1966

Annual Report

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OREGON STATE GAME COMMISSION

GAME DIVISION

1966

ANNUAL REPORT

GAME DIVISION

O R E G O N S T A T E G A M E C O M M I S S I O N

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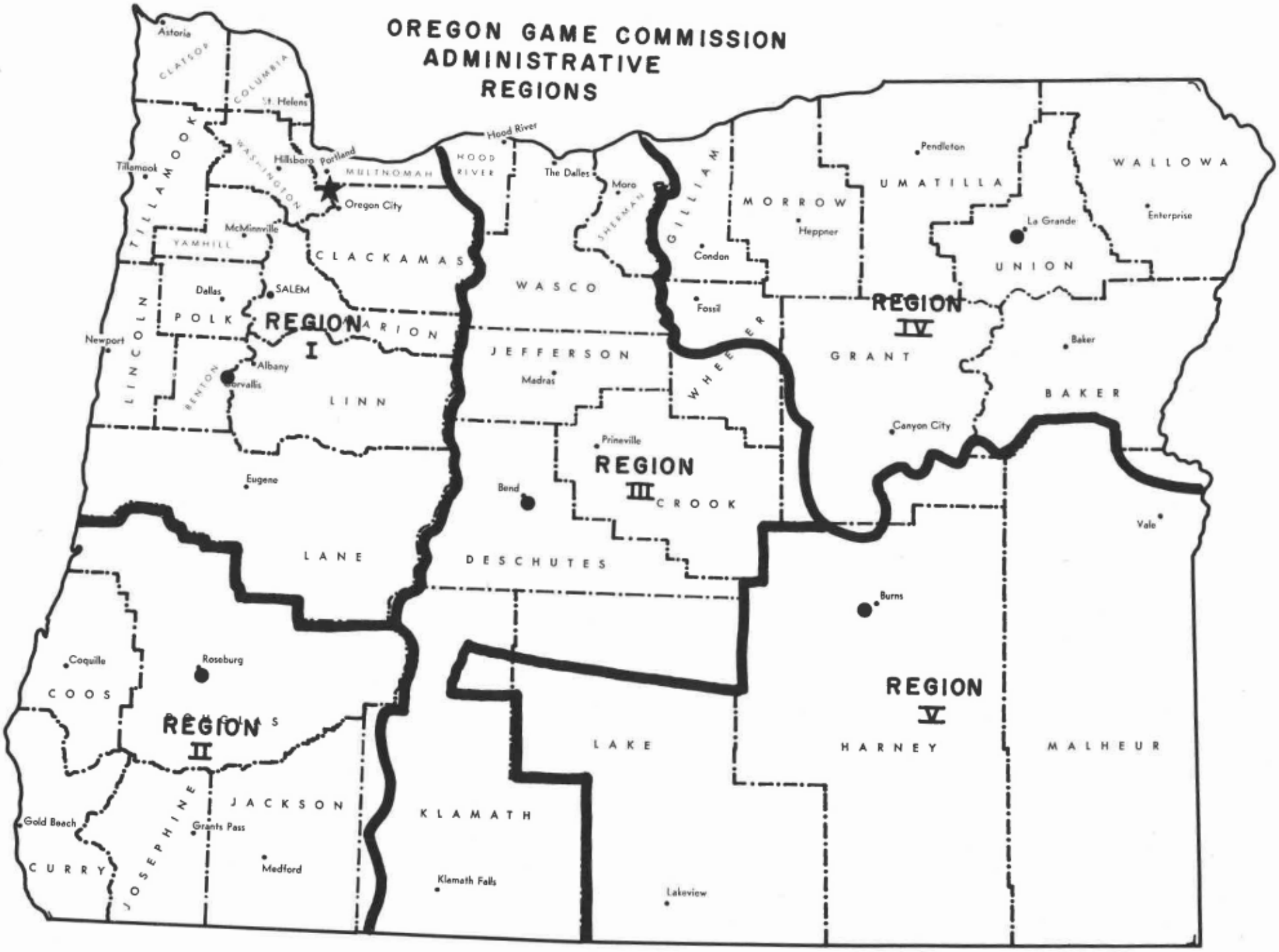
OREGON GAME COMMISSION ADMINISTRATIVE REGIONS



INTRODUCTION

This report summarizes statistical data concerning Oregon's wildlife resources. Specific information for the period from July 1, 1965 through June 30, 1966 is presented, along with comparative data from previous years. A summary of service and development programs is included.

Since the report is designed primarily as a reference for use by those interested in game management, most of the data is presented in tabular form. Descriptive material and interpretation are limited.

Oregon supports a diversity of game with one or more forms present on nearly every portion of the state's 96,000 square miles of habitat. Big game species include three forms of deer, two forms of elk, pronghorn antelope, black bear, bighorn sheep, and mountain goat. Twelve species of resident upland game are present while migratory mourning doves, band-tailed pigeons, and a variety of ducks and geese are found seasonally throughout much of the state.

Hunting in Oregon is of interest to a great many people as indicated by the fact that 332,906 individuals purchased licenses in 1965. Big game hunters bagged 132,000 animals and enjoyed 1,890,000 days afield in the process. The harvest of birds totaled 1,230,000 for all species, and recreation from bird hunting amounted to 940,000 man-days. Important milestones in 1965 were the first modern day seasons for bighorn sheep, mountain goats, and wild turkeys.

A growing diversity of interests, more competitive demands for the use of land and water, and increasing population pressures continue to complicate the task of maintaining wildlife resources and recreational opportunities. Since most game management is practiced on land administered by others, cooperative programs are essential. Much progress has been made, particularly on public lands where administrative agencies have undertaken extensive wildlife habitat improvement projects. The need for extending such cooperative programs is paramount.

The management program of the Game Division is planned and coordinated by a division chief assisted by four staff specialists. Twenty district biologists stationed in five administrative regions execute the program. Other agencies and groups share the management responsibility, including the Research Division of the Department which is charged with basic research, the Department of State Police which is responsible for game law enforcement, and the Fish and Wildlife Service, U. S. Department of the Interior, which has primary responsibility for migratory birds and also administers the cooperative predator and rodent control program.

B I G G A M E R E S O U R C E S

Public interest in Oregon's big game resource again showed a substantial increase in 1965. The number of licensed hunters increased from 319,272 in 1964 to 325,670. A total of 277,857 deer tags and 67,387 elk tags was issued. The respective totals for 1964 were 271,339 deer hunters and 62,898 elk hunters.

A decline occurred in the harvest of animals. A total of approximately 119,000 deer, 12,000 elk, 370 antelope, 5 bighorn sheep, and 5 mountain goat was reported taken. This was a decline of 17 percent in the deer kill and a decline of 29 percent in the elk kill compared with 1964.

Big game hunting provided about 1,891,000 man-days of recreation. Warm, dry weather through October combined with exceptional forage supplies resulted in a wide distribution of animals, little migratory movement, and a decline in hunter success. Significant winter losses of young animals during the 1963-64 winter and in the spring of 1965 also contributed to lower hunting success. Winter losses during the winter of 1965-66 were very light throughout the state, indicating a better potential for the 1966 hunting season.

The 1966 big game inventories indicate a slight increase in both black-tailed and mule deer.

Poor survival of young antelope and deer continues to be a matter of great concern on the desert type ranges of southeastern Oregon.

Forage production was excellent on winter ranges in 1965 and utilization was generally below critical levels except on a few herd ranges during the 1965-66 winter.

BLACK-TAILED DEER

Winter inventories of blacktails on 2,577 miles of census routes produced a total count of 13,366 deer. The average of 5.2 per mile compares with 4.4 in 1965 and 5.9 in 1964. The census (Table 1) includes both spotlight and foot samples. Variance in census methods on different units precludes direct comparison of animal density. Research and planning is underway to attempt correction of this situation.

Classification of 4,919 deer in 1965 indicated a ratio of 42 bucks and 66 fawns per 100 females; or 20 percent bucks, 48 percent does, and 32 percent fawns. Keno Unit fawn production is again very low this year. See Table 2.

Winter losses in western Oregon were very light this past winter. A total of 18 carcasses was found in 444 miles of travel, as indicated in Table 3. This reflected the mild winter of little snow or cold temperatures. A summary of observed losses is presented in Table 3.

Damage complaints exceeded the 1965 high in western Oregon with receipt of 1,258 deer damage complaints. The past four years' complaints totaled 1,226, 1,153, 1,130, and 946 respectively. Liquid repellents and kill or hazing permits were the most numerous of controls employed, but control also included issuance of tankage, extensive fencing, and hunting seasons. A summary of complaints is presented in Table 19.

Hunters reported taking a total of 47,732 blacktails, of which 13,348, or 27 percent, were antlerless. Hunter success averaged 44 percent compared with 53 percent in 1964. Black-tailed deer comprised 40 percent of all deer taken in Oregon compared with 41 percent in 1964. Table 25 presents a 12-year comparison.

Early and extended seasons were popular in western Oregon, making up 31 percent of the northwest region deer harvest.

General, early, extended, and controlled season data are presented by unit in Table 22. Early and extended seasons are shown by area in Table 23, and controlled seasons are shown in Table 24.

Table 1

BLACK-TAILED DEER POPULATION TRENDS

Units by Region	Herd Range	Miles Traveled	Deer Observed	Deer per Mile 1966	1965	1964	1963
Alsea		695	2,150	3.1	2.9	3.5	3.4
Clatsop		106	238	2.2	2.4	2.6	2.7
McKenzie		376	2,265	6.0	5.8	6.0	6.0
Nestucca		92	155	1.7	2.2	2.5	2.0
Polk		156	264	1.7	1.9	3.0	3.7
	Clackamas	133	440	3.3	4.3	7.2	5.9
	Marion	76	231	3.0	2.9	3.2	3.7
	S. Santiam	213	488	2.3	1.7	2.5	1.5
Santiam		422	1,159	2.7	2.4	4.0	3.2
Siuslaw		52	151	2.9	2.5	2.2	3.7
	E. Trask	83	310	3.7	2.0	4.5	3.5
	W. Trask	28	84	3.0	3.3	4.0	3.4
Trask		111	394	3.5	2.2	4.3	3.2
Wilson		39	105	2.7	3.1	3.2	3.2
NORTHWEST		2,049	6,881	3.4	3.1	3.9	3.7
Applegate		63	162	2.6	5.2	5.2	4.4
	E. Chetco	28	110	3.9	3.6	3.6	2.2
	W. Chetco	-	-	-	5.0	5.0	1.9
Chetco		28	110	3.9	4.5	4.4	2.0
Elkton		30	120	4.0	3.9	3.3	3.2
	N. Umpqua	20	91	4.6	3.1	4.0	4.5
	Foothills	60	166	2.8	4.9	9.9	9.6
	S. Umpqua	20	62	3.1	2.0	5.5	3.6
Dixon		100	319	3.2	3.2	6.5	6.2
	S. Evans Cr.	38	101	2.7	3.1	2.0	1.6
	N. Evans Cr.	20	162	8.1	6.6	9.3	8.6
Evans Creek		58	263	4.5	4.3	4.5	3.9

Table 1

(continued)

BLACK-TAILED DEER POPULATION TRENDS

Units by Region	Herd Range	Miles Traveled	Deer Observed	Deer per Mile 1966	1965	1964	1963
Melrose		140	560	4.0	3.8	4.3	5.8
Powers		20	21	1.1	6.8	11.1	8.2
	Little Butte	19	329	17.3	16.3	22.0	16.5
	Big Butte	47	274	5.8	5.9	6.2	4.3
	Jenny Creek	34	632	18.6	10.0	19.4	10.6
	Emigrant Cr.	9	151	16.8	8.1	22.1	13.0
Rogue		109	1,386	12.7	9.7	15.3	9.9
Sixes		37	327	8.8	4.6	8.0	6.6
	E. Tioga	20	74	3.9	1.7	0.4	-
	W. Tioga	39	17	0.4	0.7	1.8	-
Tioga		59	91	1.5	1.0	1.4	-
SOUTHWEST		644	3,359	5.2	4.6	7.2	5.7
Hood River		10	86	8.6	6.5	11.0	-
Keno	Pokegama	39	954	22.2	20.9	29.6	8.8
	Six Fingers	28	320	11.4	17.4	13.9	16.3
	Badger Creek	20	679	34.0	21.3	25.9	27.5
	White River	19	1,087	57.2	50.3	51.3	45.2
Wasco		67	2,086	31.1	28.2	28.3	27.9
CENTRAL		116	3,126	26.9	23.7	27.0	27.9
TOTALS AND AVERAGES		2,577	13,366	5.2	4.4	5.9	5.0

Table 2

BLACK-TAILED DEER HERD COMPOSITION

Units by Regions	Deer Classified				Average Number Per 100 Does					
					*1966		1965		1964	
	Bucks	Does	Fawns	Total	Bucks	Fawns	Bucks	Fawns	Bucks	Fawns
Alsea	130	184	151	465	71	82	48	76	55	73
Clatsop	43	57	42	142	75	74	72	74	50	73
McKenzie	71	111	61	243	64	55	46	51	55	69
Nestucca	8	21	15	44	38	71	56	75	55	70
Polk	19	41	29	89	46	71	53	98	54	46
Santiam	56	163	112	331	34	69	59	72	47	73
Siuslaw	8	26	16	50	31	61	18	97	28	61
Trask	28	81	56	165	34	69	51	76	32	77
Willamette	15	50	33	98	30	66	-	-	41	71
Wilson	35	60	42	137	58	70	71	77	35	79
NORTHWEST	413	794	557	1,764	52	70	53	71	48	71
Applegate	37	59	36	132	63	61	35	64	30	66
Chetco	-	-	-	-	-	-	13	47	17	65
Dixon	80	141	115	336	57	82	47	85	39	67
Elkton	40	129	71	240	31	55	23	51	29	86
Evans Creek	8	24	18	50	33	75	25	97	40	74
Melrose	47	179	172	398	26	96	28	60	41	85
Powers	27	83	60	170	32	72	33	66	27	73
Rogue	127	331	232	690	38	70	38	73	37	60
Sixes	18	61	45	124	30	73	43	77	49	72
Tioga	22	37	26	85	70	55	-	-	48	70
SOUTHWEST	406	1,044	775	2,225	39	74	35	69	37	70
Keno	34	195	57	286	17	29	25	47	23	48
Wasco	137	329	178	644	42	54	42	76	61	66
Hood River	-	-	-	-	-	-	-	-	46	23
CENTRAL	171	524	235	930	33	45	35	64	39	54
TOTALS AND AVERAGES	990	2,362	1,567	4,919	42	66	40	69	41	66

*Fawn-doe ratios refer to the previous year's production as of December 31.

Table 3

BLACK-TAILED DEER WINTER LOSSES

Units by Region	Winter Losses: Sex: Male	Winter Losses: Sex: Female	Winter Losses: Age: Young	Winter Losses: Age: Adult	Total Carcasses	Miles Traveled	Carcasses per Mile: 1966	Carcasses per Mile: 1965	Carcasses per Mile: 1964	Carcasses per Mile: 1963	Carcasses per Mile: 1962
Alsea						58	-	-	-	-	0.1
Clatsop					3	47	-	0.2	-	-	0.2
McKenzie						25	-	0.1	0.4	-	0.8
Santiam						29	-	-	-	-	0.3
Siuslaw						9	-	0.1	0.8	-	0.4
Trask					2	45	-	0.2	-	-	-
Wilson				1	2	53	-	0.2	-	-	0.1
Nestucca						16	-	-	-	-	-
NORTHWEST				1	7	282	-	-	0.1	-	0.4
Elkton						2	-	0.5	0.1	-	-
Applegate						16	-	-	-	-	-
Melrose						3	-	1.5	0.9	0.1	0.9
Dixon	1		1		1	5	-	0.7	-	-	-
Evans Creek			1		1	2	-	1.0	-	-	-
Rogue	2	1	5	3	8	70	-	0.1	0.1	-	-
Powers						2	-	0.3	-	-	2.2
Tioga						2	-	1.5	0.2	-	1.4
SOUTHWEST	3	1	7	3	10	102	0.1	0.3	0.2	-	0.4
Hood River						10	-	0.4	-	-	-
Wasco	1			1	1	50	-	0.1	-	-	-
CENTRAL	1			1	1	60	-	0.1	-	-	-
TOTALS AND AVERAGES	4	1	7	5	18	444	-	0.1	0.1	-	0.3

Anything less than 0.1 deer per mile is indicated by (-).

MULE DEER

Spring inventory of mule deer on 3,434 miles of census routes on winter ranges produced a total of 42,579 deer observed. The trend index of 12.4 deer per census mile is almost identical to the 12.3 deer per census mile average in 1965. The past ten-year average of 12.3 deer per census mile is practically identical to the 1966 figure. The southeast region shows a 4 percent decline over 1965 and a 19 percent decline from 1964, primarily in the extreme southeast section of the state including the Steens, Owyhee, Malheur River, and Whitehorse Units. The central and northeastern regions showed a very slight increase over 1965. Table 4 presents a comparison of data by unit and herd range for the past four years.

Herd composition shown in Table 5 indicates averages of 20 bucks and 63 fawns per 100 does for the 20,483 deer classified. This average may also be presented as 11 percent bucks, 54 percent does, and 35 percent fawns. Fawn production was 11 percent below the 1965 average of 71 fawns per 100 does. The southeastern and central regions show a marked decline in fawn production. The southeast is down 19 percent and the central down 21 percent below 1965 which was also a low year. The northeast region shows an increase of four percent, indicating good production except in desert type units. The lowest production was in the Whitehorse Unit which showed an average of 17 fawns per 100 does, computed from a very small sample of deer.

The southeast and central regions contribute about 35 percent to the total deer harvest. The reduction in fawn production will probably be felt in about a 5 percent reduction in kill during the 1966 hunting season.

Antler class percentages are shown in Table 6. Forty-eight percent of all mule deer bucks classified were spikes or two-points. In 1965 this average 45 percent and in 1964, 50 percent.

Winter losses appeared to be very light on eastern Oregon winter ranges, averaging less than .03 carcasses per mile on 2,247 miles of census routes. Losses recorded on winter range sampling areas are shown in Table 7.

Bitterbrush utilization measurements, shown in Table 16, indicate an average of 51 percent use in 1965. This is misleading, since leader growth was exceptionally good but deer use was still high. Heaviest use was found in Klamath County where total use averaged 70 percent. Moisture conditions have been very poor in many parts of eastern Oregon in 1966. Bitterbrush production will be much less in 1966. We can expect a moderate to heavy deer winter loss in eastern Oregon, depending on the severity of the winter and the specific area concerned.

Range vegetative trends, presented in Table 17, show decreases in desirable vegetation and a decline in plant density except in the Starkey Unit where improvement is indicated. The table includes a five-year comparison by unit and herd range.

In 1965, 110 mule deer damage complaints were received compared with 196 in 1964. A summary of complaints is presented in Table 19.

Hunters reported a harvest of 73,718 mule deer for a success ratio of 50 percent. Mule deer comprised 60 percent of the total deer taken in 1965. Warm, dry hunting conditions and winter loss resulted in a decline in deer harvest from 1964.

The antlerless mule deer harvest consisted of 19,242 animals and made up 27 percent of the total mule deer harvest. A 12-year comparison is presented in Table 25. Early and extended season harvests are shown in Table 23 and controlled seasons in Table 24.

INTERSTATE DEER HERD

The Devil's Garden-Interstate deer herd summers in Oregon and winters in California. Inventories are conducted jointly by the California and Oregon Game Departments, the Modoc and Fremont National Forests, and the Bureau of Land Management.

The following table summarizes basic data pertaining to this herd. It appears that there may be a relationship between precipitation, browse production, and fawn survival.

BASIC DATA OF THE DEVIL'S GARDEN-INTERSTATE DEER HERD

Year	Track Count	Deer Harvest: Bucks Ore.	Deer Harvest: Bucks Calif.	Deer Harvest: Antlerless Ore.	Deer Harvest: Antlerless Calif.	Total	Herd Comp. Counts per 100 Does: Bucks	Herd Comp. Counts per 100 Does: Fawns	*Rainfall Alturas	Bitterbrush Utilization: Growth (In.)	Bitterbrush Utilization: Livestock % Use	Bitterbrush Utilization: Deer %Use	Bitterbrush Utilization: Total %Use	Bitterbrush Utilization: %Plots Over 60% Use
1947	10,826						14	56			20.1			
1948	9,665						11	85	14.08		18.4	16.2	36.3	
1949	14,011	2,500	670	0	0	3,170	17	94	14.15	3.5	18.8	21.5	39.9	
1950	13,256	2,440	310	688	1,319	4,757	19	77	11.59	3.2	10.3	29.5	48.3	
1951	17,570	3,149	967	2,343	1,504	7,963	13	77	12.14	3.7	16.1	29.9	40.2	20
1952	10,547	1,898	98	1,399	0	3,395	12	55	19.69	5.4	7.1	18.2	34.3	17
1953	11,601	2,798	128	1,893	0	4,819	19	97	16.28	3.8	13.5	15.6	22.7	5
1954	17,615	3,821	361	1,850	0	6,032	18	88	12.31	3.2	8.5	19.1	32.6	11
1955	17,170	3,494	441	2,574	2,008	8,517	15	73	8.13	3.0	7.5	44.7	53.2	46
1956	12,240	4,659	899	3,931	1,885	11,374	20	85	14.31	4.5	12.0	30.3	37.8	20
1957	11,695	4,912	925	2,173	0	8,010	14	83	15.17	4.3	10.5	14.8	26.8	6
1958	12,819	3,168	662	981	285	5,096	15	80	17.40	4.8	9.0	28.7	39.2	15
1959	14,642	4,738	1,345	1,609	0	7,692	11	64	9.37	2.4	8.2	17.6	26.6	3
1960	14,203	4,658	646	2,394	554	8,252	11	58	10,28	2.1	7.0	31.2	39.4	4
1961	13,091	3,409	684	2,123	0	6,216	10	61	8.47	1.8	6.0	17.0	24.0	1
1962	12,112	2,589	212	1,302	0	4,103	11	76	10.87	2.6	4.4	18.2	24.2	10
1963	7,193	1,964	84	0	0	2,048	12	75	17.34	2.5	8.0	13.5	17.9	1
1964	16,513	3,188	152	591	0	3,931	16	60	12.95	3.5	9.0	30.0	38.0	10
1965	10,906	2,471	164	956	0	3,591	12	56	14.59	3.9	11.0	36.0	45.0	27

*Precipitation for 12-month period ending June 30 of named year.

Table 4

MULE DEER POPULATION TRENDS

Units by Region	Herd Range	Miles Traveled	Deer Observed	Deer per Mile 1966	1965	1964	1963
Deschutes	Tumalo	50	108	2.2	2.1	1.9	1.2
	N. Ochoco	10	46	4.6	9.4	7.5	10.1
	Trout Creek	28	425	15.0	15.8	13.3	19.3
	McKay-Ochoco	37	325	8.7	8.6	6.5	5.2
Grizzly		75	796	10.6	11.7	9.6	8.5
	Swan Lake	59	924	15.7	11.2	19.6	16.0
	N. Goodlow	41	693	16.9	17.7	20.6	8.4
Klamath		100	1,617	16.2	13.9	20.1	12.8
Maupin*	Maupin	350	230	0.7	1.0	1.5	1.3
Maury	Maury Mtn.	76	1,089	14.3	12.9	3.6	2.4
Metolius	Metolius	65	214	3.3	3.2	3.0	3.1
	McKay-Ochoco	23	299	13.0	9.3	12.1	11.1
	S. Ochoco	63	1,410	22.3	21.5	12.3	7.9
	S. Fk. J. Day	55	834	15.1	16.3	17.6	9.7
	N. Ochoco	63	1,052	16.7	27.3	18.8	20.1
Ochoco		204	3,595	17.6	19.4	15.9	13.4
	N. Paulina	130	433	3.3	3.2	3.2	2.1
	Devil's Garden	95	558	5.9	7.8	7.7	5.5
	Hole-in-the-Ground	55	149	2.7	2.7	2.5	2.1
Paulina		280	1,140	4.1	4.7	4.5	3.2
	Sprague	20	410	20.5	28.8	17.5	18.3
	Black Hills	23	450	19.6	24.4	17.8	14.6
Sprague		43	860	20.0	26.4	17.7	16.3
	Lower Deschutes	150	334	2.2	1.6	-	-
	N. Pine Hollow	140	66	0.5	1.5	-	-
	S. Pine Hollow	200	308	1.5	1.6	-	-
Sherman*		490	708	1.4	1.5	-	-
CENTRAL		893	9,419	10.5	10.4	8.8	6.5

*Aerial route. Not in ground census averages.

