399	1,796	9,974	1,282	5,668	1,341	4,718	775	10,392			2,768	36,338	7,283
Union	1,834	5,258	682	2,783	470	2,020	1,121	4,857	124	2,537			834	5,609	307
Wallowa	366	589	186	1,736	745	5,576	877	5,146	87	479			185	1,138	246
Wheeler	371	1,178	278	4,734	624	4,672			247	5,248			62	216	62
NORTHEAST	13,889	51,582	6,086	37,803	9,052	58,327	5,058	20,724	2,033	24,360			5,447	58,956	10,265
Harney	495	1,394	340	2,194	938	4,026	93	187	372	5,482			739	6,224	2,283
Lake	836	1,825	494	3,939	438	958	216	433	371	2,667			2,421	15,911	8,277
Malheur	8,562	49,007	3,160	21,951	3,740	15,684			681	6,164			2,064	18,299	2,098
SOUTHEAST	9,893	52,226	3,994	28,084	5,116	20,668	309	620	1,424	14,313			5,224	40,434	12,658
STATE TOTAL	58,056	169,656	27,787	156,030	18,657	95,613	19,907	60,377	15,872	156,851	9,603	66,327	46,543	459,007	53,401

(Continued from Page 3)

Hunters bagged an estimated 14,000 elk during the season, an increase of nearly 4,000 animals above 1972. The 1973 harvest exceeded that of any other year except 1964 when 17,000 were taken. Success averaged 14 percent in 1973 compared with the 13 percent experienced the previous year. Roosevelt elk hunters took 3,640 (26 percent) of the total, representing a 53 percent increase in kill over that of 1972.

In analyzing the causes for such a substantial increase in elk tag sales, it is apparent that concern about high meat prices was the major factor. Many hunters who went afield for the first time in hopes of bagging the winter's meat supply obviously were disappointed and, in the process, caused hunting quality to deteriorate. In an effort to maintain quality and protect elk populations, the Commission has taken several steps in the past, including shortened seasons to preserve more bulls, separate elk tags requiring the hunter to choose between eastern and western Oregon, and road closures restricting vehicle travel in the more popular hunting areas.

The most important consideration in managing elk is to protect the resource and assure that calf production is not affected by hunting. Recent classification of over 10,000 elk to determine sex and age ratios reveals that hunting last fall cropped a higher percentage of the bulls but calf ratios remained stable. The influence on reproduction of fewer mature bulls can only be measured in the future through checking the calf crop. There is no biological justification for reducing the bull harvest until there is evidence of a decline in production. Reproduction to date appears satisfactory and that is the major concern. Equally significant in designing regulations is to determine if last fall's increase is a continuing factor or if the fuel shortage and disappointment on the part of first-time hunters will cause declining hunter interest this fall.

ANTELOPE

The antelope season extended from August 18 through August 22 with 1,615 tags authorized for 16 areas in southeastern Oregon. Hunters reported taking 749 antelope for an average of 53 percent success.

BEAR

Bear hunting was allowed statewide from August 1 through December 31 with a bag limit of one bear. No tag was required. The 15,852 hunters reported taking 2,369 bear. Hunters and harvest increased 63 and 59 percent, respectively, compared with 1972.

COUGAR

Eighty-three cougar tags were authorized for use during December in four areas of northeastern Oregon and one area of southwestern Oregon. The 54 participating hunters bagged 16 cougar, all from northeastern Oregon.

BIGHORN SHEEP

Ten hunters had a once-in-a-lifetime opportunity to hunt bighorn sheep in the Owyhee and Steens Mountain Units September 15 through September 21. Only one of the eight hunters in the Steens Mountain Unit was successful. The Owyhee Unit was open for the first time and both tag holders were successful in bagging a trophy bighorn.

BOW HUNTING

The general archery season extended from August 25 through September 30 with other opportunities being available through February 15, 1974. Areas open to bow hunting only included 1 for antelope, 4 for elk, 13 for deer and 8 for both deer and elk. The 16,830 archery hunters reported taking 1,155 deer, 152 elk, 121 bear and 3 antelope.

The accompanying tables display results of the 1973 big game seasons. Estimates are based on projected information from questionnaires returned by hunters who were selected at random. □

Environmental Events

The Land Conservation and Development Commission is holding a series of public meetings throughout the state to obtain local opinion on statewide land use goals and guidelines. Everyone interested in wildlife management and outdoor recreation should participate.

The State Water Resources Board revised its beneficial water use programs for the Umpqua and Middle Coast Basins. The changes strengthened the minimum stream flow base and added other restrictions to consumptive water uses. Similar revisions are now being studied for the Rogue and South Coast Basins.

A proposed motorcycle park was denied by the Washington County Planning Commission after determining that adequate plans had not been made to avoid environmental damage.

An evaluation of the proposed McNary Dam second powerhouse showed that it would not have serious wildlife damages if adequate fish passage and protective features are provided.

There has been an 80 percent increase in 1974 permit applications for fill and removal activities in natural waterways. The series of winter floods is the principal reason for the many more watershed projects this year. The department is providing advice on each request to assure the work will be compatible with natural wildlife habitat.

Waste oil pollution of Force Lake in the Delta Park area of north Portland recently killed several hundred fish and some waterfowl. The Wildlife Commission staff is cooperating with the Department of Environmental Quality in determining the source of the oil. □

OREGON WILDLIFE COMMISSION
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P. O. BOX 3503
PORTLAND, OREGON 97208