(continued)

MULE DEER POPULATION TRENDS

Units by Region	Herd Range	Miles Traveled	Deer Observed	Deer per Mile 1966	1965	1964	1963
	Sumpter	15	196	13.1	9.4	30.0	10.0
	Burnt River	64	511	8.0	10.9	9.8	16.0
Baker		79	707	8.9	10.5	13.5	14.8
Catherine Creek		22	637	29.0	30.5	32.0	24.4
Chesnimnus		117	555	4.7	4.8	5.7	5.7
Desolation	M. Fk. J. Day	94	483	5.2	5.2	5.0	6.0
	Heppner	49	832	17.0	17.1	16.1	17.1
	Monument	32	404	10.4	12.5	15.9	11.7
	W. Mid.Fk.J. D.	26	126	5.0	6.8	5.0	3.0
	N. Fk. J. Day	29	493	17.0	18.7	14.0	11.8
Heppner		136	1,855	13.6	14.0	13.1	11.4
Imnaha		56	1,095	19.6	16.1	17.3	9.9
Keating	Keating	71	1,505	21.2	21.6	26.8	32.8
Lookout Mtn.	Lookout Mtn.	32	932	29.1	17.8	24.4	27.2
Minam		76	1,742	22.9	23.6	19.6	17.2
	Murderer's Cr.	73	1,615	22.1	20.3	16.9	13.7
	S. Side J. Day	70	434	6.2	8.3	8.9	8.0
	E. S. Fk.J. Day	12	162	14.0	14.0	19.0	8.6
	N. Izee	14	260	18.6	21.7	22.4	17.6
Murderer's Creek		169	2,471	14.6	15.0	14.2	11.3
Northside	Northside	56	1,388	24.6	21.1	26.4	21.3
Sled Springs		57	989	17.4	9.6	9.1	9.7
	N. Snake Riv.	75	947	12.5	10.9	6.9	9.5
	S. Snake Riv.	31	706	22.8	13.8	8.0	12.7
Snake River		106	1,653	15.6	11.8	7.2	10.2

(continued)

MULE DEER POPULATION TRENDS

Units by Region	Herd Range	Miles Traveled	Deer Observed	Deer per Mile 1966	1965	1964	1963
	Grande Ronde	90	497	5.5	5.6	3.4	6.0
	Shaw Mtn.	35	415	11.8	9.0	13.8	8.3
Starkey		125	912	7.3	6.7	4.1	6.6
	Bridge Creek	8	242	30.3	27.5	32.7	21.5
	Birch Creek	22	324	14.9	19.0	28.6	22.9
	McKay Creek	21	617	29.3	24.8	17.0	24.5
Ukiah		51	1,183	23.2	22.7	24.5	23.3
	Umatilla	20	314	15.5	10.4	22.6	24.2
	Meacham Cr.	33	442	13.3	14.5	17.5	26.6
Umatilla		53	756	14.2	13.0	19.5	25.5
Walla Walla	Walla Walla	41	372	9.0	8.6	11.0	10.3
Wenaha		38	347	9.1	10.3	2.8	5.9
	John Day Riv.	24	246	10.2	9.1	5.9	8.3
	Waterman	52	486	9.3	12.6	8.2	8.0
Wheeler		76	732	9.6	11.5	7.3	8.1
NORTHEAST		1,455	20,314	14.0	13.3	13.0	13.1
	N. Side Malheur	45	860	19.1	21.7	24.9	12.8
	Ironside	18	258	18.3	7.7	6.7	8.7
	Cottonwood	50	136	2.7	3.6	4.4	2.2
Beulah		113	1,254	11.1	11.5	12.4	7.5
Fort Rock	North Lake	160	2,117	13.2	12.7	15.9	15.7
	Crooked Cr.	36	434	12.1	6.7	9.5	12.0
	W. Goose L.	22	197	9.0	9.0	4.5	10.1
	Gearhart	39	452	11.6	18.2	17.9	9.3
	S. Goodlow	22	557	25.3	19.6	29.5	16.3
Interstate		119	1,640	13.8	13.3	13.8	11.6

(continued)

MULE DEER POPULATION TRENDS

Region	Herd Range	Miles Traveled	Deer Observed	Deer per Mile 1966	1965	1964	1963
	S. Side Malheur	75	417	5.5	5.3	7.1	2.6
	Riverside	33	55	1.6	3.6	6.8	2.4
	Drewsey	21	232	11.0	15.0	24.4	9.0
	Stinkingwater	27	246	9.1	7.6	11.5	3.9
Malheur		156	950	6.1	6.6	10.1	3.6
Owyhee	Mahogany Mtn.	50	196	3.9	5.5	7.2	1.4
Silver Lake	Silver Lake	142	3,821	26.9	25.9	27.3	23.9
	Dry Mtn.	30	410	13.7	10.2	16.0	8.9
	Silvies River	47	134	2.9	3.7	5.3	4.7
	South Izee	7	62	9.0	7.3	11.6	10.6
Silvies		84	606	7.2	6.3	9.6	6.7
	Alvord	18	624	34.7	41.7	55.9	44.1
	Frenchglen	44	554	12.6	16.6	29.9	23.1
Steens Mountain		62	1,178	19.0	23.9	34.2	29.2
	Deep Creek	96	791	8.2	11.9	11.9	6.9
	Crooked Creek	44	242	5.3	6.9	6.7	10.5
	E. Goose Lake	-	-	-	8.5	0.0	6.8
Warner		140	1,033	7.4	10.1	9.2	8.0
Whitehorse	Whitehorse	60	51	0.8	1.3	1.3	1.2
SOUTHEAST		1,086	12,846	11.8	12.3	14.6	11.3
TOTALS AND AVERAGES		3,434	42,579	12.4	12.3	12.7	11.1

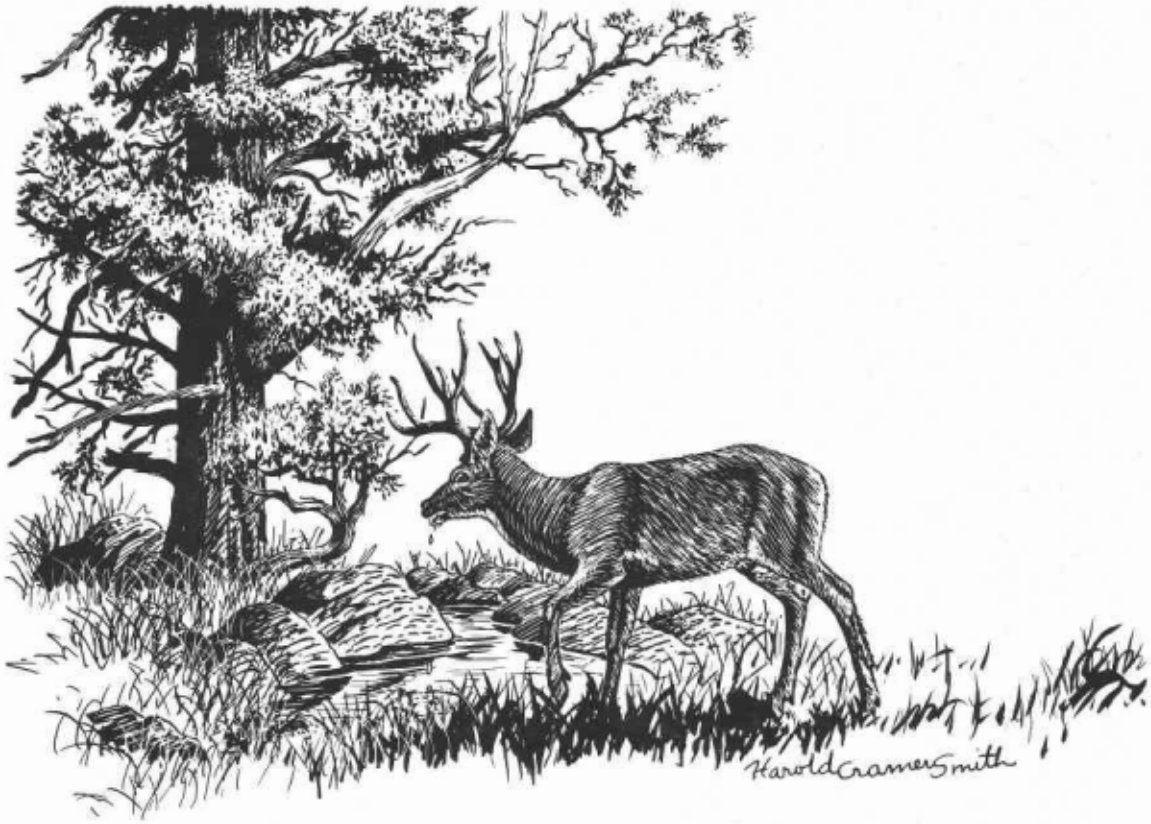

Harold Cramer Smith

Table 5

MULE DEER HERD COMPOSITION

Units by Regions	Deer Classified				Average Number Per 100 Does					
					*1966		1965		1964	
	Bucks	Does	Fawns	Total	Bucks	Fawns	Bucks	Fawns	Bucks	Fawns
Deschutes	72	196	88	356	37	45	31	70	27	71
Fort Rock	152	385	231	768	39	65	40	90	40	88
Grizzly	35	263	136	434	13	52	18	76	17	76
Klamath	98	967	536	1,601	10	55	12	59	18	77
Maupin	19	96	81	196	20	84	12	95	23	97
Maury	20	144	95	259	14	66	20	70	16	73
Metolius	65	229	115	409	28	50	33	70	28	67
Ochoco	207	1,284	760	2,251	15	59	25	71	11	74
Paulina	233	841	423	1,497	28	50	24	70	23	71
Sprague	46	259	138	443	18	53	21	71	27	76
CENTRAL	947	4,664	2,603	8,214	20	56	24	71	22	75
Baker	50	156	105	311	9	96	21	66	41	77
Catherine Creek	73	276	211	560	26	76	26	62	33	90
Chesnimnus	30	221	176	427	14	80	13	69	14	107
Desolation	16	69	44	129	23	64	13	62	4	80
Heppner	66	434	378	878	15	87	13	78	15	81
Imnaha	36	153	115	304	24	75	15	73	23	101
Keating	26	232	150	408	11	65	17	67	29	79
Lookout Mtn.	4	60	54	118	7	90	9	70	10	76
Minam	129	363	264	756	36	73	19	72	35	72
Murderer's Cr.	95	553	334	982	17	60	17	70	12	78
Northside	87	265	161	513	33	60	25	71	25	71
Sled Springs	53	423	375	851	13	89	15	75	25	99
Snake River	77	363	300	740	21	83	7	40	40	92
Starkey	33	151	133	317	22	88	27	89	28	107
Ukiah	28	177	139	344	16	81	37	72	16	91
Umatilla	7	44	34	85	16	72	11	72	16	72
Walla Walla	12	82	90	184	36	82	25	69	36	82
Wenaha	15	90	76	181	17	84	19	64	20	88
Wheeler	21	211	154	386	10	73	15	89	15	81
NORTHEAST	858	4,323	3,293	8,474	20	76	17	73	22	84

MULE DEER HERD COMPOSITION

(continued)

Units by Regions	Deer Classified				Average Number Per 100 Does					
					*1966		1965		1964	
	Bucks	Does	Fawns	Total	Bucks	Fawns	Bucks	Fawns	Bucks	Fawns
Beulah	23	134	92	249	17	68	19	60	15	77
Interstate	151	662	323	1,136	23	49	18	65	20	83
Malheur River	33	154	72	259	22	47	21	60	28	77
Owyhee	14	59	37	110	24	63	21	49	39	80
Silver Lake	107	466	301	874	23	65	21	95	23	96
Silvies	33	202	116	351	16	57	19	74	18	68
Steens Mtn.	62	317	149	528	20	47	25	48	22	55
Warner	17	154	88	259	11	57	19	52	20	103
Whitehorse	2	23	4	29	9	17	42	71	30	73
SOUTHEAST	442	2,171	1,182	3,795	20	54	20	67	21	80
TOTALS and AVERAGES	2,247	11,158	7,078	20,483	20	63	20	71	22	80

*Fawn-doe ratios refer to the previous year's production as of December 31.

Table 6

MULE DEER ANTLER CLASS PERCENTAGES

Counties by Regions	Percent Spikes				Percent Two Points				Percent Three Points				Percent Four Points and Over			
	1966	1965	1964	1963	1966	1965	1964	1963	1966	1965	1964	1963	1966	1965	1964	1963
Crook	21	14	8	11	39	51	40	26	16	11	33	32	24	24	19	31
Deschutes	9	8	9	8	36	36	33	26	18	18	25	24	37	36	33	42
Jefferson	17	9	10	25	26	35	37	27	15	11	16	20	42	45	37	28
Klamath	26	14	21	13	30	38	40	34	24	20	18	21	20	28	21	32
CENTRAL	17	11	12	13	35	39	37	28	19	16	23	27	29	34	28	32
Baker	8	4	11	5	43	36	48	45	14	9	10	17	35	51	31	32
Grant	12	8	6	6	30	46	37	30	19	16	18	24	39	30	39	40
Morrow	9	16	10	9	34	40	42	34	25	24	26	30	32	20	22	26
Umatilla	8	5	2	6	47	33	49	28	13	31	18	28	31	30	30	37
Union	9	20	8	10	39	29	35	35	23	12	30	22	29	39	27	32
Wallowa	2	0	6	6	41	39	38	33	15	27	13	13	42	34	43	48
Wheeler	4	4	8	19	52	49	51	31	29	30	31	26	15	17	10	23
NORTHEAST	7	8	7	9	41	39	43	34	20	22	21	23	32	31	29	34
Harney	4	4	10	8	34	18	44	22	21	29	17	23	41	49	29	47
Lake	16	9	6	17	30	41	50	32	20	12	18	19	34	38	26	32
Malheur	4	6	13	7	57	39	35	18	11	11	12	32	28	44	40	43
SOUTHEAST	12	6	9	11	33	33	43	24	20	17	16	25	35	44	32	41
STATE AVERAGES	12	8	9	11	36	37	41	29	20	19	20	25	32	36	30	35

Table 7

MULE DEER WINTER LOSSES

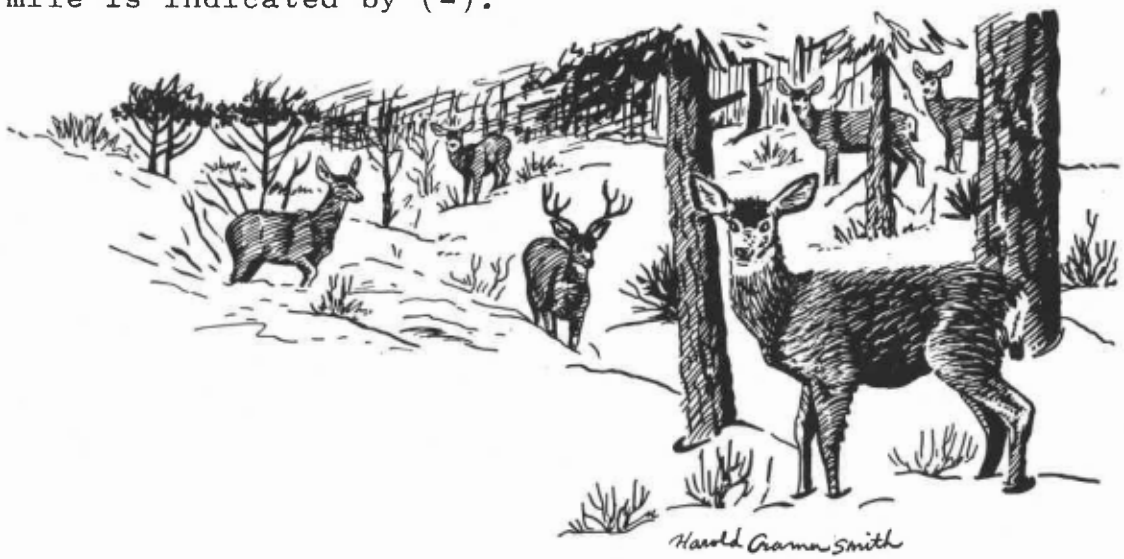
Units by Regions	Winter Losses				Total Carcasses	Total Miles	Carcasses per Mile				
	Sex		Age								
	Male	Female	Young	Adult			1966	1965	1964	1963	1962
Klamath	6	11	9	8	17	100	0.2	0.1	0.1	0.1	0.1
Ochoco						152	-	-	-	0.2	0.4
Sprague	1			1	1	43	-	0.2	-	-	-
CENTRAL	7	11	9	9	18	295	0.1	0.1	0.1	0.1	0.1
Baker						79	-	0.7	0.6	-	-
Catherine Cr.						22	-	0.1	0.3	-	-
Chesnimnus			3		3	117	-	-	0.2	-	0.2
Heppner		1	3	2	5	82	-	0.2	0.1	-	0.6
Imnaha			1		1	41	-	-	0.7	-	1.6
Keating						71	-	0.1	1.0	-	-
Lookout Mtn.						32	-	0.1	0.4	0.1	-
Minam			3	1	4	76	-	-	1.3	-	0.3
Murderer's Cr.	2	1		5	5	30	0.1	-	0.2	-	0.2
Northside		3	1	4	5	56	0.1	-	-	-	-
Sled Springs			3	1	4	57	-	-	1.9	-	0.4
Snake River			2		2	31	-	0.1	0.4	-	0.2
Starkey						125	-	-	0.1	-	-
Ukiah						51	-	-	-	-	-
Umatilla						53	-	-	0.4	-	-
Walla Walla					1	47	-	-	-	-	-
Wenaha			1		1	58	-	-	0.8	-	0.2
Wheeler			3	1	4	76	-	-	0.1	-	-
NORTHEAST	2	5	20	14	35	1,104	-	-	0.5	-	0.3

(continued)

MULE DEER WINTER LOSSES

Units by Regions	Winter Losses: Sex: Male	Winter Losses: Sex: Female	Winter Losses: Age: Young	Winter Losses: Age: Adult	Total Carcasses	Total Miles	Carcasses per Mile: 1966	1965	1964	1963	1962
Beulah						75	-	-	1.1	-	0.3
Fort Rock					3	160	-	0.1	-	-	-
Interstate		3		3	3	61	-	-	0.1	-	-
Malheur River						81	-	-	1.0	-	0.2
Silver Lake					3	142	-	-	-	-	-
Silvies						84	-	0.1	0.1	-	0.1
Steens Mtn.						62	-	0.1	0.1	-	0.2
Warner						153	-	0.2	0.1	-	-
SOUTHEAST		3		3	9	818	-	0.1	0.2	-	0.1
TOTALS AND AVERAGES	9	19	29	26	62	2,217	-	0.1	0.3	-	0.2

Anything less than 0.1 deer per mile is indicated by (-).



ROOSEVELT ELK

Census samples totaling 344 miles in western Oregon indicated an average trend of 5.5 elk per mile. The previous three-year averages were 5.2, 6.2, and 6.7, respectively. Southwestern Oregon averaged .3 elk per mile less than in 1965, while northwestern Oregon averaged a one elk per mile increase.

Classification of 3,346 Roosevelt elk during the 1965-66 winter averaged 6 bulls and 40 calves per 100 cows. The number of remaining bulls has definitely decreased over the past five years. The 40 calves per 100 cows observed this year is about average. The percentages of animal classes included in this year's herd composition included 4 percent bulls, 27 percent calves, and 69 percent cows. Herd composition information is obtained after the close of the hunting season.

Roosevelt elk damage complaints totaled 37 in 1965 compared with 42, 55, and 45 the three previous years. Agricultural complaints have been alleviated by antlerless seasons and winter archery seasons.

Very little evidence of winter loss was found in western Oregon last winter. Studies in the Millicoma area indicate a substantial difference between elk-calf ratios in the fall and spring. Counts in September 1965 averaged 39 calves per 100 cows, while counts in March 1966 averaged 28 calves per 100 cows.

Approximately 400 elk have been immobilized by use of tranquilizers, tagged, and released in the Millicoma Tree Farm study. Food habits and plant ecology studies are still in progress on the area.

The warm, dry weather that had plagued deer hunters continued on through nearly all of the 1965 general elk season. In addition, much of the coast area was covered with fog on opening morning of the elk season. The harvest of 2,918 Roosevelt elk was 30 percent below the 1964 level of 4,702 elk. Roosevelt elk tag sales declined 11 percent from the 1964 high of 21,888 tags sold.

The 1965 kill included 2,300 bulls and 618 antlerless elk and comprised 24 percent of the total elk kill. Roosevelt elk tag sales declined 11 percent from 1964 or, 19,736 tags in 1965 compared with 21,888 in 1964. Table 27 summarizes elk hunting trends since 1933 and Table 26 shows the harvest by unit and region.

General season information, compiled at the Millicoma Tree Farm gates in Coos County, is presented in the following table.

MILLICOMA TREE FARM ELK SEASONS

(From Checking Station Data)

First Day Cars	Year	Hunter Visits	Bull Harvest Three Points	Spikes	Percent Spikes	Total	Known Illegal Kill Spikes	Antlerless	Total
159	1955	1,113	59	-	-	59	11	3	14
330	1956	2,479	64	-	-	64	19	4	23
593	*1957	4,151	83	56	40	139	-	16	16
486	*1958	4,190	54	77	59	131	-	13	13
670	*1959	4,998	77	83	52	160	-	5	5
861	*1960	5,500	44	99	70	143	-	6	6
668	*1961	6,317	60	102	63	163	-	7	7
769/1	*1962	4,802	22	67	75	89	-	9	9
707	*1963	6,000	79	74	48	153	-	10	10
856	*1964	8,170	62	92	60	154	-	18	18
930	*1965	7,317	17	114	87	131	-	6	6

*Spikes legal since 1957.

/1 October 12 windstorm.

Table 8

ROOSEVELT ELK POPULATION TRENDS

Units by Region	Miles Traveled	Elk Observed	Elk per Mile 1966	1965	1964	1963
Clatsop	47	798	17.0	16.0	14.9	12.0
Nestucca	20	94	4.7	7.8	6.5	5.4
Trask	27	42	1.5	1.3	3.2	3.5
Wilson	29	363	12.5	13.0	9.5	6.2
McKenzie	59	234	4.0	3.5	3.0	-
NORTHWEST	183	1,531	8.4	7.4	8.4	7.8
Rogue	-	-	-	0.9	-	-
Elkton	46	27	0.6	0.6	3.7	-
Melrose	25	78	3.1	2.8	3.4	3.5
Powers	36	74	2.1	0.9	0.0	-
Tioga	54	171	3.1	4.5	5.0	4.7
SOUTHWEST	161	350	2.2	2.5	3.7	4.5
TOTALS AND AVERAGES	344	1,881	5.5	5.2	6.2	6.7

Table 9

ROOSEVELT ELK HERD COMPOSITION

Units by Region	Elk Classified				Average Number per 100 Cows					
					1966		1965		1964	
	Bulls	Cows	Calves	Total	Bulls	Calves	Bulls	Calves	Bulls	Calves
Clatsop	20	562	240	822	4	43	8	44	9	46
McKenzie	16	127	49	192	12	38	6	42	8	41
Nestucca	4	83	36	123	5	43	12	48	13	42
Trask	9	117	59	185	8	50	11	52	-	-
Wilson	16	523	236	775	3	45	9	49	15	44
NORTHWEST	65	1,412	620	2,097	5	44	9	46	11	44
Dixon	5	48	18	71	10	37	17	50	17	64
Elkton	5	36	20	61	14	56	0	21	27	61
Melrose	6	51	21	78	12	41	5	43	4	51
Powers	11	74	32	117	15	43	22	33	30	40
Tioga	48	676	198	922	7	29	3	42	6	37
SOUTHWEST	75	885	289	1,249	8	33	4	43	7	40
TOTALS AND AVERAGES	140	2,297	909	3,346	6	40	8	46	9	42

ROCKY MOUNTAIN ELK

A total of 8,524 Rocky Mountain elk was counted on 1,535 miles of winter census routes for an average of 5.5 elk per census mile. This is identical to last year's average and close to the 5.8 elk per mile average for the past five years. See Table 10.

A comparison of aerial and ground counts on the same herd ranges is shown in Table 11. Analysis of the two methods during the past several years indicates aerial census could be efficiently substituted for ground routes on many herd ranges. Herd composition information (shown in Table 12) averaged 9 bulls and 49 calves per 100 cows for the 4,116 elk classified. This may also be expressed as 6 percent bulls, 31 percent calves, and 63 percent cows.

A total of 28 complaints of elk depredation was received in eastern Oregon during 1965. Forty-three and 38 complaints were received in 1964 and 1963.

The kill of Rocky Mountain elk in the 1965 elk season declined 25 percent from the high success experienced in 1964. Hunters reported taking 9,348 elk in eastern Oregon including 5,766 bulls and 3,582 antlerless. Hunter success averaged 20 percent. A summary of elk kill since 1934 is given in Table 27, while breakdown by unit and region is shown in Table 26.

Information is being collected on 338 elk tagged in the Wenaha Game Management Area during the past five years. Another elk tagging study to determine distribution will be initiated on the Bridge Creek Management Area during the 1966-67 winter.

Table 10

ROCKY MOUNTAIN ELK POPULATION TRENDS

Units by Region	Herd Range	Miles Traveled	Elk Observed	Elk per Mile 1966	1965	1964	1963
	Sumpter					2.1	1.6
	Burnt River					2.7	3.0
Baker*		115	181	1.6	2.4	2.3	2.5
Catherine Creek*		125	447	3.6	3.3	3.7	-
Chesnimnus		109	1,065	9.8	10.7	10.8	11.5
Desolation*	E. Middle Fk. John Day	94	557	5.9	6.8	6.6	3.9
	Heppner	27	50	1.9	4.0	2.2	2.8
	Monument	40	149	3.7	2.8	4.2	3.0
	N.Fk. J. Day	29	0	0.0	0.8	0.2	0.0
	W. Middle Fk. John Day	26	2	0.1	0.0	0.2	0.0
Heppner		122	201	1.6	1.9	2.0	1.6
Imnaha*		200	319	1.6	1.7	1.3	0.6
Minam		58	343	5.9	8.0	6.9	6.4
	Canyon Creek	40	49	1.2	1.9	0.3	0.8
	Strawberry Cr.	15	1	0.0	1.0	0.3	0.1
Murderer's Creek*		55	50	0.9	1.6	0.3	0.6
	Beech Creek	8	15	1.9	0.7	1.2	0.0
	Camp Creek	20	5	0.2	1.0	0.1	0.3
	Grub Creek	40	9	0.2	0.4	0.1	0.1
Northside*		68	29	0.4	0.6	0.2	0.1
Sled Springs		14	192	13.7	12.1	8.1	12.4
Snake River*		200	1,180	5.9	5.6	5.6	2.7
Starkey*	Grande Ronde	106	1,262	11.9	11.1	11.7	11.0
	Bridge Creek	8	23	2.9	35.4	39.3	37.7
	Birch Creek	22	10	0.5	9.5	2.0	0.1
	McKay Creek	21	12	0.5	0.0	14.8	0.4
Ukiah		51	45	0.8	9.6	13.2	6.2

*Aerial samples.

(continued)

ROCKY MOUNTAIN ELK POPULATION TRENDS

Units by Region	Herd Range	Miles Traveled	Elk Observed	Elk per Mile 1966	1965	1964	1963
	Umatilla	20	151	7.5	7.5	5.6	9.9
	Meacham Creek	33	462	14.0	9.0	13.3	7.4
	Mt. Emily	20	110	5.5	6.6	2.5	2.3
Umatilla		73	723	9.9	6.6	8.2	6.8
Walla Walla	Walla Walla	47	732	15.5	12.8	16.8	12.2
	Wenaha	38	533	14.0	12.6	8.0	3.2
	Lookingglass	60	665	11.0	3.4	7.5	6.7
Wenaha		98	1,198	12.2	7.0	7.7	5.3
NORTHEAST TOTALS		1,535	8,524	5.5	5.5	6.8	5.7

Table 11

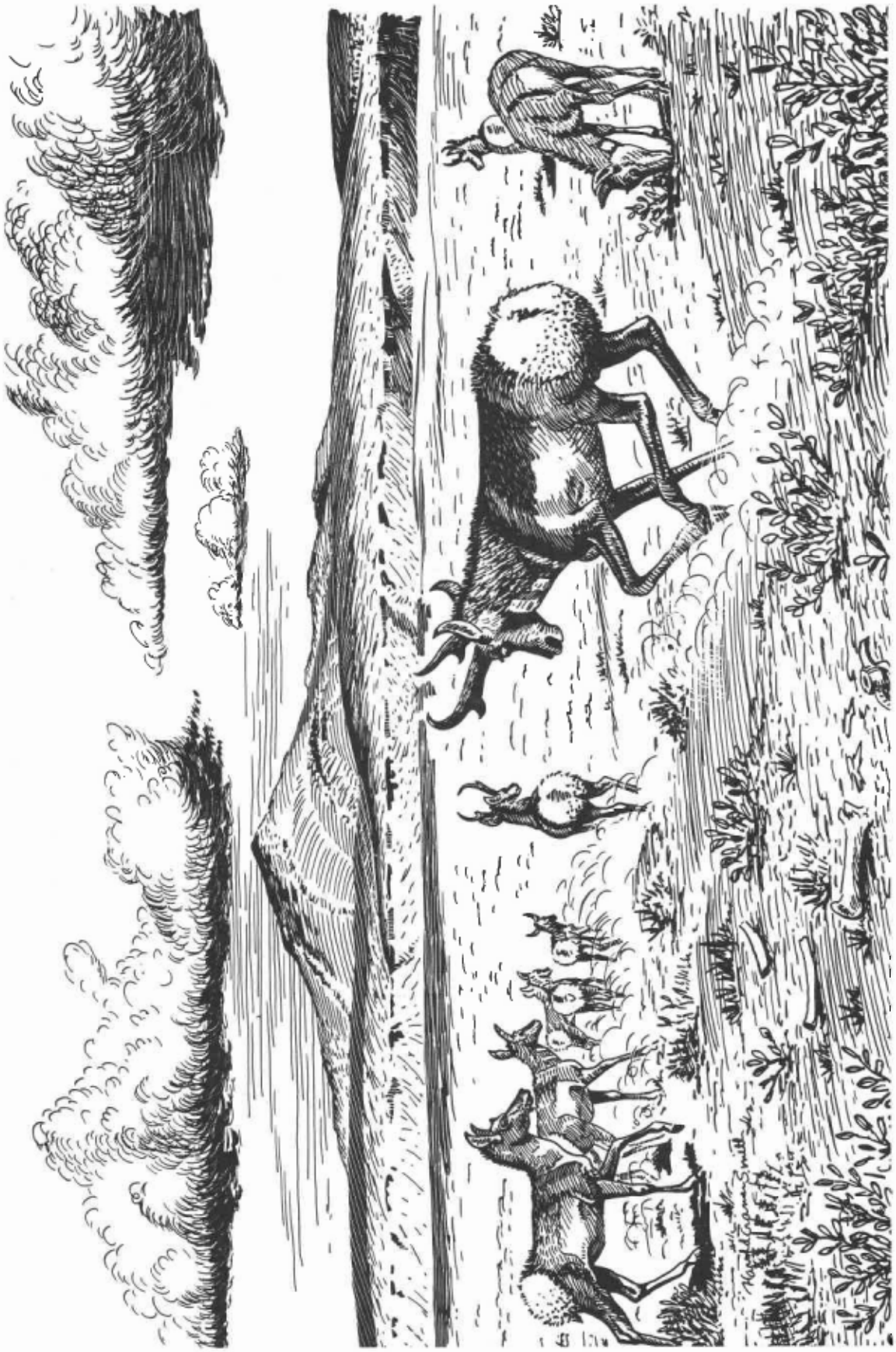
COMPARISON OF SAMPLE METHODS IN
ROCKY MOUNTAIN ELK POPULATION TRENDS

Unit	Herd Range	Ground Census Miles	Ground Census Elk Seen 1966	Ground Census Per Mile 1966	Ground Census Per Mile 1965	Aerial Census Miles	Aerial Census Elk Seen 1966	Aerial Census Per Mile 1966	Aerial Census Per Mile 1965
Chesnimnus		109	1,065	9.8	10.7	302	1,729	5.7	5.9
Heppner		29	0	0.0	0.8	20	131	6.5	13.0
Minam		58	343	5.9	8.0	170	933	5.5	6.0
Sled Springs		14	192	13.7	12.1	130	1,416	10.9	11.7
	Bridge Creek	8	23	2.9	35.4	14	402	28.9	68.5
	Birch Creek	22	10	0.5	9.5	22	210	9.5	21.8
	McKay Creek	21	12	0.5	0.0	33	106	3.2	15.6
Ukiah		51	45	0.8	9.6	69	718	10.4	28.3
	Umatilla Riv.	20	151	7.5	7.5	35	375	17.0	7.6
	Meacham Creek	33	462	14.0	9.0	38	1,288	34.0	18.3
Umatilla		53	613	11.6	8.4	73	1,663	22.7	12.9
Walla Walla	Walla Walla	47	732	15.5	12.8	55	1,217	22.1	21.3
Wenaha		38	533	14.0	12.6	159	2,482	15.6	12.3
NORTHEAST TOTALS and AVERAGES		399	3,523	8.8	10.3	978	10,289	10.5	10.1

Table 12

ROCKY MOUNTAIN ELK HERD COMPOSITION

Unit	Elk Classified				Average Number Per 100 Cows					
					1966		1965		1964	
	Bulls	Cows	Calves	Total	Bulls	Calves	Bulls	Calves	Bulls	Calves
Baker	13	47	25	85	28	53	16	58	9	49
Catherine Cr.	6	116	54	176	5	47	11	47	-	-
Chesnimnus	4	194	106	304	1	55	2	53	2	57
Desolation	7	35	9	51	20	26	7	56	10	40
Heppner	13	142	61	216	9	43	9	48	12	50
Imnaha	20	138	67	225	14	48	4	50	9	49
Minam	46	222	111	379	21	50	15	52	23	50
Sled Springs	4	189	94	287	2	50	1	66	3	56
Snake River	31	211	96	338	15	45	20	47	22	59
Starkey	50	514	283	847	10	55	13	67	16	62
Ukiah	8	92	47	147	9	51	5	50	18	65
Umatilla	4	141	90	235	3	63	5	57	4	50
Walla Walla	5	160	82	247	3	51	4	54	5	64
Wenaha	34	397	148	579	9	37	7	46	10	47
TOTALS AND AVERAGES	245	2,598	1,273	4,116	9	49	8	53	11	54



ANTELOPE

Aerial inventories (Table 13) of 4,000 flight miles provided a count of 6,010 antelope for an average of 1.5 antelope per mile of travel. This is about the average number per mile observed for the past five years.

Herd composition information obtained in August just prior to the season indicates fewer bucks and a slight improvement in fawns compared with 1965. Table 14 includes herd composition by county and Table 15 gives a comparison over the past 17 years.

Hunters reported taking 369 buck antelope on 675 tags issued for a success of 60 percent. Table 28 summarizes the 1965 season and Table 29 includes a 16 year comparison.

Table 13

1966 AERIAL ANTELOPE INVENTORY

Unit by Area	Herd Range	Miles Traveled	Antelope Observed	Antelope per Mile 1966	1965	1964	1963	1962	1961
Silvies		125	161	1.3	-	-	-	-	-
Maury		125	77	0.6	1.4	2.8	3.8	2.5	2.2
Ochoco		125	175	1.4	-	-	-	-	-
AREA I TOTALS		375	413	1.1	1.4	2.8	3.8	2.5	2.2
Paulina		200	333	1.7	1.5	1.9	1.8	1.2	0.6
Silver Lake		225	68	0.3	0.5	0.6	0.7	0.7	1.0
Wagontire		320	345	1.1	1.2	0.2	0.2	0.0	0.1
AREA II TOTALS		745	746	1.0	1.0	0.9	1.2	1.1	0.5
Abert Rim		100	339	3.4	3.5	0.4	3.0	4.2	2.2
Warner		55	266	4.8	7.2	7.5	5.7	8.8	7.7
Interstate		75	87	1.2	1.6	1.2	1.8	1.0	1.0
Klamath		-	-	-	-	0.8	0.6	1.0	1.2
AREA III TOTALS		230	692	3.0	2.0	1.9	3.0	3.7	4.0
Hart Mountain	Hart Mountain	100	149	1.5	0.8	1.6	3.7	0.0	2.1
	Big Sprgs. Tbl.	240	775	3.2	7.7	7.0	1.5	4.7	0.6
	Catlow Valley	270	353	1.3	1.5	1.8	1.2	1.6	0.8
	Fields Basin	50	39	0.8	0.0	0.7	0.7	0.9	0.0
	Sagehen Flat	240	554	2.3	0.0	0.0	3.2	0.0	2.6
Subtotals Hart Mtn.		900	1,870	2.1	2.6	2.6	2.1	1.8	1.2
Juniper	Chain Lakes	160	95	0.6	0.6	0.2	0.7	0.3	0.2
	Foster Flat	80	117	1.5	1.0	1.2	1.4	0.4	0.5
Subtotals Juniper		240	212	0.9	0.8	0.5	1.0	0.4	0.3

1966 AERIAL ANTELOPE INVENTORY (continued)

Unit by Area	Herd Range	Miles Traveled	Antelope Observed	Antelope per Mile 1966	1965	1964	1963	1962	1961
Steens	Alvord Desert	30	83	2.8	1.1	2.1	2.5	1.0	1.7
	Blitzen Valley	90	7	0.1	0.0	0.0	0.0	0.1	0.1
	Bridge Creek	40	17	0.4	0.6	0.8	1.0	0.8	1.4
	Red "S" Field	60	9	0.2	0.0	0.6	0.1	0.0	0.3
Subtotals Steens		220	116	0.5	0.3	0.6	0.6	0.3	0.9
AREA IV TOTALS		1,360	2,198	1.6	1.9	1.9	1.6	1.3	0.9
Beulah	Brogan	50	133	2.7	1.1	2.1	1.0	0.5	1.3
	Harper	75	165	2.2	1.3	1.5	2.3	3.5	1.7
Subtotals Beulah		125	298	2.4	1.2	1.8	1.6	2.1	1.5
Malheur	Harney Valley	50	54	1.1	1.8	0.6	1.5	0.3	0.2
	Coleman Mtn.	90	59	0.7	3.4	1.0	1.1	0.4	0.5
	Juntura	150	123	0.8	0.7	1.2	1.1	0.6	0.9
Subtotals Malheur		290	236	0.8	1.7	1.0	1.2	0.4	0.5
Owyhee	Saddle Mtn.	150	519	3.5	3.4	3.2	2.3	1.8	2.2
	Freezeout	50	55	1.1	0.4	0.6	0.4	0.3	0.1
	Mahogany	150	144	1.0	1.3	1.1	0.9	1.6	0.0
	Vale	25	38	1.5	-	-	-	-	-
	Sucker Creek	25	53	2.0	-	-	-	-	-
Subtotals Owyhee		400	809	2.0	2.1	1.5	1.4	1.2	0.7
AREA V TOTALS		815	1,343	1.6	1.9	1.5	1.3	1.0	0.8
Whitehorse	Bowden Hills	250	389	1.6	1.1	1.0	1.0	0.8	0.4
	Sheephead	50	72	1.4	-	0.0	0.3	0.5	-
	Whitehorse	75	157	2.1	0.0	0.6	0.6	0.4	-
	Antelope Flat	100	0	0.0	0.0	0.0	2.8	-	-
	Deer Flat	-	-	-	0.1	0.4	2.3	-	-
AREA VI TOTALS		475	618	1.3	0.6	0.5	1.3	0.7	0.4
GRAND TOTALS		4,000	6,010	1.5	1.6	1.4	1.6	1.3	1.1

Table 14

1966 ANTELOPE HERD COMPOSITION

County	Antelope Classified				Average Number Per 100 Does					
					1966		1965		1964	
	Bucks	Does	Fawns	Total	Bucks	Fawns	Bucks	Fawns	Bucks	Fawns
Crook-Deschutes	70	239	101	410	30	42	43	51	43	44
Harney	56	187	59	302	30	32	29	22	57	28
Lake	66	173	66	305	38	38	37	56	61	59
Malheur	106	430	210	746	25	49	19	41	40	58
TOTALS	298	1,029	436	1,763						
AVERAGES					31	40	31	39	48	51

Table 15

ANTELOPE HERD COMPOSITION

Year	Bucks	Does	Fawns	Total	Per 100 Does	
					Bucks	Fawns
1966	298	1,029	436	1,763	25	49
1965	269	879	343	1,491	31	39
1964	412	854	432	1,698	48	51
1963	355	887	581	1,823	40	66
1962	321	785	452	1,558	41	57
1961	214	770	347	1,331	28	45
1960	326	942	555	1,823	35	59
1959	393	806	361	1,560	50	45
1958	274	711	551	1,536	39	77
1957	203	608	493	1,304	33	81
1956	236	542	320	1,098	44	59
1955	194	455	268	917	43	59
1954	350	730	477	1,557	48	65
1953	417	950	589	1,956	44	62
1952	419	952	470	1,841	44	49
1951	334	694	417	1,445	48	60
1950	371	612	555	1,538	63	91

ROCKY MOUNTAIN GOAT

Six mountain goats were obtained from the Chopaka Mountain area of northern Washington and released on Chief Joseph Mountain in the Wallowa Mountains during the spring of 1950. One animal died shortly after release, leaving three adult males, one adult female, and one yearling female.

Periodic aerial flights and some ground observations indicated that the goats were reproducing well and extending their range. In the summer of 1964, 39 goats were observed in a day's flight.

The first hunting season was held August 28 through September 6, 1965. Five tags were issued, authorizing one adult goat. The five goat hunters were successful in bagging four male and one female goat.

BIGHORN SHEEP

Twenty head of bighorn sheep obtained from British Columbia in November 1954 were released in a holding pen at Hart Mountain and used as brood stock for stocking of other areas. The first hunting season was held in September 1965.

Six tags were issued specifying one ram with not less than 3/4 curl. Five hunters were able to bag a legal ram. The sixth hunter, handicapped by a previous heart attack, did not bag a sheep. Each hunter was accompanied by an employee of the Game Commission.

RANGE CONDITIONS

Bitterbrush leader growth averaged 5.9 inches in 1965 compared with 4.0 in 1964 and 4.2 in 1963. Utilization measurements indicated that an average of 14 percent of the available bitterbrush production had been consumed by November and that an additional 37 percent was consumed in the winter. The total use by both livestock and game averaged 51 percent of the year's production on winter ranges.

Table 16 presents a five-year comparison of bitterbrush utilization measurements.

Two hundred Parker condition and trend transects have been established to measure changes in plant composition and density. All ranges evaluated in 1965, except Starkey, indicate a decline of desirable vegetation and plant density (Table 17).

The reading schedule for Parker transects is shown in Table 18.

Table 16

BITTERBRUSH UTILIZATION

Units by Region	No. of Transects	Av. Twig Length	1966 Summer	1966 Winter	1966 Total	1965	1964	1963	1962
Deschutes	4	4.9	0	25	25	29	40	18	24
Grizzly	6	5.7	28	29	57	-	-	-	-
Klamath	11	4.8	34	36	70	70	70	58	68
Maury	6	5.1	40	30	70	90	77	68	79
Metolius	7	4.8	8	34	42	47	52	43	47
Ochoco	9	6.2	16	38	54	81	63	57	76
Paulina	26	5.1	4	31	35	50	32	47	49
Sprague	4	4.3	28	43	71	62	69	54	62
Wasco	21	3.6	12	30	42	43	53	36	42
CENTRAL	94	4.9	18	33	51	58	58	48	58
Baker	-	-	-	-	-	46	52	36	-
Heppner	7	5.3	19	40	59	74	64	61	71
Murderer's Cr.	5	9.9	0	55	55	74	85	55	54
Northside	6	9.5	0	30	30	40	70	30	74
Wheeler	7	4.7	24	32	56	56	55	59	55
NORTHEAST	25	7.4	11	39	50	58	65	48	62
Fort Rock	9	5.1	3	63	66	72	66	50	70
Interstate	5	4.6	29	34	63	64	64	38	70
Malheur	3	5.5	12	25	37	51	61	15	49
Silver Lake	8	6.3	3	55	58	70	69	50	68
Silvies	11	4.8	18	22	40	46	45	25	63
Warner	9	6.7	6	37	43	41	41	28	65
SOUTHEAST	45	5.5	12	39	51	57	57	34	64
TOTALS	163								
AVERAGES		5.9	14	37	51	58	61	43	62

Table 17

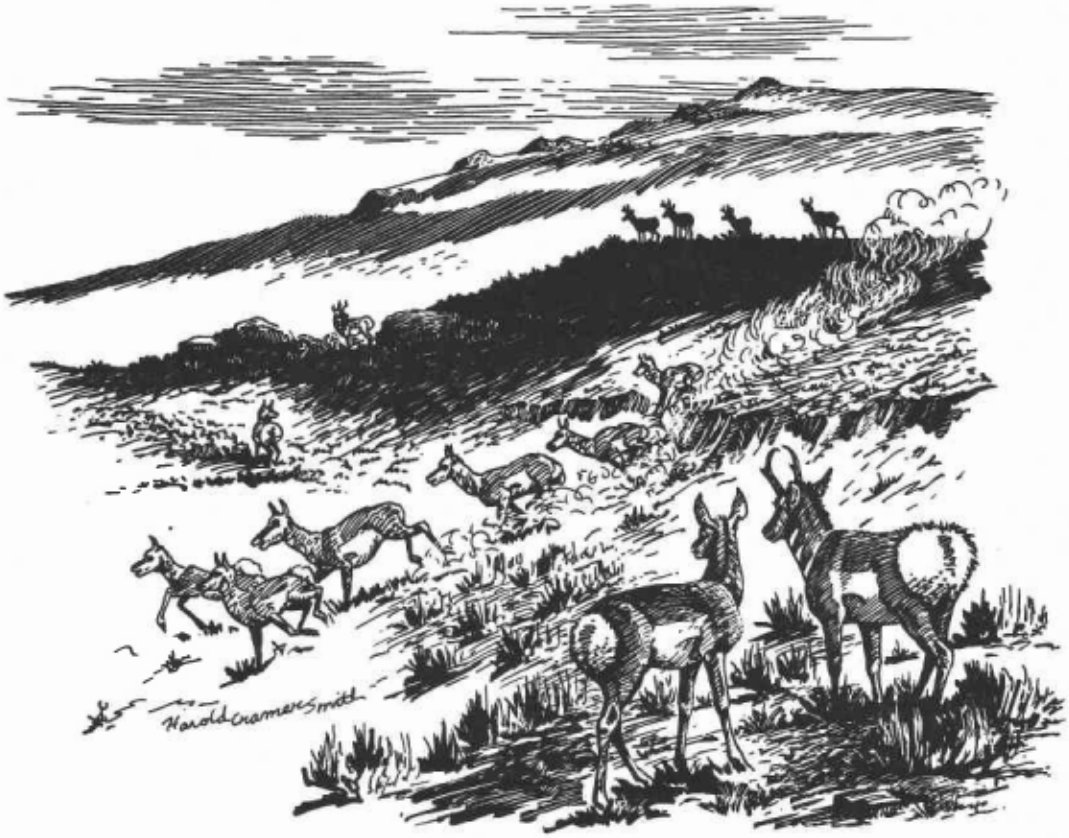
RANGE VEGETATIVE TRENDS

UNIT	HERD RANGE	AVERAGE VEGETATIVE COMPOSITION						AVERAGE VEGETATIVE DENSITY						AVERAGE LITTER		AVERAGE BARE SOIL	
		DESIRABLE		INTERMEDIATE		LEAST DESIRABLE		DESIRABLE		INTERMEDIATE		LEAST DESIRABLE					
		1960	1965	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965	1960	1965
MURDERER'S CREEK	MURDERER'S CREEK	10.8	10.7	85.2	85.1	3.9	4.2	2.2	3.8	9.2	11.2	0.6	1.2	45.7	26.1	19.6	34.7
	(4 Clusters)	-0.1		-0.1		+0.3		+1.6		+1.8		+0.6		-19.6		+15.1	
OWYHEE	MAHOGANY MTN.	44.4	42.0	37.4	38.3	18.1	16.1	12.5	17.6	11.1	12.7	6.0	8.4	28.2	26.1	31.8	20.2
	(3 Clusters)	-2.4		+0.9		-2.0		+5.1		+1.6		+2.4		-2.1		-11.6	
UKIAH	BIRCH CREEK	64.2	61.3	25.9	33.5	9.9	5.2	22.9	11.5	11.0	4.6	3.7	1.0	44.8	51.8	12.7	19.5
	(3 Clusters)	-2.9		+7.6		-4.7		-11.4		-6.4		-2.7		+7.0		+6.8	
STARKEY	GRANDE RONDE	31.6	38.1	62.3	55.8	6.1	6.1	7.8	8.7	2.6	7.4	1.8	1.0	31.6	32.8	39.8	36.3
	(3 Clusters)	+6.5		-6.5		0.0		+0.9		+4.8		-0.8		+1.2		-3.5	
INTERSTATE	CROOKED CREEK	7.2	7.2	65.7	67.9	27.1	28.6	4.0	4.0	10.2	8.1	9.2	10.7	32.0	47.9	34.9	21.9
		0.0		+2.2		+1.5		0.0		-2.1		+1.5		+15.9		-13.0	

TABLE 18

CONDITION AND TREND READING SCHEDULE

	1965		1966		1967		1968		1969	
REGION	HERD RANGE	NO.	HERD RANGE	NO.	HERD RANGE	NO.	HERD RANGE	NO.	HERD RANGE	NO.
CENTRAL	MCKAY-OCHOCO	2	N.FK. CROOKED R.	3	N. PAULINA	8FS	MAURY MTN.	3	METOLIUS	3
	WHITE RIVER	3	SWAN LAKE	3	HOLE-IN-GROUND	4FS	DEVIL'S GARDEN	2	TUMALO	2
					GEARHART MTN.	3	SPRAGUE RIVER	2	GOODLOW MTN.	5
NORTHEAST	BIRCH CREEK	3	LOOKOUT MTN.	3	M.FK. JOHN DAY	1	BURNT RIVER	4	KEATING	3
	GRANDE RONDE	3	MCKAY CREEK	3	MINAM	2	CHESNIMNUS	1	SNAKE RIVER	1
	KAHLER BASIN	2	MEACHAM CREEK	1	N. OCHOCO	3	HEPPNER	1		
	MURDERER'S CR.	4	MONUMENT	1	SOUTHSIDE	2	IZEE	4	N.FK. UKIAH	4
	WALLOWA MTN.	3	SLED SPRINGS	2	WALLA WALLA	4	N.FK. JOHN DAY	7	NORTHSIDE	8
	WENAHA	2	S. FK. JOHN DAY	3			UMATILLA	1	WATERMAN	3
SOUTHEAST	ALVORD	2	DEEP CREEK	4	CRANE MTN.	3	DREWSEY	3	FRENCHGLEN	3
	CROOKED CR.	3	HART MTN.	1	SILVIES RIVER	3	DRY MTN.	4	SILVER LAKE	3
	MAHOGANY MTN.	3	MALHEUR RIVER	4			FORT ROCK	3	WHITEHORSE	3


Harold Cramer Smith

BIG GAME DAMAGE

Damage complaints listed in Table 19 indicate a slight decline in number compared with 1964. A total of 1,368 deer and 65 elk complaints was received throughout the state.

Western Oregon again experienced a new high of 1,274 damage complaints. This is an increase of 48 complaints over 1964.

Control measures included issuance of repellents, consisting of blood meal and various liquids, to 948 complainants. Kill permits were issued in 231 instances, and hazing permits were issued to 38 persons.

Sixty-four deer-proof fences were completed during 1965. These fences totaled 5,065 rods and cost the Commission $12,579.00. Fencing contracts are shown by unit and region in Table 20. Fencing contracts are issued in areas where deer populations are desired, and afford complete protection to a crop. A total of $234,976 has been expended by the Commission on 860 fencing contracts since the program was started in 1949.

Haystacks are protected against big game use by the issuance of wooden panels. Panels were supplied for protection of 80 haystacks in 1965. Approximately 42,500 panels have been issued to protect 3,100 haystacks in eastern Oregon.

A summary of all previous years' emergency hunts is included in Table 21.

Additional complaints were received involving big game damage to conifer reproduction and grass. These are not included in Table 19.

Table 19

BIG GAME DAMAGE COMPLAINTS

Units by Region	Number of Complaints Deer	Number of Complaints Elk	Kill Permits	Haze Permits	Fence Contracts	Tree Cages	Haystacks Paneled	Repel-lents	Hazing by Employees	Other
Alsea	114		15	1	7	6		84		15
Clatsop	26	22	4		5			24	12	19
McKenzie	109		15	1	10	2		77		4
Nestucca	10	1						10		3
Polk	54		20		1	1		35		3
Santiam	130		38	4	8	1		79		7
Siuslaw	89		4	4	8			71		2
Trask	28		5					25		1
Willamette	127	1	42	3	1	2		96		2
Wilson	6	4	1					5	3	5
NORTHWEST	693	28	144	13	40	12		506	15	61
Applegate	46		12	4		1		28		1
Chetco	6			1				5		
Dixon	49		3	2	1			38		
Elkton	14	3	1	1				13		2
Evans Creek	23		2	3		2		15		1
Melrose	343		36	8	10	8		265		
Powers	23		3	2	1	1		12		3
Rogue	7	1	2	1				5		
Sixes	15		2		2			9		2
Tioga	18	5	3	1				15		5
SOUTHWEST	544	9	64	23	14	12		405		14
Deschutes										
Grizzly	2				1			1		
Hood River	21		6			1		19		
Maupin										
Metolius							4			
Ochoco	3									
Wasco	20		10	1	1	1		12	1	
Maury	4						2			
CENTRAL	50		16	1	2	2	6	32	1	

Table 19 (continued)

BIG GAME DAMAGE COMPLAINTS

Units by Region	Number of Complaints Deer	Number of Complaints Elk	Kill Permits	Haze Permits	Fence Contracts	Tree Cages	Haystacks Paneled	Repel-lents	Hazing by Employees	Other
Baker	8	6					24		3	3
Catherine Cr.	6		2	1	1		2	1		
Chesnimnus	1	1	1				1			
Columbia Basin										
Desolation										
Heppner	6	5			1		1	1	2	6
Imnaha	8				1		7			
Keating	2						5		1	
Lookout Mtn.										
Minam	9		2		1		7			
Murderer's Cr.	2						2			
Northside	7		1		3		4	1		
Sherman	2						1			1
Sled Springs	6	4					5		3	2
Starkey		1					2			
Ukiah										
Umatilla	1	5			2			1	3	
Walla Walla	1	5					2		5	
Wenaha		1							1	
Wheeler	10		1		3		1	1	1	3
Snake River	1						1			
NORTHEAST	70	28	7	1	12		65	5	19	15
Beulah										
Interstate	9						7			1
Owyhee										
Malheur	1						1			
Silver Lake										
Silvies	1						1			
SOUTHEAST	11						9			1
STATE TOTALS	1,368	65	231	38	68	26	80	948	35	91

Table 20

FENCES COMPLETED
May 1965 through April 1966

Units by Regions	Number of Fences	Rods Fenced	Money Expended
Alsea	7	397	$ 1,005.00
Clatsop	2	66	145.00
McKenzie	14	420	976.25
Polk	3	459	1,017.50
Santiam	5	888	2,032.50
Siuslaw	12	927	2,429.63
Nestucca	2	27	60.00
NORTHWEST	45	3,184	$ 7,665.88
Evans Creek	2	67	$ 184.25
Melrose	7	295	811.25
Powers	1	43	118.25
Sixes	2	265	728.75
Tioga	1	44	121.00
SOUTHWEST	13	714	$ 1,963.50
Grizzly	1	34	$ 85.00
Wasco	1	131	360.25
CENTRAL	2	165	$ 445.25
Heppner	2	945	$ 2,362.50
Wheeler	2	57	142.50
NORTHEAST	4	1,002	$ 2,505.00
STATE TOTALS	64	5,065	$12,579.63

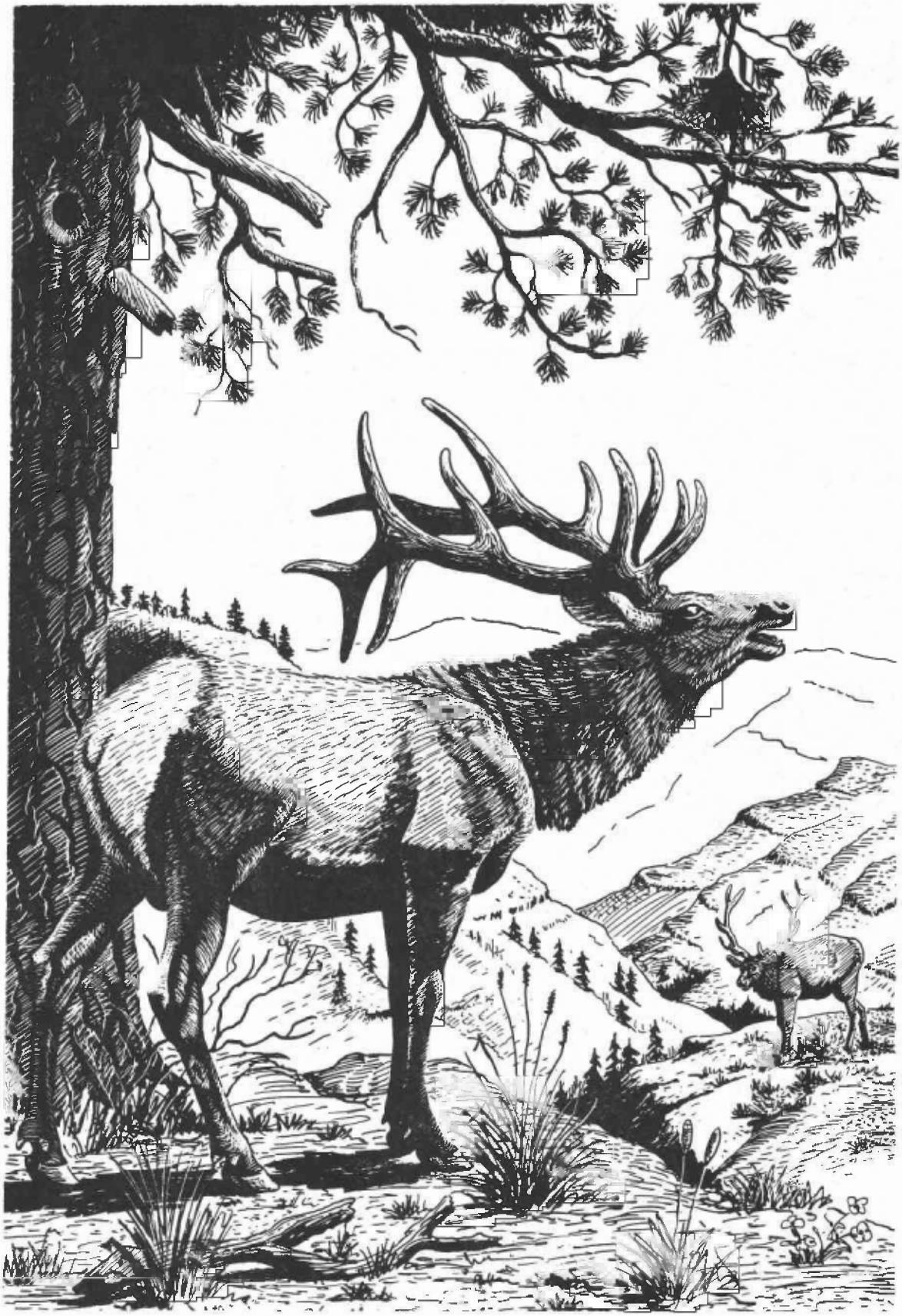


Table 21

SUMMARY OF EMERGENCY BIG GAME SEASONS

				Kill					
				Elk			Deer		
County	Area	Dates	Hunters	Bulls	Antlerless	Total	Bucks	Antlerless	Total
	Wren	1/24/59	46				-	-	16
		2/7/59	46				-	-	16
		2/14/59	13				-	-	6
		2/21/59	17				-	-	8
Benton			122				-	-	46
	Jewell	3/1/58	6			0			
	Swenson	3/1/58	6	-	-	2			
	Knappa	1/24/59	13	2	4	6			
		2/7/59	11			0			
	Jewell	2/8/59	20	4	11	15			
		2/14/59	18	3	11	14			
		2/21/59	10	2	-	2			
Clatsop			84	-	-	39			
	Sitkum	2/1/58	6		3	3			
		2/21/59	6			0			
Coos			12		3	3			
Douglas	Tyee	9/6-7-13-14/58	20	-	-	23			
	Nashville	1/31/59	19				-	-	8
		2/8/59	20				-	-	6
Lincoln			39				-	-	14

Table 21 (continued)

SUMMARY OF EMERGENCY BIG GAME SEASONS

				Kill					
				Elk			Deer		
County	Area	Dates	Hunters	Bulls	Antlerless	Total	Bucks	Antlerless	Total
	Shaw Mtn.	2/1/58	15	2	4	6			
	Elgin	8/9-17/58	25	-	-	9			
Union			40	-	-	15			
Wallowa	Day Ridge	8/16-17/58	23	1	7	8			
Grant	Kimberly	8/19-20, 26-27/61	45				10	8	18
Wallowa	Imnaha	8/19-20-21/61	73				32	23	55
TOTALS	14		458	-	-	88	-	-	133

HUNTING SEASONS

The 1965 big game seasons resulted in a reported harvest of 132,014 big game animals and provided Oregon hunters with 1,891,000 man-days of outdoor recreation. The reported deer harvest of 119,369 by 259,280 tag holders ranks eighth toward the highest kill on record. The reported elk harvest of 12,266 elk by 67,387 hunters is the third highest elk kill and the largest number of elk hunters.

General deer season dates extended from October 2 through October 24. Antlerless deer unit permits were valid October 16 through October 24. A total of 99,650 antlerless deer unit permits was issued compared with 95,700 in 1964, 97,350 in 1963, and 135,000 in 1962. Twelve controlled seasons with 5,825 tags were held in 1965 (Table 24). Table 23 includes results of all early and extended seasons. Table 22 presents results of all 1965 deer seasons. Table 25 summarizes all deer seasons since 1954.

The deer and elk harvests were computed through analysis of a random survey questionnaire mailed to 17,655 Oregon hunters.

The general elk season opened October 30, extended through November 14 for western Oregon hunters and through November 28 east of U. S. Highway 97. Information in Table 26 summarizes the 1965 general and permit elk seasons. Table 27 includes a summary of all previous elk seasons since 1934.

By the issuance of separate tags, hunters had to choose between hunting Roosevelt or Rocky Mountain elk for the second year. The dividing line used again this year was U. S. Highway 97. The objective of this regulation is to improve the distribution of hunters by relieving hunter concentrations that jeopardize both wildlife and recreational values. This division of elk hunting has not resolved all the hunter distribution problems, but the proportion of Roosevelt tag holders to total tag sales declined 6 percent from the 1964 ratio.

Antlerless elk unit permits were valid in eastern Oregon on November 13 and extended through the remainder of the season. Six additional special elk seasons were conducted with the first opening date September 4 and the last date January 31, 1966. A total of 3,414 antlerless elk was killed in northeastern Oregon and an additional 143 antlerless animals were taken in the either-sex areas of southeastern Oregon.

Hunter success averaged 20 percent in northeastern Oregon compared with 31 percent in 1964.

The questionnaire survey indicated that 9,610 archers killed 920 deer and 110 elk.

Antelope return cards from 612 reporting hunters showed a harvest of 369 antelope. Six antelope areas were open to hunting from August 14 through August 18. Area IV (Juniper, Hart Mountain, Steens) led with 106 antelope taken. Hunter success was highest in Area IV with 68 percent of the 157 reporting hunters killing an antelope. Table 28 presents the harvest by area. Table 29 includes a 16-year comparison of antelope hunting success.

Six sheep tag holders were allowed to hunt for California bighorn sheep in Oregon for the first hunt in over 40 years. The season was set for September 11 and 12 or 18 and 19. The area hunted was the west face of Hart Mountain in Lake County. A total of 1,915 persons applied for the 6 sheep tags and 5 of the 6 tag holders were successful in bagging a 3/4-curl ram.

The first mountain goat hunt ever held in Oregon opened August 28 and extended through September 6. The open area included all of the Eagle Cap Wilderness area of the Wallowa Mountains in Wallowa County. The bag limit was one adult goat. A total of 441 applications was received for the five authorized tags. All five tag holders killed a goat, including four males and one female goat.

The 1965 season illustrated the increasing public demand on big game resources. Elk hunters increased 7 percent and deer hunters by 2.5 percent.

The poorest hunting conditions experienced for many years prevailed during deer and elk seasons, adversely affecting the big game harvest. The total deer kill was 16 percent below that of the previous year and the elk harvest was 20 percent less.

Table 22

1965 DEER HARVEST

Units by Region	GENERAL SEASON Number of Unit Permits	Harvest Bucks	Harvest Antlerless	Harvest Total	Number of Hunters	Percent Hunter Success	Early & Extended Seasons	Con-trolled Seasons	Total Deer Taken	Hunter-Days	Deer Killed Per Sq. Mi.
Alsea	8,000	2,655	1,014	3,669	10,305	36	2,382		6,051	78,925	3.6
Clatsop	1,500	1,044	448	1,492	5,121	29		50	1,542	30,508	1.8
McKenzie	10,000	3,486	1,365	4,851	14,605	33	3,217		8,068	113,667	2.8
Nestucca	2,000	215	169	384	1,092	35			384	5,887	1.3
Polk	2,000	717	253	970	3,276	30	555		1,525	19,553	3.1
Santiam	6,000	2,408	1,060	3,468	14,062	25	2,573		6,041	98,796	2.0
Siuslaw	2,000	1,110	227	1,337	3,918	34	332		1,669	24,096	1.9
Trask	2,500	1,964	592	2,556	7,620	34	332	191	3,079	40,189	3.6
Willamette	7,000	731	182	913	3,986	23	499	34	1,446	23,537	2.1
Wilson	2,500	1,259	682	1,941	5,492	35			1,941	27,555	3.2
NORTHWEST	43,500	15,589	5,992	21,581	69,477	31	9,890	275	31,746	460,935	2.6
Applegate	500	711	143	854	2,355	36		37	891	15,571	0.8
Chetco	500	803	163	966	1,687	57			966	8,328	0.6
Dixon	1,500	1,546	690	2,236	4,485	50	124	41	2,401	29,436	1.1
Elkton	400	508	100	608	1,617	38		45	653	9,996	0.7
Evans Creek	600	574	107	681	1,793	38		62	743	10,184	1.1
Melrose	1,000	1,546	343	1,889	4,178	45		146	2,035	23,441	2.9
Powers	500	757	163	920	1,791	51		83	1,003	10,420	1.1
Rogue	1,000	2,140	293	2,433	8,467	29			2,433	46,110	2.3
Sixes	2,000	1,520	377	1,897	3,260	58			1,897	18,567	2.4
Tioga	500	639	133	772	2,305	33			772	11,504	0.9
SOUTHWEST	8,500	10,744	2,512	13,256	31,938	42	124	414	13,794	183,557	1.3
Deschutes	300	1,690	117	1,807	8,319	22			1,807	45,994	1.4
Fort Rock	2,500	1,259	735	1,994	5,278	38	534		2,528	31,097	1.4
Grizzly	1,000	1,097	240	1,337	3,486	38			1,337	15,915	1.8
Hood River	0	111		111	1,159	10			111	5,598	0.4
Keno	250	717	97	814	2,446	33			814	13,589	1.0
Klamath	1,200	3,112	560	3,672	7,525	49		226	3,898	38,950	3.9
Maupin	700	431	228	659	1,556	42	12		671	6,666	2.7

1965 DEER HARVEST
(continued)

Units by Region	GENERAL SEASON Number of Unit Permits	Harvest Bucks	Harvest Antlerless	Harvest Total	Number of Hunters	Percent Hunter Success	Early & Extended Seasons	Con-trolled Seasons	Total Deer Taken	Hunter-Days	Deer Killed Per Sq. Mi.
Maury	750	684	195	879	1,777	49			879	9,398	1.8
Metolius	0	626		626	2,363	26		114	740	11,404	1.2
Ochoco	1,500	3,172	766	3,938	12,548	31			3,938	55,954	2.8
Paulina	750	1,363	455	1,818	5,016	36	60		1,878	25,762	1.3
Sherman	700	1,064	370	1,434	2,731	53		59	1,493	12,150	1.5
Sprague	1,000	1,495	435	1,930	4,721	41	149		2,079	24,613	2.3
Wasco	2,000	1,591	817	2,408	6,523	37	63		2,471	31,248	3.1
CENTRAL	12,650	18,412	5,015	23,427	65,448	36	818	399	24,644	328,338	1.9
Baker	500	1,448	130	1,578	4,087	39	25		1,603	22,044	1.8
Catherine Cr.	1,000	1,076	429	1,505	2,481	61			1,505	13,266	5.0
Chesnimnus	1,000	717	474	1,191	1,787	67			1,191	7,524	2.0
Columbia Basin	500	208	19	227	574	40			227	2,273	0.8
Desolation	1,000	658	188	846	1,914	44			846	10,444	1.3
Heppner	3,000	2,858	1,177	4,035	7,757	52		429	4,464	34,396	3.3
Imnaha	1,000	1,278	266	1,544	2,370	65	71	22	1,637	12,892	4.1
Keating	800	1,298	324	1,622	2,657	61			1,622	12,073	2.7
Lookout Mtn.	500	750	155	905	1,823	50		105	1,010	7,779	2.9
Minam	500	620	32	652	960	68	400	200	1,252	7,052	1.7
Murderer's Cr.	2,500	1,519	826	2,345	4,396	53			2,345	22,007	2.3
Northside	2,500	1,827	1,020	2,847	5,520	52		496	3,343	30,550	4.2
Sled Springs	750	1,219	416	1,635	2,382	68			1,635	12,171	2.3
Snake River	1,000	816	195	1,011	1,425	71			1,011	7,003	1.3
Starkey	700	953	188	1,141	2,359	48			1,141	13,550	0.9
Ukiah	1,500	933	410	1,343	3,388	40			1,343	18,866	2.4
Umatilla	800	998	220	1,218	3,197	38			1,218	18,868	2.7
Walla Walla	400	223	169	392	825	48			392	4,174	2.0
Wenaha	500	332	143	475	881	53			475	4,788	1.2
Wheeler	3,000	3,001	1,021	4,022	7,487	54			4,022	30,892	4.0
NORTHEAST	23,450	22,732	7,802	30,534	58,270	52	496	1,252	32,282	292,612	2.4

1965 DEER HARVEST
(continued)

Units by Region	GENERAL SEASON Number of Unit Permits	Harvest Bucks	Harvest Antlerless	Harvest Total	Number of Hunters	Percent Hunter Success	Early & Extended Seasons	Con-trolled Seasons	Total Deer Taken	Hunter-Days	Deer Killed Per Sq. Mi.
Beulah	2,500	1,494	753	2,247	4,174	54			2,247	18,544	1.7
Hart Mountain	0	52		52	367	14			52	2,332	0.1
Interstate	3,000	2,683	1,035	3,718	7,812	48		57	3,775	42,315	2.2
Juniper	0	59		59	261	23			59	908	0.1
Malheur River	1,000	1,206	364	1,570	3,372	47			1,570	16,324	0.8
Owyhee	0	463		463	699	66			463	3,261	0.8
Silver Lake	3,000	2,475	1,025	3,500	7,674	46	570		4,070	37,191	5.1
Silvies	800	1,625	566	2,191	4,653	47			2,191	24,115	1.8
Steens Mountain	500	906	39	945	1,875	50			945	8,924	0.7
Wagontire	0	72		72	314	23			72	1,495	0.5
Warner	750	939	266	1,205	2,397	50			1,205	11,582	2.2
Whitehorse	0	254		254	549	46			254	2,986	0.2
SOUTHEAST	11,550	12,228	4,048	16,276	34,147	48	570	57	16,903	169,977	1.3
GRAND TOTALS	99,650	79,705	25,389	105,074	259,280	41	11,898	2,397	119,369	1,435,419	1.9

Total deer tags issued - 277,857

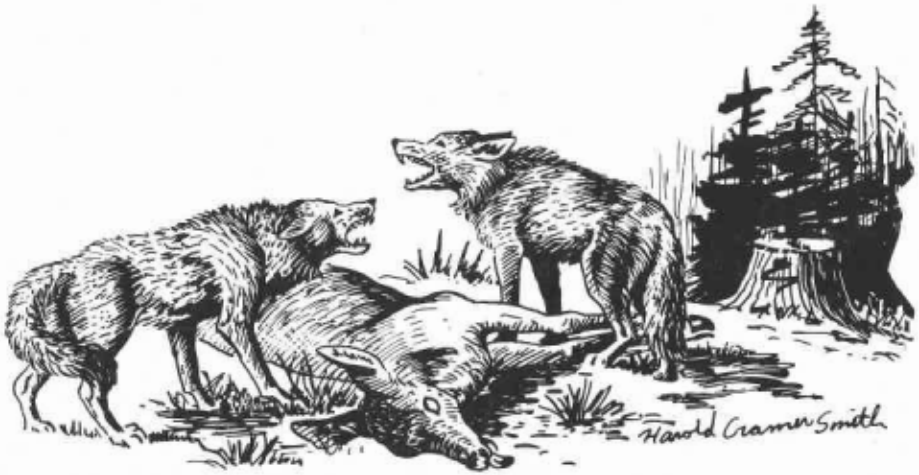


Table 23

1965 EARLY AND EXTENDED DEER SEASONS

Areas by Region	No. of Hunters	Harvest			Percent Success	Hunter Days
		Bucks	Antlerless	Total		
Chehalem Hills	4,666	843	768	1,611	35	14,763
Clackamas W.S.	193	74	50	124	64	620
Corvallis W.S.	1,327	198	74	272	20	3,651
Five Rivers	172	25	129	154	90	45
Harlan	299	35	198	233	78	804
High Cascades	2,569	496	-	496	19	11,204
McKenzie	4,923	1,462	779	2,241	46	15,728
Monmouth-Dallas	299	50	173	223	75	436
Northwest Agri.	6,700	1,561	1,760	3,321	50	19,652
Wald.-Mapleton	3,660	1,215	-	1,215	33	14,968
NORTHWEST	24,808	5,959	3,931	9,890	40	81,871
High Cascade	1,220	124	-	124	10	
SOUTHWEST	1,220	124	-	124	10	
Sprague River	214	-	149	149	70	414
Ward Creek	43	-	12	12	28	23
White River	144	-	63	63	38	123
CENTRAL	401	-	224	224	56	560
Elkhorn	128	25	-	25	20	345
Wallowa Pack	814	471	-	471	58	2,548
NORTHEAST	942	496	-	496	53	2,893
Cabin Lake	85	-	60	60	71	123
Fort Rock	606	-	534	534	88	1,070
Silver Lake	621	-	570	570	92	1,125
SOUTHEAST	1,312	-	1,164	1,164	89	2,318
TOTALS	28,683	6,579	5,319	11,898	41	87,642

Table 24

1965 CONTROLLED DEER SEASONS

Areas by Region	Available Tags	Harvest			Percent Success
		Bucks	Antlerless	Total	
Eola Hills	800	17	17	34	4
Jewell	300	15	35	50	17
Lower Trask	500	71	120	191	38
NORTHWEST	1,600	103	172	275	17
Doug.-Josephine	1,000	251	163	414	41
SOUTHWEST	1,000	251	163	414	41
Antelope Creek	125	-	59	59	47
Bly	300	-	171	171	6
Bryant Mtn.	150	-	112	112	75
Metolius	200	-	114	114	57
CENTRAL	775	-	456	456	24
Durkee	200	-	105	105	53
N. Side John Day	1,000	-	496	496	50
Ritter	750	-	429	429	57
Wallowa Pack	500	151	71	222	44
NORTHEAST	2,450	151	1,101	1,252	51
TOTALS	5,825	505	1,892	2,397	41

Table 25

SUMMARY TOTAL DEER HARVEST

1952 - 1965

				MULE DEER						BLACK-TAILED DEER					
Year	Deer Tags Issued	Total Deer Harvested	Percent Hunter Success	*Hunters	Number Harvested	Percent Hunter Success	Percent of Total	Antlerless Harvest	Percent Antlerless	*Hunters	Number Harvested	Percent Hunter Success	Percent of Total	Antlerless Harvest	Percent Antlerless
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	145,823	59	138,856	88,261	64	61	23,686	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	163,989	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	271,339	143,023	53	148,215	84,665	57	59	19,931	23	110,555	58,358	53	41	18,807	32
1965	277,857	119,369	43	143,618	71,637	50	60	19,242	27	108,281	47,732	44	40	13,348	27

*General season hunters only.
**1960-64 estimates of hunting pressure revised.

Table 26

1965 ELK SEASONS

Units by Region	Number of Hunters	Harvest			Percent	
		Bulls	Antlerless	Total	Hunter Success	Spike Bulls
Alsea	641	82	-	82	13	64
Clatsop	8,378	1,042	287	1,329	16	67
McKenzie	823	101	-	101	12	45
Nestucca	161	9	-	9	6	75
Santiam	76	2	-	2	3	0
Siuslaw	42	7	-	7	17	33
Trask	396	55	-	55	14	87
Willamette	52	7	-	7	13	33
Wilson	2,462	310	103	413	17	76
NORTHWEST	13,031	1,615	390	2,005	15	50
Dixon	399	42	-	42	11	33
Elkton	597	107	-	107	18	74
Melrose	758	52	-	52	7	59
Powers	356	42	-	42	12	78
Rogue	177	7	-	7	4	66
Sixes	33	4	-	4	12	50
Tioga	3,931	391	216	607	15	67
SOUTHWEST	6,251	645	216	861	14	61
Deschutes	87	11	-	11	13	0
Grizzly	57	2	4	6	10	100
Keno	74	5	-	5	7	100
Maury	15	-	8	8	53	-
Ochoco	595	24	25	49	8	10
Wasco	293	22	-	22	7	33
CENTRAL	1,121	64	37	101	9	60

1965 ELK SEASONS (continued)

Units by Region	Number of Hunters	Harvest			Percent	
		Bulls	Antlerless	Total	Hunter Success	Spike Bulls
Baker	2,438	277	54	331	14	39
Catherine Creek	911	108	116	224	25	47
Chesnimnus	3,106	456	253	709	23	67
Desolation	3,954	403	156	559	14	55
Heppner	2,399	205	117	322	13	60
Imnaha	1,064	202	129	331	31	64
Keating	486	69	47	116	24	47
Lookout Mountain	102	16	30	46	45	28
Minam	1,792	349	201	550	31	39
Murderer's Creek	577	60	45	105	18	35
Northside	1,334	66	141	207	15	28
Sled Springs	3,955	522	487	1,009	25	74
Snake River	1,024	295	66	361	35	48
Starkey	6,391	560	361	921	14	66
Ukiah	4,466	385	230	615	14	59
Umatilla	4,686	675	245	920	20	71
Walla Walla	2,036	264	305	569	28	68
Wenaha	4,220	681	399	1,080	26	72
Wheeler	266	14	32	46	17	17
NORTHEAST	45,207	5,607	3,414	9,021	20	52
Beulah	1,000	87	114	201	20	32
Malheur River	550	37	23	60	11	25
Silvies	227	11	6	17	7	0
SOUTHEAST	1,777	135	143	278	16	20
GRAND TOTALS	67,387	8,066	4,200	12,266	18	61

Table 27

SUMMARY OF ALL ELK SEASONS

Year	Tags Issued	Rocky Mountain Elk Harvest			Roosevelt Elk Harvest			Grand Total	Percent Success
		Bulls	Antlerless	Total	Bulls	Antlerless	Total		
1934	3,140	752		752				752	24
1935	2,743	692		692				692	25
1936	2,947	547		547				547	19
1937	3,064	634		634				634	21
1938	3,867	734		734	294		294	1,028	27
1939	3,878	842	379	1,221	227		227	1,488	37
1940	6,152	1,152	1,179	2,331	198		198	2,529	41
1941	9,203	1,169	2,388	3,557	184		184	3,741	41
1942	9,753	1,296	1,067	2,363				2,363	24
1943	13,471	1,375	882	2,257	696		696	2,953	22
1944	10,513	1,204	351	1,555	439		439	1,994	19
1945	12,625	2,176	67	2,243	222		222	2,465	19
1946	16,712	2,055	1,619	3,674	256		256	3,930	24
1947	16,689	1,519	243	1,762	356		356	2,118	13
1948	22,536	2,454	2,548	5,002	365	33	398	5,400	24
1949	28,110	2,614	6,071	8,685	449		449	9,134	32
1950	24,741	2,210	1,234	3,444	947	1,000	1,947	5,391	22
1951	28,772	2,502	1,361	3,863	620		620	4,483	16
1952	25,974	2,036	823	2,859	574		574	3,433	13
1953	27,085	2,820	531	3,351	742	52	794	4,145	15
1954	27,858	2,967	734	3,701	851	862	1,713	5,414	19
1955	29,309	3,361	1,749	5,110	867	106	973	6,083	21
1956	34,885	3,652	2,068	5,720	1,104	264	1,368	7,088	20
1957	37,995	4,698	1,066	5,764	1,669	69	1,738	7,502	20
1958	42,448	3,658	1,276	4,934	1,746	273	2,019	6,953	16
1959	44,217	5,307	1,524	6,831	1,920	224	2,144	8,975	20
1960	48,992	6,434	1,898	8,334	2,065	466	2,531	10,865	22
1961	51,349	7,098	1,863	8,961	2,609	521	3,130	12,091	24
1962	52,983	6,460	1,925	8,385	1,538	253	1,791	10,176	19
1963	54,724	6,959	3,606	10,565	3,123	0	3,123	13,688	24
1964	62,898	7,576	4,879	12,455	4,270	432	4,702	17,157	27
1965	67,387	5,766	3,582	9,348	2,300	618	2,918	12,266	18

Table 28

1965 ANTELOPE SEASON
(91% return)

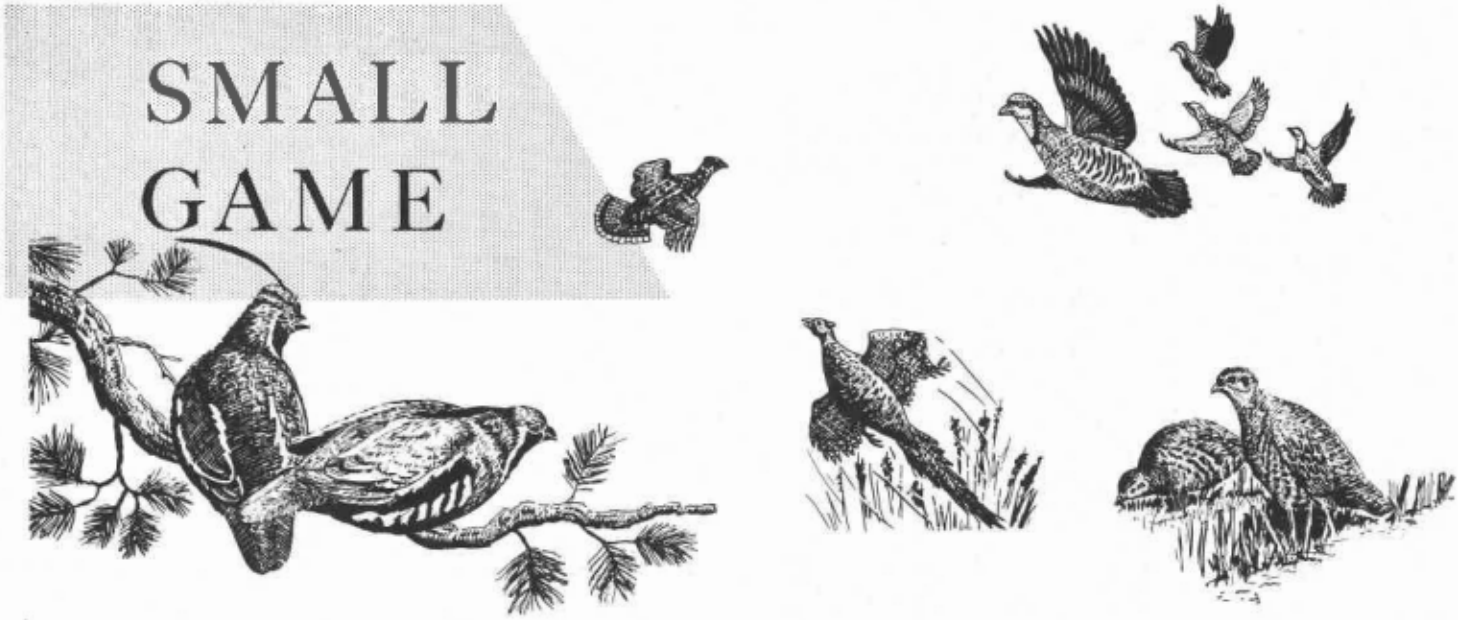
Area	Units	Tags Issued	Reporting Hunters	Harvest	Percent Successful Hunters
I	Ochoco, Maury, Silvies, Murderer's Creek	100	84	42	50
II	Paulina, Wagontire, Fort Rock, Silver Lake	100	93	48	52
III	Warner	100	90	51	57
IV	Juniper, Hart Mountain, Steens	175	157	106	68
V	Beulah, Malheur River, Owyhee	100	90	57	63
VI	Whitehorse	100	98	65	66
TOTALS		675	612	369	60

Table 29

ANTELOPE HUNTING SEASONS
1950 - 1965

Year	Number of Hunters	Buck Kill	Per Cent Success
1965	675	369	60
1964	597	378	63
1963	578	333	58
1962	516	277	54
1961	814	418	51
1960	845	459	54
1959	812	451	55
1958	554	314	57
1957	543	294	54
1956	560	318	57
1955	570	358	63
1954	589	334	57
1953	380	181	48
1952	1,076	448	42
1951	1,133	600	53
1950	1,422	679	47

SMALL GAME



PHEASANTS

An average of 22.7 pheasants per 100 acres was recorded on the spring inventory which sampled 14,351 acres on 209 quadrats. The 1966 state-wide average was 12 percent below 1965 and 16 percent below the average for the past four years. Western Oregon recorded the most substantial decline with a drop of 50 percent from the previous year. A 2 percent increase in the spring breeding population occurred in eastern Oregon. The state-wide ratio of cocks per 100 hens increased 7 percent over 1965. Increases were 26 percent in western Oregon and 19 percent in eastern Oregon. Tables 1 and 2 summarize the quadrat data.

Numbers of pheasants wintering on the E. E. Wilson Game Management Area declined 35 percent from 1965. Fewer birds were present than at any time since the inventory commenced in 1953. Comparative data is presented in Table 3.

Crowing counts were made on 52 sample routes, each measuring 20 miles in length. The index of roosters heard per mile declined 6 percent in western Oregon and 9 percent in eastern Oregon. A four-year comparison is provided in Table 4.

Production was measured during the first of August which was two weeks later than in 1965. As a result, the broods were more easily observed due to the advanced stage of harvest.

Production, as shown in Table 5, exceeded that of the previous year. The state-wide density on 3,907 miles sampled was 36 percent above 1965. Western Oregon populations declined, particularly in Lane County and the Rogue Valley, while most of eastern Oregon showed an increase. Approximately 85 percent more pheasants were tallied in Umatilla County, 75 percent more in Baker County, and 25 percent more in Malheur County.

Individual broods averaged 5 percent fewer chicks than in 1965 but this was offset by a 3 percent increase in the proportion of hens with broods. The average number of chicks per hen was comparable both years. Approximately 90 percent of the broods were a month or more old the first of August compared with 85 percent in 1965.

Table 6 summarizes the number of damage complaints received in Malheur County during the past nine years. Approximately 42 percent more complaints were received during the spring of 1966 compared with the previous year, indicating a good carry-over of birds.

VALLEY QUAIL

Quadrat sampling revealed a 13 percent increase over 1965 in the breeding population and a 3 percent decline from the average for the past four years. A 15 percent decline in western Oregon was offset by a 20 percent increase in eastern Oregon. Substantial increases were apparent in Wasco, Umatilla, and Morrow Counties while the most obvious decline occurred in Malheur County.

Production surveys on 4,219 miles sampled in early August revealed a 33 percent increase in total birds over 1965. The 1966 population compared with those of 1963 and 1964, as indicated in Table 7. Low breeding populations in western Oregon were offset by good production, and more valley quail were counted in all districts except the Umpqua Valley and extreme north end of the Willamette Valley. Increases were fairly uniform in eastern Oregon, being most pronounced in Wasco, Crook, Morrow, Baker, and Lake Counties.

The number of chicks per brood declined 14 percent from 1965 but more broods were produced as indicated by the ratio of chicks per adult. The average of 3.8 was the highest recorded in the past five years, revealing excellent production. Earlier nesting occurred as 85 percent of the broods were at least a month old the first of August compared with 72 percent in 1965.

BOBWHITE QUAIL

Only 14 bobwhite quail were counted on the quadrat samples compared with 47 in 1965. Bobwhites were seen only in Umatilla and Malheur Counties, none being observed in western Oregon.

Three adult birds were tallied on the 700 miles sampled during the production survey. Even though it is recognized that bobwhites are difficult to see under the best of conditions, the current population appears to be at a very low ebb.

MOUNTAIN QUAIL

Tables 12 and 13 summarize the numbers of mountain quail observed on the big game sample routes. Few observations are made so the data cannot be relied upon to measure breeding population trends. No birds were seen on the northwestern Oregon samples and numbers showed a 28 percent decline from 1965 in the Northwest Region, a 3 percent decline in the Southwest Region, and a 66 percent decline in the Central Region.

Production data on 2,404 miles sampled is presented in Table 8. The August survey revealed a population similar to 1965 in western Oregon and approximately a third less birds east of the Cascades. Numbers of chicks per brood averaged the same both years while the ratio of chicks per adult declined 5 percent. Mountain quail are late nesters, as indicated by the fact that half the broods observed were less than a month old the first of August.

CHUKAR PARTRIDGE

Fewer chukars were observed on the big game samples as shown in Table 9. The decline averaged 25 percent and occurred in all areas except Morrow and Baker Counties. Wintering populations were the lowest recorded in the past four years.

Approximately 64 percent more chukars were observed on the 2,105 miles sampled during the production survey compared with 1965. Nearly half the total was counted in Malheur County where dry conditions concentrated the birds around remaining sources of water. Elsewhere, the changes were less marked. Some increase was apparent along the middle reaches of the Snake River, particularly in Baker County, and on the lower Deschutes and upper John Day drainages. Chukar populations remained low along the lower John Day and in Lake and Harney Counties.

The average number of chicks per brood compared with 1965, while the ratio of chicks per adult declined in all areas except Malheur

County. Approximately 90 percent of the broods were at least a month old the first of August compared with 87 percent in 1965.

Production data is summarized in Table 10.

HUNGARIAN PARTRIDGE

Numbers of Hungarian partridge observed on the spring quadrat samples declined 74 percent from 1965 with most of the drop occurring in Morrow and Union Counties. Table 9 summarizes observations on the big game routes where 8 percent fewer birds were tallied than in 1965.

Production data is presented in Table 11. Some improvement over 1965 was noted with 61 percent more birds being counted on the 2,766 miles sampled. Most of the gain occurred in Baker, Union, and Wallowa Counties. Average numbers of chicks per brood declined 10 percent but this was offset in part by a slight increase in the ratio of young to adults.

FOREST GROUSE

Blue and ruffed grouse numbers seen on big game samples are summarized in Tables 12 and 13. A 53 percent decrease from last year was recorded in the western Oregon blue grouse breeding populations. The south coastal area accounted for most of the decline. More ruffed grouse were seen along the north coast, with few being observed elsewhere. In eastern Oregon, the Wallowa County blue grouse population increased substantially but there was little change in ruffed grouse numbers. Fewer birds were heard on the spring hooting and drumming counts than at any time in the past four years, as revealed in Table 14.

Table 15 presents the results of the blue grouse production inventory. Approximately 83 percent more birds were counted than in 1965. Fewer birds were observed in the mid-Willamette Valley foothills and along the south coast but, elsewhere, an increase was apparent. The north coast, Umpqua, and Wallowa districts recorded the most substantial gains. Numbers of chicks per brood declined 20 percent from 1965 but all hens had broods, which offset the low average. The ratio of chicks per adult increased 16 percent state-wide and showed no change in Wallowa County which is the most productive area in the state.

Ruffed grouse production also improved over 1965 as indicated in Table 16. Over twice as many birds were counted, with the majority being seen in Tillamook, Clatsop, Douglas, and Wallowa Counties. The average number of chicks per brood increased slightly while the ratio of chicks per adult gained 17 percent over 1965.

SAGE GROUSE

The 1966 tally of male sage grouse on 21 traditional strutting grounds is presented in Table 17. Total numbers increased 4 percent above 1965 and declined 2 percent below the average for the past eight years.

Production data based on 772 miles sampled is summarized in Table 18. Although more grouse were observed than in 1965, approximately 68 percent of the total was counted in Malheur County where limited water and grass growth made it easier to see birds. Much of the increase in other areas also can be attributed to better counting conditions. The average number of chicks per brood declined 15 percent while the ratio of chicks per adult dropped 11 percent, indicating poor production.

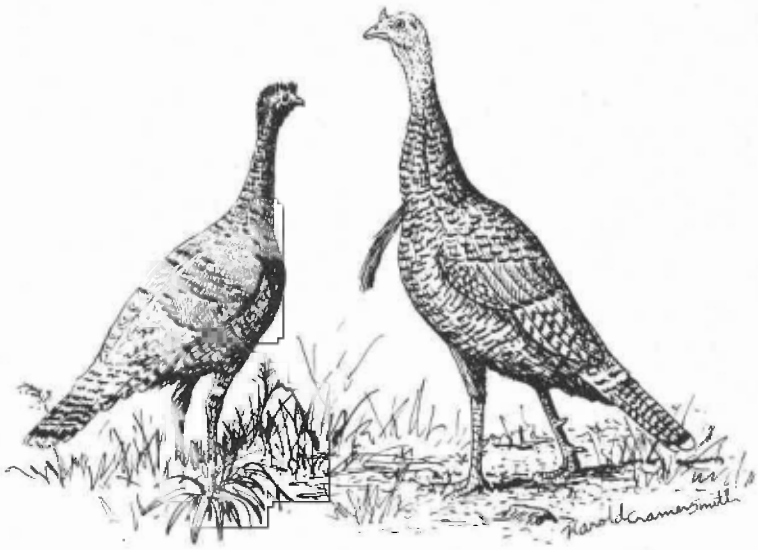
TURKEYS

Little information is available on turkeys since the birds are difficult to observe at any season of the year. No inventory technique has been developed to date for measuring population changes.

Observations on the east slopes of Mt. Hood indicate continued expansion in range and buildup in numbers since the 1961 releases. Weather conditions during the past winter favored survival of turkeys and no losses were noted.

Reports of turkeys observed continue to be received from the vicinity of release sites elsewhere in eastern Oregon. Nowhere are the birds as well established as east of Mt. Hood, however.

Trapping attempts continued during the winter but moderate weather discouraged the use of bait for any period of time. Only five birds were trapped during the one successful attempt. The following table summarizes trapping and transplanting to date.



TURKEY TRAPPING AND TRANSPLANTING

Date	Trapping Location	Classification	Release Area
1/4/63	Rock Cr. Reservoir	3 toms - 5 hens	Eden Bench, Wallowa County
12/27/63	Friend	7 toms - 5 hens	John Young Mdws. Grant County
1/31/64	Driver Ranch	3 toms - 11 hens	Pokegama, Klamath County
2/1/65	Happy Ridge	7 toms - 2 hens	Bridge Cr. Flats, Umatilla County
1/12/66	Pine Hollow	2 toms - 3 hens	Rhea Creek, Morrow County

SILVER GRAY SQUIRRELS

Field observations indicate a continued buildup of silver gray squirrels in Wasco and Hood River Counties. More animals also were apparent in Douglas County.

Records have been maintained on the number of squirrels seen in Jackson and Josephine Counties while conducting regular field work as well as animals observed on big game sample routes. The following tables indicate a slight reduction from 1965 but a substantially higher population than present during several previous years.

RANDOM GRAY SQUIRREL TALLY
Jackson and Josephine Counties

Year	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956
No. Seen	70	84	36	35	36	36	68	69	67	58	74

GRAY SQUIRREL TRENDS ON BIG GAME SAMPLES
Jackson and Josephine Counties

Miles Traveled	Squirrels Seen	Squirrels per Mile					
		1966	1965	1964	1963	1962	1961
104	19	.18	.27	.05	.03	.03	.04

MOURNING DOVES

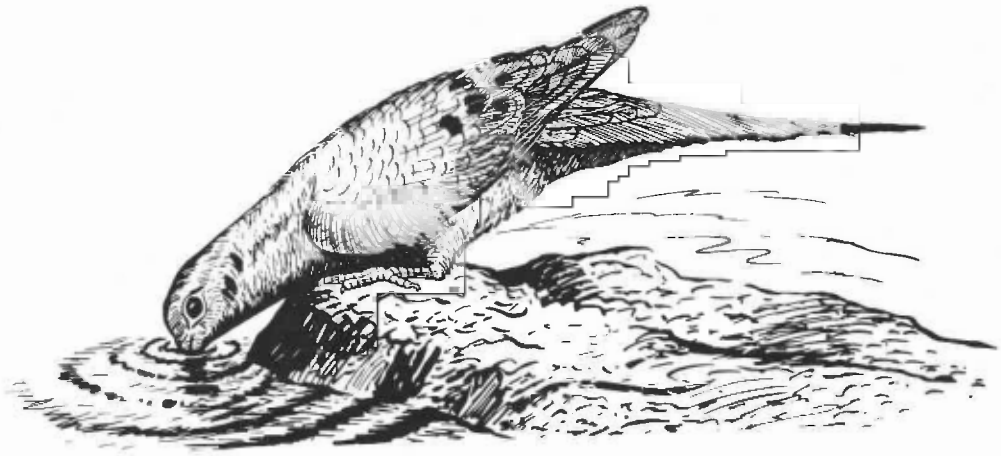
August roadside counts are summarized in Table 19. The average number of birds observed per mile in 1966 was almost equal to the 1965 figure but showed a 19 percent decline from the average for the past four years. Since weather conditions influence migrations, mid-August dove populations often differ from numbers present at the start of the season.

Numbers of doves wintering in the Willamette Valley declined 84 percent from 1965 based on the upland game quadrat survey. The 1966 average per 100 acres of habitat was the lowest recorded since 1960. More doves were observed on the Rogue River Valley quadrats, with the increase over 1965 averaging 30 percent. Table 20 summarizes quadrat data for the past eight years.

The annual call count survey was conducted between May 20 and June 10 in conjunction with the nationwide effort. Routes were established on a random basis in 1964 so data accumulated since that date cannot be compared with previous years. The average number of doves heard per mile in 1966 increased 38 percent over the 1965 figure, while the number observed increased 54 percent. Information on the call count survey is presented in Table 21.

BAND-TAILED PIGEONS

The preseason inventory at mineral springs and tideflat concentration areas is presented in Table 22. Fewer pigeons were counted at six locations than in 1965 while more were observed at four sites. Differing weather conditions make direct comparisons between years difficult.



HUNTING SEASONS

Random survey sampling by questionnaire was conducted following the 1965 hunting seasons. A total of 14,827 questionnaires was returned, representing 86 percent of those mailed. Projection of the results indicated that 89,842 of the 332,772 licensees hunted upland game. An estimated 838,506 birds were killed and 646,146 days of recreation were provided while hunting a total of seven species. Table 23 presents 1965 season results while Table 24 compares data from 1951 to date.

Bag checks during the opening weekend of the respective seasons are summarized in Tables 25 through 31.

The 1965 pheasant season extended from October 23 through November 28 with a bag limit of 3 cocks daily and 12 in possession in eastern Oregon and 2 daily and 8 in possession in western Oregon and Klamath County. A hen was permitted in the daily bag or possession limit in Malheur County during the last nine days of the season. An estimated 75,373 hunters bagged 254,575 pheasants during 326,276 days spent afield. Bag checks indicated 74 percent of the birds killed were young compared with 75 percent in 1964.

Juveniles were permitted to hunt pheasants on the E. E. Wilson Game Management Area a total of four days while accompanying adults were allowed to participate with the juveniles an additional four days during the 1965 season. A daily limit of 75 participants was enforced. The 440 hunters bagged 115 pheasants; an average of 0.3 birds apiece which was the lowest success recorded on the area to date.

Valley and mountain quail seasons ran concurrently with the pheasant season in western Oregon and extended through January 6 in eastern Oregon. The daily bag and possession limits were 10 and 20, respectively. Based on the questionnaire survey, 26,383 hunters bagged 168,274 birds, most of which were valley quail. Total recreation amounted to 112,506 days. Bag checks indicated good hatching success since 83 percent of the birds were juveniles compared with 73 percent in 1964.

Chukar hunting was permitted over the Labor Day weekend and from October 2 through January 6. Bag and possession limits were 3 and 6, respectively, over Labor Day and 6 and 12 during the regular season. An estimated 19,653 hunters reported 130,132 chukars bagged and 68,887 days spent afield. Nesting success improved over 1964 since bag checks indicated 72 percent of the kill to be juveniles compared with only 51 percent the previous year.

Hungarian partridge were hunted concurrently with chukars under

aggregate bag and possession limits. Participation was limited as the questionnaire sample revealed only 6,021 hunters, 17,288 birds killed, and 22,555 days spent hunting.

No seasons were authorized on forest or sage grouse in 1965.

The mourning dove season extended through the month of September with a daily bag of 12 and a possession limit of 24 allowed. Hunting was fair during the first week prior to the time the birds migrated southward. An estimated 16,205 hunters bagged 163,064 doves and spent 65,977 days hunting. Bag checks revealed 56 percent of the kill to be juveniles compared with 57 percent in 1964.

Pigeon hunting was permitted during the month of September with most of the birds being bagged during the early part of the season. The questionnaire survey indicated a harvest of 105,173 birds by 12,597 hunters, which was slightly better than 1964. Juveniles made up only one-fourth of the bag, emphasizing the low productivity of the species.

Oregon's first turkey season was held in 1965 with 300 tags authorized and 290 issued for the period from November 20 through November 28. Unsuccessful tag holders were permitted to hunt from April 30 through May 8. The bag limit during the fall season was one turkey while toms, only, were legal during the spring period. A total of 45 kills was reported by the 120 hunters who submitted return cards. Of the 45 birds reported bagged, 41 were taken during the fall hunt. The kill data is conservative since only 41 percent of the tag holders reported.

Trends in land posting are recorded in Table 32. Less than one-third of the farmland ownerships located along the 718 miles of sample route were posted against hunting during the 1965 season.

GAME FARM OPERATIONS

Game bird production is summarized in Table 33.

Pheasants are the major species reared for release. The 1965 production schedule was expanded to 20,000 birds in order to compensate for closure of the Hermiston Game Farm in 1964. All hatches were sexed and the cocks only were retained for rearing. The sexing technique proved to be 93 percent accurate. Hatching success was the lowest recorded to date as the result of two poor hatches probably caused by the low over-flight of a jet aircraft. All other hatches compared with past years.

A limited number of chukars were raised for release on the Ladd Marsh Game Management Area. The species can be raised successfully in western Oregon as indicated by the excellent hatching and rearing success achieved.

A small breeding stock of Hungarian partridge is being maintained. Hatching success averaged 37 percent compared with 44 percent in 1964. Survival of the hatched chicks was 82 percent, substantially better than the 70 percent experienced the previous year.

Few bamboo partridge were raised due to poor egg production and fertility. Only 30 percent of the eggs hatched while 43 percent of the hatched birds were raised. While rearing success showed some improvement over 1964 the outlook is not optimistic.

Fertility of Kalij pheasant eggs remains low but some improvement has occurred in the number raised to maturity.

Pheasant liberations are recorded in Table 34. Releases during 1965 totaled 11,273 birds in western Oregon and 9,856 in eastern Oregon. Of the total, 2,920 were liberated as adults in the spring, 6,532 as young during the summer, and 11,677 as adult cocks during the hunting season. Holding pens designed to accommodate 2,500 cocks were operated on the Denman, Klamath, Summer Lake, and Ladd Marsh Management Areas.

Miscellaneous releases included 151 Hungarian partridge liberated in Klamath County, 500 chukars distributed on the Ladd Marsh Management Area, and 28 chukars released in Lake County.

Table 1

UPLAND GAME POPULATION TRENDS

REGION	HABITAT AREA	PHEASANTS PER 100 ACRES 1966	1965	1964	1963	1966 COCKS PER 100 HENS	VALLEY QUAIL PER 100 ACRES 1966	1965	1964	1963	BOBWHITE QUAIL PER 100 ACRES 1966	1965	1964	1963	HUNGARIAN PARTRIDGE PER 100 ACRES 1966	1965	1964	1963
NORTHWEST	NO. WILLAMETTE	11.5	22.8	19.6	19.4	48	7.0	7.1	11.3	14.4	-	1.9	1.8	1.5	-	-	-	-
	SO. WILLAMETTE	8.5	30.0	36.8	52,7	68	2.8	3.4	2.5	5.9	-	-	-	-	-	-	-	-
SOUTHWEST	ROGUE-UMPQUA	11.3	14.7	17.3	16.5	48	23.4	28.2	16.9	29.9	-	-	-	-	-	-	-	-
WESTERN OREGON		10.3	23.1	25.3	30.5	54	9.7	11.5	9.7	16.0	-	0.6	0.6	0.5	-	-	-	-
CENTRAL	COLUMBIA	17.8	21.8	35.4	22.5	37	27.0	16.1	41.0	23.0	-	-	-	-	0.4	0.1	0.4	0.3
	UPPER DESCHUTES	9.1	9.7	4.8	3.5	24	14.3	13.0	6.5	3.2	-	-	-	-	0.1	0.1	-	-
	KLAMATH	-	8.3	7.3	24.1	-	-	-	-	2.4	-	-	-	-	-	-	-	-
NORTHEAST	BLUE MTN. VALLEY	15.6	16.6	18.6	16.7	27	7.8	11.1	20.0	7.4	-	-	-	-	0.2	1.0	0.2	0.2
	UMATILLA-MORROW	52.0	49.6	54.8	52.8	27	51.2	30.9	38.5	42.7	0.3	-	-	-	0.2	1.5	1.4	0.5
SOUTHEAST	GREAT BASIN	9.7	8.7	14.8	7.4	28.	19.3	16.4	23.9	31.4	-	-	-	-	-	-	-	-
	MALHEUR	69.1	69.8	76.0	59.0	18	22.5	42.7	44.4	17.2	0.7	1.4	1.2	1.1	-	0.5	1.2	0.3
EASTERN OREGON		27.9	27.3	33.2	28.5	25	23.0	19.0	28.6	20.0	0.1	0.2	0.1	0.1	0.2	0.6	0.6	0.2
STATE TOTALS		22.3	25.9	30.7	29.2	29	18.7	16.6	22.6	18.7	-	0.3	0.3	0.2	0.2	0.6	0.6	0.2

Table 2

SUMMARY 1966 UPLAND GAME SPRING POPULATION INVENTORY

Region	District	Samples		Pheasants					Valley Quail		Bobwhite Quail		Hungarian Partridge		Chukar Partridge	
		No.	Acres	Cocks	Hens	Uncl.	Total	Per 100 Acres	No.	Per 100 Acres	No.	Per 100 Acres	No.	Per 100 Acres	No.	Per 100 Acres
Northwest	NW Willamette	9	534	9	30	7	46	8.6	20	3.7						
	No. Willamette	21	1,206	44	80	30	154	12.8	101	8.4						
	Mid-Willamette	17	1,116	34	37	13	84	7.5	47	4.2						
	Lane	9	576	19	41	-	60	10.4								
Southwest	Douglas	10	600	23	19	-	42	7.0	106	17.7						
	Southwest	10	600	21	72	-	93	15.5	175	29.2						
WESTERN OREGON		76	4,632	150	279	50	479	10.3	449	9.7						
Central	Columbia	13	1,513	69	188	12	269	17.8	409	27.0			6	0.4		
	Ochoco	12	952	21	95	-	116	12.2	166	17.4			2	0.2		
	Deschutes	7	420	3	6	-	9	2.1	30	7.1						
Northeast	Heppner	12	995	33	135	34	202	20.3	351	35.3			4	0.4	16	1.6
	Umatilla	14	840	74	263	415	752	89.5	588	70.0	5	0.6			2	0.2
	Wallowa	8	600	7	3	-	10	1.7								
	Northeast	26	1,800	73	307	23	403	22.4	76	4.2			5	0.3		
	Grant	5	335	5	10	-	15	4.5	138	41.2						
Southeast	Lake	5	375	4	56	-	60	16.0	188	50.1						
	Harney	11	677	16	16	10	42	6.2	15	2.2						
	Malheur	20	1,212	98	547	192	837	69.1	273	22.5	9	0.7				
EASTERN OREGON		133	9,719	403	1,626	686	2,715	27.9	2,234	23.0	14	0.1	17	0.2	18	0.2
STATE TOTALS		209	14,351	553	1,905	736	3,194	22.3	2,683	18.7	14	-	17	0.2	18	0.2

Table 3

E. E. WILSON UPLAND GAME POPULATION TRENDS

Year	Pheasants Per 100 Acres	Pheasants Cock-Hen Ratio	Valley Quail Per 100 Acres	Bobwhite Quail Per 100 Acres
1953	173.7	133:100	19.5	48.5
1954	142.0	70:100	7.7	34.0
1955	169.0	80:100	21.2	22.0
1956	70.3	40:100	-	-
1957	70.0	71:100	5.0	3.7
1958	129.0	90:100	3.2	3.5
1959	148.5	99:100	8.2	4.7
1960	98.9	91:100	5.3	0.0
1961	148.9	57:100	22.8	2.1
1962	103.0	74:100	4.3	0.0
1963	136.7	43:100	6.9	0.0
1964	69.7	44:100	0.0	0.0
1965	73.4	34:100	13.8	0.0
1966	47.8	59:100	0.0	0.0

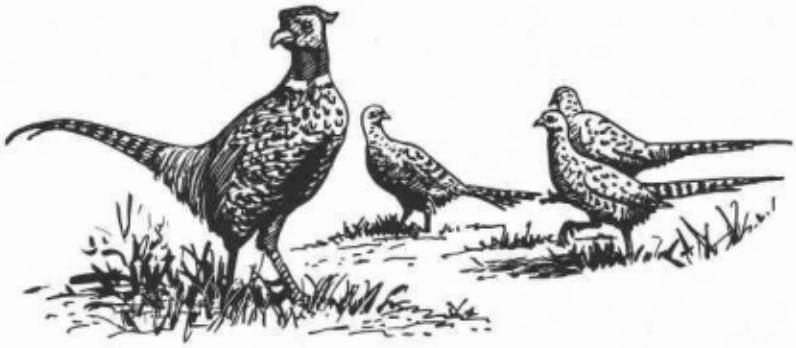


Table 4

PHEASANT CROWING COUNTS

Habitat Area	County	No. of Samples	Av. Calls Heard per Stop 1966	1965	1964	1963
NO. WILLAMETTE	Clackamas	1	11.1	-	-	-
	Marion	2	8.2	16.3	13.1	19.5
	Yamhill	2	16.6	15.3	20.9	22.0
SO. WILLAMETTE	Benton	1	7.2	15.4	17.4	16.0
	Lane	1	14.1	13.5	12.5	7.0
	Linn	2	5.9	11.6	10.9	13.0
	Polk	1	10.8	8.4	12.9	15.7
ROGUE-UMPQUA	Douglas	8	3.1	3.2	2.9	3.1
	Jackson	2	18.1	16.4	19.1	18.5
	Josephine	1	3.8	3.6	5.2	1.5
WESTERN OREGON		21	8.1	8.6	8.2	8.7
COLUMBIA	Hood River	1	2.4	2.7	3.0	3.2
	Jefferson	1	2.6	2.4	1.7	2.9
	Sherman	1	2.0	2.4	3.9	4.4
	Wasco	2	2.8	3.7	5.7	3.7
UPPER DESCHUTES	Crook	1	3.5	3.5	5.7	6.4
	Deschutes	1	1.2	1.2	1.4	1.7
KLAMATH	Klamath	2	2.1	3.4	5.9	5.0
BLUE MTN. VALLEY	Baker	5	9.5	12.7	9.6	7.3
	Grant	1	6.1	10.6	12.3	5.7
	Union	4	18.3	16.6	14.3	12.8
	Wallowa	3	3.2	2.1	2.6	2.5
UMATILLA-MORROW	Morrow	1	3.1	3.7	3.4	3.1
	Umatilla	1	6.5	10.5	10.9	12.5
GREAT BASIN	Harney	1	0.8	0.5	0.5	0.3
	Lake	3	2.0	1.8	3.2	4.2
MALHEUR	Malheur	3	5.3	7.6	10.3	9.6
EASTERN OREGON		31	6.1	7.0	6.7	5.9
STATE AVERAGES		52	6.9	7.6	7.4	7.1

Table 5

1966 PHEASANT PRODUCTION INVENTORY

District	Miles Traveled	Total Birds Observed	Birds per Mile				Hens Observed	Hens With Broods		Average Chicks Per Brood	Average Chicks per Hen			
			1966	1965	1964	1963		No.	Percent		1966	1965	1964	1963
N.W. Willamette	68	130	1.9	1.8	2.8	-	12	12	100	6.7	6.7	3.8	3.0	-
N. Willamette	315	400	1.3	1.2	3.3	2.4	28	26	93	6.0	5.6	5.9	5.2	5.7
Mid-Willamette	204	184	0.9	0.8	2.1	1.5	19	16	84	6.3	5.3	5.6	6.7	6.1
Lane	180	293	1.6	2.2	2.7	1.9	49	46	94	5.6	5.3	4.8	6.6	5.8
NORTHWEST	767	1,007	1.3	1.3	2.7	1.9	108	100	93	5.9	5.5	5.2	6.1	5.8
Umpqua	200	141	0.7	0.6	0.5	0.4	19	13	68	8.2	5.6	8.9	8.8	5.3
Rogue	195	349	1.8	2.1	2.7	2.4	50	33	66	4.7	3.1	3.7	3.5	4.2
SOUTHWEST	395	490	1.2	1.4	1.5	1.2	69	46	67	5.6	3.8	4.4	4.1	4.5
WESTERN OREGON	1,162	1,497	1.3	1.4	2.3	1.5	177	146	82	5.8	4.8	4.9	5.5	5.3
Columbia	227	232	1.0	0.4	0.7	1.2	32	31	97	5.3	5.1	4.8	3.8	5.2
Ochoco	146	125	0.9	0.4	0.1	0.1	25	23	92	4.5	4.1	2.6	3.0	2.7
Klamath	138	15	0.1	0.1	0.2	0.2	2	0	0	-	-	6.5	2.8	3.4
CENTRAL	511	372	0.7	0.3	0.4	0.7	59	54	92	5.0	4.6	3.6	3.6	4.8
Umatilla	256	710	2.8	1.5	2.1	3.5	141	110	78	5.7	4.4	3.5	3.6	4.0
Morrow	139	72	0.5	0.3	0.8	1.7	16	10	63	6.3	4.0	5.4	2.0	4.8
Union	87	255	2.9	2.8	1.8	3.4	47	39	83	5.4	4.5	4.2	4.8	6.5
Baker	126	266	2.1	1.2	1.8	2.9	48	33	69	4.8	3.3	4.7	5.1	5.2
Grant	70	56	0.8	0.1	1.9	0.7	9	7	78	4.6	3.6	3.5	5.2	5.4
NORTHEAST	678	1,359	2.0	1.2	1.7	2.7	261	199	76	5.4	4.1	4.1	4.0	4.8
Lake	103	88	0.9	0.4	0.5	0.7	15	11	73	5.4	3.9	3.7	4.1	5.0
Malheur	202	591	2.9	2.3	2.7	2.3	95	79	83	7.5	6.2	6.0	4.3	3.9
SOUTHEAST	305	679	2.2	1.7	1.9	2.0	110	90	82	7.2	5.9	5.9	4.4	3.9
EASTERN OREGON	1,494	2,410	1.6	1.0	1.2	1.8	430	343	80	5.8	4.6	4.7	4.1	4.5
STATE TOTALS	2,656	3,907	1.5	1.1	1.6	1.7	607	489	81	5.8	4.7	4.8	4.7	4.7

Table 6

MALHEUR COUNTY PHEASANT DAMAGE

Year	Damage Complaints				
	Corn	Grain	Beets	Other	Total
1958	31		13		44
1959	45	8	14		67
1960	18	3	6		27
1961	10	3	2		15
1962	14	1	2		17
1963	24	11	9		44
1964	28	2	7	2	39
1965	23	8	2		33
1966	34	6	5	2	47

Table 7

1966 VALLEY QUAIL PRODUCTION INVENTORY

District	Miles Traveled	Total Birds Observed	Birds per Mile				Birds Classified			Average Chicks Per Brood	Average Chicks per Adult			
			1966	1965	1964	1963	Adults	Chicks	Total		1966	1965	1964	1963
N.W. Willamette	68	10	0.1	0.8	1.0	-	10	0	10	-	-	2.9	3.5	-
N. Willamette	315	199	0.6	0.6	0.9	1.5	8	32	40	8.0	4.0	6.5	1.4	1.0
Mid-Willamette	204	271	1.3	0.6	1.2	1.0	43	171	214	11.4	4.0	0.7	2.7	1.7
Lane	180	58	0.3	0.1	0.2	0.2	16	34	50	17.0	2.1	0.5	2.6	2.3
NORTHWEST	767	538	0.7	0.5	0.8	0.9	77	237	314	11.3	3.1	1.5	2.2	1.3
Umpqua	200	189	0.9	1.6	0.7	0.2	23	142	165	10.9	6.2	7.3	2.4	1.6
Rogue	195	196	1.0	0.4	1.6	1.6	50	73	123	8.1	1.5	0.5	1.6	0.7
SOUTHWEST	395	385	1.0	0.9	1.1	0.8	73	215	288	9.8	2.9	3.2	1.9	0.9
WESTERN OREGON	1,162	923	0.8	0.6	0.9	0.8	150	452	602	10.5	3.0	2.3	2.0	1.1
Columbia	357	509	1.4	0.9	2.1	1.9	109	338	447	9.8	3.1	3.3	3.9	4.0
Ochoco	209	601	2.9	1.5	-	-	97	504	601	9.9	5.2	3.4	-	-
Deschutes	105	187	1.8	1.8	1.0	2.4	44	143	187	9.5	3.3	2.8	2.2	2.8
Klamath	138	79	0.6	0.0	0.3	0.3	23	56	79	9.3	2.4	-	3.0	1.5
CENTRAL	809	1,376	1.7	1.0	1.4	1.6	273	1,041	1,314	9.8	3.8	3.2	3.4	3.3
Umatilla	256	196	0.8	0.5	1.1	0.7	35	131	166	9.5	3.7	4.0	2.7	4.3
Morrow	173	253	1.5	0.9	1.6	3.1	54	199	253	6.9	3.7	1.7	1.3	3.3
Wallowa	500	206	0.4	0.2	0.1	0.6	48	158	206	9.5	3.3	3.8	5.0	3.4
Union	87	48	0.6	0.3	0.5	0.2	5	37	42	12.3	7.4	1.9	1.4	7.0
Baker	221	238	1.1	0.7	0.7	3.8	56	135	191	8.4	2.4	2.7	4.6	2.2
Grant	209	337	1.6	1.6	3.4	2.3	60	214	274	7.1	3.6	2.8	1.9	2.8
NORTHEAST	1,446	1,278	0.9	0.6	1.1	1.1	258	874	1,132	8.0	3.4	2.7	2.0	3.1
Lake	97	563	5.8	2.7	4.0	3.7	105	495	600	11.0	4.7	5.7	4.1	6.5
Harney	375	37	0.1	0.2	0.7	1.1	5	32	37	10.4	6.4	5.5	2.8	5.1
Malheur	330	859	2.6	2.6	2.4	2.4	149	710	859	11.2	4.8	4.2	3.6	1.3
SOUTHEAST	802	1,459	1.8	1.6	2.0	2.0	259	1,237	1,496	11.1	4.8	4.5	3.6	2.6
EASTERN OREGON	3,057	4,113	1.3	1.0	1.4	1.5	790	3,152	3,942	9.6	4.0	3.5	2.8	3.1
STATE TOTALS	4,219	5,036	1.2	0.9	1.3	1.3	940	3,604	4,544	9.7	3.8	3.3	2.7	2.5

Table 8

1966 MOUNTAIN QUAIL PRODUCTION INVENTORY

DISTRICT	MILES TRAVELED	TOTAL BIRDS OBSERVED	BIRDS PER MILE				BIRDS CLASSIFIED			AV. CHICKS PER BROOD	AV. CHICKS PER ADULT			
			1966	1965	1964	1963	ADULTS	CHICKS	TOTAL		1966	1965	1964	1963
N. COAST	636	156	0.2	0.2	0.1	0.2	30	126	156	9.7	4.2	4.3	2.2	3.1
N.W. WILLAMETTE	54	20	0.4	-	0.2	-	2	10	12	10.0	5.0	-	5.0	-
N. WILLAMETTE	297	15	-	-	-	-	3	12	15	12.0	4.0	5.0	-	-
MID-WILLAMETTE	391	40	0.1	-	0.2	-	6	31	37	10.3	5.2	4.0	4.5	-
LANE	57	0	0.0	0.8	0.7	0.2	0	0	0	-	-	3.4	7.0	-
S. COAST	69	32	0.5	0.8	0.3	1.7	12	33	45	8.3	2.8	4.7	1.8	3.6
UMPQUA	70	64	0.9	0.6	2.3	-	9	55	64	9.2	6.1	3.8	3.7	-
ROGUE	114	16	0.1	0.4	0.3	0.0	5	6	11	6.0	1.2	6.0	3.6	-
WESTERN OREGON	1,688	343	0.2	0.2	0.4	0.3	67	273	340	9.4	4.1	4.2	3.5	2.8
COLUMBIA	130	24	0.2	-	0.3	-	4	20	24	10.0	5.0	-	3.5	-
OCHOCO	63	23	0.4	-	-	-	6	17	23	8.5	2.8	-	-	-
KLAMATH	23	42	1.8	-	2.9	0.6	2	15	17	7.5	7.5	-	-	-
WALLOWA	500	49	0.1	0.4	0.2	0.6	13	36	49	8.3	2.8	3.8	5.3	3.2
EASTERN OREGON	716	138	0.2	0.3	0.3	0.5	25	88	113	8.9	3.2	3.8	4.0	3.3
STATE TOTALS	2,404	481	0.2	0.2	0.4	0.4	92	361	453	9.2	3.9	4.1	3.6	3.2

Table 9

CHUKAR AND HUNGARIAN PARTRIDGE OBSERVED ON BIG GAME SAMPLES

		Chukar Partridge					Hungarian Partridge				
			Birds per Mile					Birds per Mile			
District	Traveled	No.	1966	1965	1964	1963	No.	1966	1965	1964	1963
Morrow	157	58	.37	.21	.27	.34	41	.26	.46	.30	.15
Umatilla	180	16	.09	.15	.35	.13	10	.06	.08	.09	.10
Wallowa	279	174	.62	.83	.89	1.25	28	.10	.15	.06	.14
Blue Mtn.	360	276	.77	.62	.64	.99	92	.26	.17	.27	.37
Ochoco	142	4	.03	.50	-	-	0	.00	.03	-	-
Grant	112	5	.04	.13	.18	.11	0	.00	.00	.00	.00
Harney	207	13	.06	.48	7.01	.52	0	.00	.00	.00	.00
Malheur	96	81	.84	1.28	2.30	1.14	0	.00	.00	.00	.00
TOTALS	1,533	627	.41	.55	1.47	.46	171	.11	.12	.13	.15

Table 10

1966 CHUKAR PARTRIDGE PRODUCTION INVENTORY

DISTRICT	MILES TRAVELED	TOTAL BIRDS OBSERVED	BIRDS PER MILE				BIRDS CLASSIFIED			AV. CHICKS PER BROOD	AV. CHICKS PER ADULT			
			1966	1965	1964	1963	ADULTS	CHICKS	TOTAL		1966	1965	1964	1963
COLUMBIA	130	377	2.9	2.6	1.7	2.1	83	244	327	12.2	2.9	5.4	0.7	2.8
OCHOCO	63	127	2.0	3.9	1.9	0.5	43	1 120	163	7.2	2.8	4.5	5.3	3.0
CENTRAL	193	504	2.6	2.9	1.7	2.0	126	364	490	11.0	2.9	5.0	0.8	2.8
UMATILLA	182	198	1.1	0.3	1.1	1.1	45	152	197	9.0	3.4	6.9	1.4	5.5
MORROW	173	216	1.2	0.8	5.2	3.8	65	122	187	6.9	1.9	4.2	0.1	4.1
WALLOWA	500	540	1.1	1.2	1.0	1.6	95	445	540	11.5	4.7	5.2	7.7	3.3
BAKER	95	822	8.7	6.9	6.6	6.4	162	632	794	13.4	3.9	4.5	4.0	2.7
GRANT	195	224	1.1	0.9	3.9	2.7	40	156	196	7.8	3.9	5.1	1.2	7.9
NORTHEAST	1,145	2,000	1.7	1.4	2.7	2.5	407	1,507	1,914	11.0	3.7	4.8	0.9	3.8
LAKE	264	0	0.0	0.1	0.1	2.6	0	0	0	-	-	1.7	0.8	2.6
HARNEY	375	145	0.4	0.2	0.5	1.1	58	87	145	10.4	1.5	8.8	0.5	4.5
MALHEUR	128	2,286	17.9	5.5	7.6	4.1	395	1,615	2,010	12.9	4.1	1.2	2.0	1.6
SOUTHEAST	767	2,431	3.2	1.2	2.0	2.0	453	1,702	2,155	11.7	3.8	1.3	1.7	2.8
STATE TOTALS	2,105	4,935	2.3	1.4	2.4	2.3	986	3,537	4,523	11.5	3.6	2.9	1.1	3.4

Table 11

1966 HUNGARIAN PARTRIDGE PRODUCTION INVENTORY

DISTRICT	MILES TRAVELED	TOTAL BIRDS OBSERVED	BIRDS PER MILE				BIRDS CLASSIFIED			AV. CHICKS PER BROOD	AV. CHICKS PER ADULT			
			1966	1965	1964	1963	ADULTS	CHICKS	TOTAL		1966	1965	1964	1963
COLUMBIA	357	13	-	-	0.1	-	6	6	12	6.0	1.0	4.8	2.3	1.8
OCHOCO	167	13	-	-	-	-	2	11	13	11.0	5.5	-	-	-
UMATILLA	256	39	0.2	0.2	0.1	0.1	8	31	39	9.0	3.9	6.9	0.3	3.5
MORROW	139	54	0.4	0.3	0.7	0.8	11	36	47	6.0	3.3	3.4	4.7	4.4
WALLOWA	1,000	85	-	-	-	-	15	70	85	10.7	4.7	2.8	7.0	2.7
UNION	87	94	1.1	0.4	0.3	0.9	13	75	88	10.7	5.8	3.6	4.3	3.9
BAKER	221	145	0.7	0.2	0.2	-	25	104	129	10.4	4.2	6.4	2.7	1.5
GRANT	209	22	0.1	-	0.1	0.1	4	18	22	9.0	4.5	-	5.0	3.7
MALHEUR	330	45	0.1	0.1	0.1	0.1	5	36	41	10.3	7.2	3.9	5.4	3.1
STATE TOTALS	2,766	510	0.2	0.1	0.1	0.1	89	387	476	9.5	4.3	4.1	3.2	3.5

Table 12

GROUSE AND MOUNTAIN QUAIL TRENDS IN EASTERN OREGON

District	Miles Traveled	Blue Grouse				Ruffed Grouse				Mountain Quail			
			Birds per Mile				Birds per Mile				Birds per Mile		
		No.	1966	1965	1964	No.	1966	1965	1964	No.	1966	1965	1964
Lower Deschutes	57	1	.02	.02	.00	0	.00	.00	.00	5	.09	.00	.07
Klamath	39	0	.00	.00	.00	0	.00	.00	.00	19	.49	1.62	.72
CENTRAL	96	1	.01	.01	.00	0	.00	.00	.00	24	.25	.74	.34
Morrow	157	2	.01	.02	.01	0	.00	.00	.00	0	.00	.00	.00
Umatilla	180	31	.17	.31	.30	5	.03	.03	.04	0	.00	.00	.00
Wallowa	272	125	.46	.29	.26	8	.03	.03	.04	0	.00	.00	.00
Blue Mountain	360	43	.12	.08	.08	3	.01	.01	.00	0	.00	.00	.00
Grant	21	0	.00	.05	.00	0	.00	.00	.00	0	.00	.00	.07
NORTHEAST	990	201	.20	.18	.16	16	.02	.02	.02	0	.00	.00	-
TOTALS AND AVERAGES	1,086	202	.19	.17	.14	16	.01	.02	.02	24	.02	.06	.03

Table 13

GROUSE AND MOUNTAIN QUAIL TRENDS IN WESTERN OREGON

District	Miles Traveled	Blue Grouse				Ruffed Grouse				Mountain Quail			
			Birds per Mile				Birds per Mile				Birds per Mile		
		No.	1966	1965	1964	No.	1966	1965	1964	No.	1966	1965	1964
No. Coast	124	19	.15	.13	.12	17	.14	.10	.11	7	.06	.17	.25
N.W. Willamette	34	3	.09	.00	-	3	.09	.05	-	0	.00	.32	-
No. Willamette	15	2	.13	.27	.13	0	.00	.09	.08	0	.00	.00	.04
Mid-Willamette	80	4	.05	.07	.09	6	.08	.01	.00	34	.43	.23	.65
Lane	22	4	.18	.43	.25	2	.09	.00	.00	8	.36	.95	1.15
NORTHWEST	275	32	.12	.14	.14	28	.10	.06	.06	49	.18	.25	.47
So. Coast	80	3	.04	.36	.17	0	.00	.03	.00	18	.23	.30	.54
Rogue	104	1	.01	.05	.03	0	.00	.00	.00	41	.39	.35	.21
SOUTHWEST	184	4	.02	.21	.10	0	.00	.01	.00	59	.32	.33	.37
TOTALS AND AVERAGES	459	36	.08	.17	.12	28	.06	.04	.03	108	.24	.28	.42

Table 14

GROUSE HOOTING AND DRUMMING COUNTS

District	Miles Traveled	Blue Grouse Total Heard	Blue Grouse Average Heard per Mile 1966	1965	1964	1963	Ruffed Grouse Total Heard	Ruffed Grouse Average Heard per Mile 1966	1965	1964	1963
No. Coast	40	22	.55	.45	.83	1.15	16	.40	.33	.40	.28
N.W. Willamette	19	14	.73	.94	-	-	2	.11	.21	-	-
No. Willamette	65	18	.28	.73	1.00	-	0	.00	.00	.00	-
Mid-Willamette	60	3	.05	.02	-	-	1	.02	.02	-	-
Umpqua	60	0	.00	1.30	.10	-	0	.00	.00	.00	-
Rogue	0	-	-	.15	.00	.54	-	-	.00	.00	.00
TOTALS	244	57	.23	.48	.44	.73	19	.08	.09	.18	.14

Table 15

1966 BLUE GROUSE PRODUCTION INVENTORY

DISTRICT	MILES TRAVELED	TOTAL BIRDS OBSERVED	BIRDS PER MILE				BIRDS CLASSIFIED			AV. CHICKS PER BROOD	AV. CHICKS PER ADULT			
			1966	1965	1964	1963	ADULTS	CHICKS	TOTAL		1966	1965	1964	1963
N. COAST	636	128	0.2	0.1	-	-	38	90	128	5.3	2.4	1.9	0.9	1.2
N.W. WILLAMETTE	54	15	0.3	0.1	-	-	1	3	4	3.0	3.0	1.2	1.0	-
N. WILLAMETTE	297	22	-	-	-	0.1	1	5	6	5.0	5.0	5.0	1.0	1.8
MID-WILLAMETTE	391	15	-	-	0.4	-	10	5	15	1.7	0.5	0.4	0.8	-
LANE	57	29	0.5	0.0	0.5	0.3	13	23	36	3.3	1.8	-	2.2	1.6
S. COAST	69	9	0.1	0.7	0.6	0.5	2	7	9	7.0	3.5	5.0	3.2	1.6
UMPQUA	70	70	1.0	0.4	0.4	0.3	8	63	71	10.5	7.9	3.5	6.7	4.0
WESTERN OREGON	1,574	288	0.2	0.1	0.2	0.3	73	196	269	5.4	2.7	2.1	2.0	2.0
UMATILLA	21	22	1.0	-	-	-	11	11	22	3.7	1.0	-	-	-
UNION	62	28	0.5	0.1	0.2	-	5	8	13	4.0	1.6	-	-	-
WALLOWA	1,000	209	0.2	0.1	0.2	0.3	73	136	209	3.5	1.9	1.9	4.1	3.3
EASTERN OREGON	1,083	259	0.2	0.1	0.2	0.3	89	155	244	3.5	1.7	1.7	4.1	3.3
STATE TOTALS	2,657	547	0.2	0.1	0.2	0.2	162	351	513	4.4	2.2	1.9	2.5	2.4

Table 16

1966 RUFFED GROUSE PRODUCTION INVENTORY

DISTRICT	MILES TRAVELED	TOTAL BIRDS OBSERVED	BIRDS PER MILE				BIRDS CLASSIFIED			AV. CHICKS PER BROOD	AV. CHICKS PER ADULT			
			1966	1965	1964	1963	ADULTS	CHICKS	TOTAL		1966	1965	1964	1963
N. COAST	636	110	0.2	0.1	-	-	21	89	110	5.9	4.2	3.8	1.9	2.1
N.W. WILLAMETTE	54	1	-	0.0	0.2	-	-	-	-	-	-	-	-	-
N. WILLAMETTE	297	1	-	0.0	0.2	-	1	-	1	-	-	-	4.0	-
MID-WILLAMETTE	391	0	0.0	0.0	-	-	-	-	-	-	-	-	-	-
LANE	57	0	0.0	0.0	-	-	-	-	-	-	-	-	-	6.0
S. COAST	69	1	-	-	0.1	-	-	-	-	-	-	-	6.0	4.0
UMPQUA	70	30	0.4	-	0.1	-	5	25	30	5.0	5.0	3.0	8.0	-
WESTERN OREGON	1,574	143	-	-	-	-	27	114	141	5.7	4.2	3.8	2.7	4.0
UNION	62	4	-	0.1	-	-	1	0	1	-	-	-	-	-
WALLOWA	500	52	0.1	-	0.1	-	15	37	52	4.4	2.5	2.4	4.8	2.0
EASTERN OREGON	562	56	0.1	-	-	-	16	37	53	4.4	2.3	2.1	4.8	2.0
STATE TOTALS	2,136	199	-	-	-	-	43	151	194	5.4	3.5	3.0	3.2	2.3

Table 17

SAGE GROUSE STRUTTING GROUND COUNTS

County	Number of Areas	Male Grouse Counted							
		1966	1965	1964	1963	1962	1961	1960	1959
Deschutes	6	237	222	170	94	87	115	135	148
Harney	9	159	142	156	115	109	140	241	282
Lake	6	41	55	119	150	128	123	172	244
TOTALS	21	437	419	445	359	324	378	548	674

Table 18

1966 SAGE GROUSE PRODUCTION INVENTORY

DISTRICT	MILES TRAVELED	TOTAL BIRDS OBSERVED	BIRDS PER MILE				BIRDS CLASSIFIED			AV. CHICKS PER BROOD	AV. CHICKS PER ADULT			
			1966	1965	1964	1963	ADULTS	CHICKS	TOTAL		1966	1965	1964	1963
CROOK	15	89	5.9	0.4	-	-	17	11	28	2.2	0.6	2.4	-	-
DESCHUTES	100	31	0.3	0.4	0.8	1.2	14	17	31	3.4	1.2	1.0	1.4	1.5
LAKE	153	170	1.1	0.9	3.7	1.8	69	49	118	3.8	0.7	1.2	0.6	1.5
HARNEY	375	217	0.6	0.3	0.7	1.0	171	46	217	2.9	0.3	0.3	0.9	1.3
MALHEUR	129	1,066	8.2	0.1	3.4	3.3	308	353	661	3.0	1.1	-	-	2.3
STATE TOTALS	772	1,575	2.0	0.5	2.0	1.6	579	476	1,055	3.3	0.8	0.9	0.7	1.5

Table 19

AUGUST MOURNING DOVE ROADSIDE COUNT TRENDS

County	Miles Traveled	Doves Seen	Doves per Mile 1966	1965	1964	1963
Benton	67	75	1.1	0.9	1.4	1.5
Crook	70	264	3.8	4.8	3.5	5.0
Deschutes	50	40	0.8	0.7	2.2	1.1
Gilliam	20	61	3.1	3.6	3.2	3.3
Grant	38	32	0.8	-	2.0	1.3
Harney	60	4	0.7	0.4	0.2	0.7
Jackson	195	748	3.8	2.6	3.5	2.7
Jefferson	38	686	18.1	25.1	21.4	30.9
Klamath	138	101	0.7	0.6	1.0	2.8
Lake	90	311	3.5	2.1	1.7	4.0
Lane	84	174	2.1	2.9	5.2	0.8
Linn	92	262	2.8	2.3	1.5	0.9
Malheur	75	287	3.8	6.4	-	-
Marion	20	17	0.9	1.3	2.6	2.6
Morrow	20	39	2.0	2.8	4.4	6.5
Multnomah	27	10	0.4	0.2	2.2	8.1
Polk	21	37	1.8	0.9	-	-
Sherman	141	201	1.4	0.9	-	-
Umatilla	73	174	2.4	2.3	1.8	2.5
Union	87	72	0.8	1.7	-	-
Wasco	216	703	3.3	3.9	6.6	6.5
Wheeler	25	110	4.4	3.7	1.8	2.4
Yamhill	20	87	4.4	1.4	4.2	1.2
TOTALS	1,667	4,495	2.7	2.8	3.2	4.2

Table 20

MOURNING DOVE SPRING QUADRAT COUNT TRENDS

Region	Doves per 100 Acres							
	1966	1965	1964	1963	1962	1961	1960	1959
Willamette Valley	3.8	23.3	12.5	5.0	10.5	8.0	3.5	18.8
Rogue River Valley	20.2	15.5	32.0	4.3	10.7	22.2	28.1	28.0

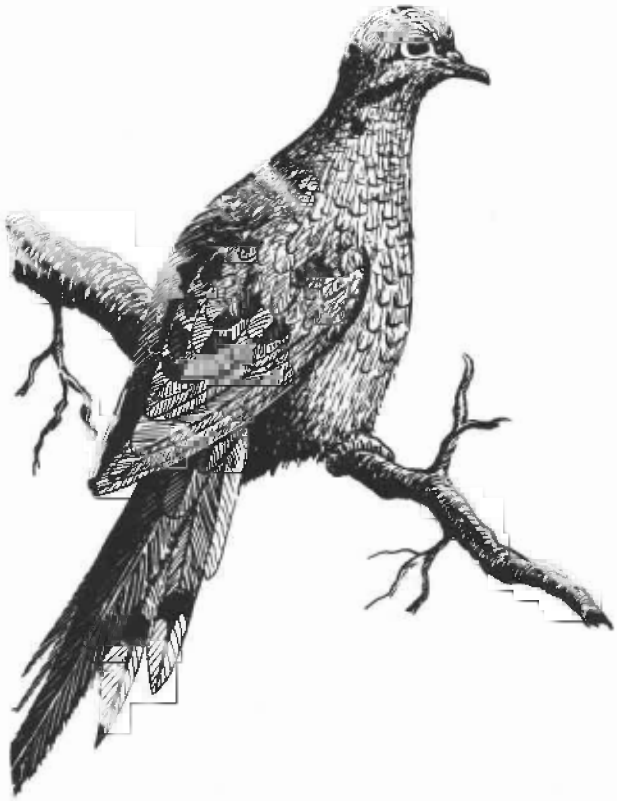


Table 21

MOURNING DOVE CALL COUNT TRENDS

Year	No. of Routes	Miles Traveled	Doves Heard Per Mile	Doves Seen Per Mile
1953	7	140	1.65	0.93
1954	14	280	1.40	1.06
1955	15	300	1.57	1.55
1956	17	340	1.46	1.69
1957	17	340	1.67	0.87
1958	17	340	1.47	1.39
1959	18	360	1.98	2.16
1960	18	360	1.87	1.47
1961	18	360	2.07	1.37
1962	18	360	1.76	1.16
1963	16	320	1.68	1.44
1964*	18	360	0.89	1.45
1965	20	400	0.61	0.46
1966	18	360	0.84	0.71

*Randomized routes established in 1964.

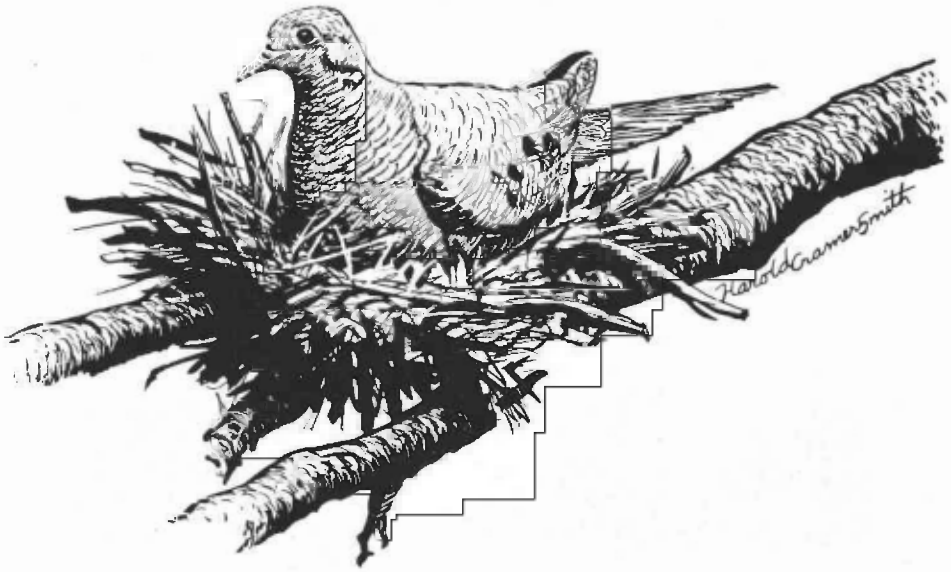


Table 22

BAND-TAILED PIGEON TRENDS

County	Area	Pigeons Counted 1966	1965	1964	1963
Benton	Pigeon Butte	150	502	369	1,140
Columbia	Dutch Canyon	374	257	500	400
Coos	Isthmus Slough	315	454	310	282
Douglas	Hudson Slough	-	949	566	488
	Canton Creek	285	507	-	-
Lane	Cushman	678	573	472	698
Linn	Crawfordsville	746	708	-	356
Marion	Aurora	179	376	305	193
Polk	Grande Ronde	113	300	-	-
Tillamook	Nehalem	712	617	576	933
Yamhill	Silver Springs	208	262	233	256
	Fairdale	102	-	-	-
TOTALS		3,862	5,581	3,410	4,746

Table 23

1965 UPLAND GAME SEASONS

Species	Hunters	Kill	Days Hunted	Birds per Hunter	Birds per Times Afield	Av. Times Afield
Pheasants	75,373	254,575	326,276	3.4	0.8	4.3
Quail	26,383	168,274	112,506	6.4	1.5	4.3
Chukar Partridge	19,653	130,132	68,887	6.6	1.9	3.5
Hungarian Partridge	6,021	17,288	22,555	2.9	0.8	3.7
Doves	16,205	163,064	65,977	10.1	2.5	4.1
Pigeons	12,597	105,173	49,945	8.3	2.1	4.0

Table 24

SUMMARY OF UPLAND GAME SEASONS

YEAR	PHEASANTS		QUAIL		CHUKAR PARTRIDGE		HUNGARIAN PARTRIDGE		FOREST GROUSE		SAGE GROUSE		MOURNING DOVES		BAND-TAILED PIGEONS	
	HUNTERS	KILL	HUNTERS	KILL	HUNTERS	KILL	HUNTERS	KILL	HUNTERS	KILL	HUNTERS	KILL	HUNTERS	KILL	HUNTERS	KILL
1951	83,920	237,037	12,777	75,373												
1952	82,145	244,791	21,903	107,105					24,400	40,504		18,788				
1953	90,441	274,940	28,340	147,651					22,812	36,043		11,406				
1954	94,699	292,527	29,950	149,352				24,858	19,120	32,886						
1955	92,741	278,223	25,545	149,740				12,006	19,536	31,923						
1956	83,206	226,320	25,472	115,643		3,820		12,226	21,636	36,780						
1957	88,691	310,096	21,930	124,431	5,321	10,319	5,321	11,609	18,813	38,916			13,169	117,875	14,621	93,853
1958	102,789	477,075	38,470	280,345	15,809	91,558	11,172	45,190	27,315	73,510	7,374	21,284	16,870	158,474	20,278	122,226
1959	97,474	375,641	32,588	224,123	11,373	36,326	6,016	16,818	15,332	32,770	7,127	17,304	17,557	194,189	13,143	86,019
1960	94,599	351,656	30,670	190,873	9,442	37,683	5,543	16,765	17,208	36,586			14,893	173,108	13,096	86,956
1961	91,117	375,755	35,088	242,040	15,033	75,268	5,205	15,581	17,819	45,180	2,725	6,659	18,340	202,082	15,003	121,032
1962	82,430	329,481	29,037	129,894	19,029	124,727	5,604	16,552	14,380	29,194	3,541	10,571	16,566	164,116	14,133	121,446
1963	84,024	374,243	31,460	265,491	28,299	295,243	8,885	36,535	13,944	34,553	1,913	4,117	16,542	184,030	11,997	90,505
1964	81,722	336,846	31,213	230,875	25,572	194,530	7,744	26,334	12,351	27,313	3,718	8,669	17,320	208,513	12,460	103,885
1965	75,373	254,575	26,383	168,274	19,653	130,132	6,021	17,288					16,205	163,064	12,597	105,173

Table 25

1965 PHEASANT SEASON

District	Hunters Checked	Hours Hunted	Birds Checked No.	Birds Checked %Young	Birds per Hour	Birds per Hunter 1965	1964	1963	1962
No. Willamette	108	383	47	71	0.1	0.4	0.4	0.5	1.0
Mid-Willamette	63	136	8	50	-	0.1	0.6	0.8	0.6
Lane	71	400	17	71	-	0.2	0.9	0.7	0.6
NORTHWEST	242	919	72	64	-	0.3	0.6	0.7	0.7
Umpqua	219	745	90	94	0.1	0.4	0.4	0.6	0.7
Rogue	78	153	39	74	0.3	0.5	0.8	1.3	1.4
SOUTHWEST	297	898	129	84	0.1	0.4	0.6	1.0	0.9
Columbia	148	407	74	97	0.2	0.5	0.4	0.9	0.8
Deschutes	5	16	7	86	0.4	1.4	0.8	1.0	1.4
Klamath	122	253	49	53	0.2	0.4	0.3	0.5	0.6
CENTRAL	275	676	130	79	0.2	0.5	0.4	0.8	0.8
Morrow	39	54	18	56	0.3	0.5	0.3	1.6	0.7
Umatilla	61	93	44	61	0.5	0.7	0.6	1.2	0.8
Baker	60	151	53	90	0.4	0.9	1.4	1.2	0.8
Grant	12	54	3	67	-	0.3	1.5	0.9	1.1
NORTHEAST	172	352	118	69	0.3	0.7	0.8	1.3	0.8
Lake	34	152	32	66	0.2	0.9	1.3	1.0	1.8
Harney	18	56	3	100	-	0.2	0.6	0.5	0.2
Malheur	158	489	223	80	0.5	1.4	1.4	1.6	1.5
SOUTHEAST	210	697	258	82	0.4	1.2	1.3	1.4	1.5
TOTALS AND AVERAGES	1,196	3,542	707	74	0.2	0.6	0.7	1.1	1.0

Table 26

E. E. WILSON JUVENILE PHEASANT SEASON

Year	Total Hunters	Pheasants				Quail Killed
		Pheasants Killed	Birds per Hunter	Highest Daily Kill	Lowest Daily Kill	
1951	272	299	0.8	-	-	-
1952	255	276	1.1	-	-	-
1953	302	200	0.7	35.	6	-
1954	314	268	0.8	37	10	-
1955	188	67	0.4	26	11	28
1956	252	172	0.7	41	6	-
1957	261	226	0.8	73	5	-
1958	184	185	1.0	40	26	12
1959	178	199	1.1	49	15	5
1960	269	289	1.1	73	28	35
1961	573	468	0.8	106	15	67
1962	584	546	0.9	114	4	53
1963	593	307	0.5	57	8	42
1964	559	319	0.6	65	9	27
1965	440	115	0.3	29	3	7

Table 27

1965 QUAIL SEASON

District	Hunters Checked	Hours Hunted	Valley Quail Checked		Birds per Hour	Birds per Hunter			
			No.	%Young		1965	1964	1963	1962
N. Willamette	108	383	9	-	-	-	-	-	0.5
Mid-Willamette	63	136	3	66	-	-	0.1	-	-
NORTHWEST	171	519	12	66	-	-	-	-	0.5
Umpqua	23	54	21	69	0.4	0.9	-	-	0.1
Rogue	4	16	1	100	-	0.3	2.0	7.0	0.4
SOUTHWEST	27	70	22	85	0.3	0.8	-	0.3	0.1
Columbia	63	224	24	94	0.1	0.4	0.5	1.1	0.6
Deschutes	5	16	2	100	0.1	0.4	4.1	0.4	1.7
Klamath	7	17	11	-	0.6	1.6	1.8	0.8	1.3
CENTRAL	75	257	37	97	0.1	0.5	1.3	1.1	0.7
Morrow	39	54	35	74	0.6	0.9	1.7	0.3	4.1
Umatilla	61	93	1	-	-	-	-	-	-
Baker	9	22	7	86	0.3	0.8	0.7	-	-
Grant	12	54	5	100	-	0.4	2.7	0.6	1.2
NORTHEAST	121	223	48	87	0.2	0.4	0.5	0.2	0.6
Lake	3	6	6	83	1.0	2.0	3.4	5.6	3.1
Harney	18	56	5	60	-	0.3	0.9	1.7	1.5
Malheur	158	489	5	-	-	-	0.1	0.1	-
SOUTHEAST	179	551	16	72	-	-	0.7	0.4	0.5
TOTALS AND AVERAGES	573	1,620	135	83	-	0.2	0.5	0.5	0.5

Table 28

1965 PARTRIDGE SEASON
(Opening weekend data)

District	Hunters Checked	Hours Hunted	Birds Checked No.	Birds Checked %Young	Birds per Hour	Birds per Hunter 1965	1964	1963	1962
Columbia	190	703	108	35	0.2	0.6	0.5	1.2	1.4
Ochoco	64	267	108	68	0.4	1.7	2.0	-	0.6
CENTRAL	254	970	216	52	0.2	0.9	1.0	1.2	1.3
Morrow	62	212	132	81	0.6	2.1	1.0	4.9	1.9
Umatilla	21	112	7	57	0.1	0.3	0.8	0.6	0.9
Baker	28	42	52	79	1.2	1.9	2.6	3.1	4.9
Grant	47	141	87	91	0.6	1.9	2.6	3.2	2.6
NORTHEAST	158	507	278	74	0.5	1.8	1.4	2.3	1.7
Lake	6	12	0	-	-	-	0.2	2.4	2.1
Harney	51	235	6	100	-	0.1	2.5	5.9	2.8
Malheur	52	182	74	62	0.4	1.4	3.7	4.8	4.1
SOUTHEAST	109	429	80	81	0.2	0.7	2.8	4.7	2.9
TOTALS AND AVERAGES	521	1,906	574	72	0.3	1.1	1.8	3.0	2.0

Table 29

1965 MOURNING DOVE SEASON

District	Hunters Checked	Hours Hunted	Birds Checked Number	Birds Checked %Young	Birds per Hour	Birds per Hunter 1965	1964	1963	1962
NW Willamette	9	9	13	77	1.4	1.4	-	-	-
North Willamette	12	21	15	-	0.7	1.3	1.8	-	1.0
Lane	5	30	21	62	0.7	4.2	1.5	-	-
Southwest	76	144	251	50	1.7	3.3	4.8	5.0	3.5
WESTERN OREGON	102	204	300	63	1.5	2.9	4.3	5.0	3.4
Columbia	27	102	68	40	0.7	2.5	2.4	5.2	3.8
Deschutes	135	428	1,070	-	2.5	7.9	6.5	6.9	6.4
Ochoco	42	210	89	74	0.4	2.1	1.0	-	-
Klamath	65	206	214	59	1.0	3.3	4.5	3.6	3.1
Lake	13	22	89	40	4.0	6.8	3.4	6.2	2.2
Harney	7	18	18	46	1.0	2.6	1.5	3.9	0.7
EASTERN OREGON	289	986	1,548	52	1.6	5.4	4.2	5.5	4.4
TOTALS AND AVERAGES	391	1,190	1,848	56	1.6	4.7	4.2	5.5	4.2

Table 30

1965 BAND-TAILED PIGEON SEASON

District	Hunters Checked	Hours Hunted	Birds Checked Number	Birds Checked %Young*	Birds per Hour	Birds per Hunter 1965	1964	1963	1962
North Coast	133	387	241	21	0.6	1.8	1.4	1.8	1.7
N. Willamette	85	330	154	18	0.5	1.8	2.3	2.9	2.3
Mid-Willamette	55	279	223	28	0.8	4.1	3.2	2.6	3.3
Lane	33	165	166	21	1.0	5.0	5.5	0.9	1.5
South Coast	83	427	309	-	0.7	3.7	3.0	2.2	3.0
Rogue	110	444	129	50	0.3	1.2	0.9	1.7	1.6
Umpqua	89	568	431	26	0.8	4.8	5.6	-	-
TOTALS AND AVERAGES	588	2,600	1,653	26	0.6	2.8	2.1	2.0	2.3

*Corrected on basis of 5.3 percent of birds with neck crescent being juveniles and 7.4 percent of birds without neck crescent being adults.

Table 31

1965-66 TURKEY SEASON

Season Dates	Birds Harvested					
	Adult		Young			
	Male	Female	Male	Female	Unclassified	Total
November 20-28	9	10	10	10	2	41
April 30-May 8	3		1			4
TOTALS	12	10	11	10	2	45

Tags issued - 290
Average success - 15.5 percent

Table 32

1965 LAND ACCESS SURVEY

County	Miles Sampled	Not Posted (Percent)	No Hunting (Percent)	Hunting by Permission (Percent)
Benton	36	52	47	1
Deschutes	60	75	19	6
Douglas	70	69	31	0
Hood River	21	92	8	0
Jackson	30	62	38	0
Jefferson	46	62	35	3
Klamath	46	79	19	2
Linn	57	77	23	0
Marion	20	80	17	3
Polk	21	48	51	1
Sherman	76	72	23	5
Wasco	180	48	41	11
Washington	35	44	43	13
Yamhill	20	86	13	1
TOTALS	718	68	29	3

Table 33

1965 GAME BIRD PRODUCTION

	Pheasants	Chukar Partridge	Hungarian Partridge	Bamboo Partridge	Kalij Pheasants
January 1 Inventory	3,153	63	326	220	40
Losses	233	10	20	35	10
Spring Liberations	2,920	53	304	0	0
Eggs Gathered	97,131	1,086	841	976	152
Eggs to Individuals	13,232	0	0	0	0
Eggs Set	54,007	934	468	966	149
Birds Hatched	37,557	671	173	290	32
Percent Hatched	69.5	71.8	37.0	30.0	21.5
Birds Raised	21,484	626	142	126	27
Percent Raised	93.7	93.3	82.1	43.4	84.4
Birds Liberated	21,129*	553	354	0	0
Spring	2,920	53	304	0	0
Summer	6,532	500	50	0	0
Fall	11,677	0	0	0	0
December 31 Inventory	3,275	126	94	311	57

*Includes 157 birds sold for dog trials.

Table 34

1965 PHEASANT LIBERATIONS

Counties by Regions	1965 Liberations Spring Adult	Summer Young	Fall Adult	Total Released
Benton	432		1,072	1,504
Clackamas	512		258	770
Clatsop			384	384
Columbia			768	768
Lane		386	1,359	1,745
Linn	136	42	280	458
Marion	472		419	891
Multnomah			768	768
Polk	296		234	530
Washington	640			640
Yamhill			779	779
NORTHWEST	2,488	428	6,321	9,237
Douglas			768	768
Jackson	384		822	1,206
Josephine			62	62
SOUTHWEST	384		1,652	2,036
WESTERN OREGON TOTALS	2,872	428	7,973	11,273
Crook	48	405		453
Deschutes		315		315
Jefferson			768	768
Klamath		720	884	1,604
Wasco		720		720
CENTRAL	48	2,160	1,652	3,860
Baker		720		720
Gilliam		360		360
Grant		720		720
Morrow		720		720
Umatilla			384	384
Union			1,168	1,168
Wheeler		360		360
NORTHEAST		2,880	1,552	4,432
Harney		528		528
Lake		536	500	1,036
SOUTHEAST		1,064	500	1,564
EASTERN OREGON TOTALS	48	6,104	3,704	9,856
STATE TOTALS	2,920	6,532	11,677	21,129

Administration

Administration of the waterfowl resource, while the birds are within the Nation's borders, is the primary responsibility of the Bureau of Sport Fisheries and Wildlife. Each state, however, has a direct responsibility of management while the birds are within its boundaries. Management practices include obtaining factual data on reproduction, migrations, mortality; and on breeding, feeding, and wintering ground conditions. Methods of obtaining detailed information are coordinated in the seven Pacific Flyway states by a flyway committee to assure results which can be combined and interpreted on a flyway basis.

The Game Commission has acquired 29,131 acres of land primarily for waterfowl use and controls an additional 20,852 acres through lease or agreement. These acreages are located in 11 management units and are being developed to supply the needs of waterfowl and to provide opportunities for public hunting.

Production

The major waterfowl breeding grounds in eastern Oregon again suffered from a severe drought. A very light winter snow pack followed by one of the driest springs on record resulted in the loss of many of the small marshes and potholes. Many water areas in the large marshlands, such as at Malheur Refuge, were also eliminated or drastically reduced in size.

Water conditions were still good in April and May and provided

Table 1

GOOSE PRODUCTION TRENDS 1963-66

Transect	Total Broods				Total Young			
	1966	1965	1964	1963	1966	1965	1964	1963
Klamath River	252	210	264	194	1,137	945	1,192	871
Sprague River	15	21	43	20	67	95	193	90
Spring Lake	5	4	14	14	24	18	65	65
Nuss Lake	14	42	30	16	65	188	137	71
Agency Lake	10	48	48	22	255	218	216	97
Wocus Bay	42	74	41	26	189	331	187	118
Howard Bay	29	13	25	4	122	60	112	17
Summer Lake	34	21	56	55	136	98	231	243
N. Lake County	58	25	29	26	252	114	116	131
Columbia River	5	12	2	11	30	66	9	48
Wickiup Reservor	0	7	20	10	0	21	81	36
G. I. Ranch	16	19	9	4	68	73	35	15
Jefferson County	4	-	-	-	17	-	-	-
S. Lake County	22	9	18	37	101	53	74	143
Ladd Marsh	5	5	-	-	29	33	-	-
Malheur Refuge	355	222	333	278	1,600	1,000	1,500	1,250
TOTALS	866	732	932	717	4,092	3,313	4,148	3,195

Production in 1966 up 23 percent from 1965

good breeding habitat for geese and early nesting ducks. Less suitable territory, however, was available to late nesting birds.

An excellent hatch of Canada geese was recorded on all major breeding areas in the state. The number of young recorded on established transects showed a 23 percent increase in production from 1965 (Table 1). This is 25 percent higher than the average production for the 1961-65 period.

Twenty-four islands in the John Day impoundment area in the Columbia River have been censused for goose nests annually since 1956. The census has been conducted by the Washington Department of Game with assistance of the Bureau of Sport Fisheries and Wildlife and the Oregon State Game Commission. These islands will be inundated with the filling of the impoundment in 1967. Results obtained are presented in the following table.

Table 2

COLUMBIA RIVER GOOSE NEST SURVEY

Year	No. Nests	Year	No. Nests
1966	87	1960	163
1965	200	1959	178
1964	140	1958	115
1963	200	1957	177
1962	151	1956	81
1961	183		

In spite of drought conditions, duck production was 9 percent above that recorded in 1965 (Table 3). On Malheur Refuge where large sections of marsh were completely dry, only 13,000 ducklings were raised to the flying stage as compared with 37,000 in 1965 and 30,000 for the 1955-64 period. Coot production also decreased to 15,000 from a peak of 50,000 in 1965 and an average of 37,000 for the previous ten-year period. Broods by species and transect are shown in Table 4.

Production by dabblers was down 7 percent but divers increased 61 percent (Table 5). Redheads and ruddy ducks showed the best recovery from the low diver production of recent years.

Table 3

DUCK PRODUCTION TRENDS 1963-66

Transect	Square Miles	Total Broods				Total Young			
		1966	1965	1964	1963	1966	1965	1964	1963
Klamath Basin	26	236	172	233	117	1,374	959	1,447	770
Summer Lake	1	85	53	113	114	573	364	862	939
N. Lake County	4	11	4	42	35	76	37	306	274
Umatilla County	4	6	3	17	15	36	20	83	93
Jefferson County	1	8	7	4	12	71	53	22	68
Wasco County	1	15	19	12	16	79	114	75	74
Malheur County	45.	45	91	76	90	317	555	498	524
Columbia County	3	20	21	46	-	152	131	331	-
G. I. Ranch	1	12	12	5	21	101	89	54	162
Davis Lake	1	8	12	-	-	58	73	-	-
Jackson County	13	15	36	-	-	71	259	-	-
Umpqua	1	16	14	-	-	146	149	-	-
Klamath Mgt. Area	2	89	-	-	-	608	-	-	-
TOTALS	103	566	444	548	420	3,662	2,803	3,678	2,904

Production in 1966 up 9 percent from 1965

Table 4

DUCK PRODUCTION BY TRANSECT, 1966
No. Broods and No. Young

TRANSECT B - Broods Y - Young		Klamath Basin	Klamath Management Area	Summer Lake	North Lake County	Umatilla County	Jefferson County	Wasco County	Malheur County	Columbia County	G. I. Ranch	Davis Lake	Jackson County	Umpqua	TOTAL
SPECIES															
Mallard	B	35	32	18	4	5	3	7	26	6	6	2	5	12	161
	Y	197	208	153	27	33	27	32	190	41	51	16	25	108	1,108
Gadwall	B	12	13	17			2		3		2				49
	Y	76	91	123			18		18		19				345
Widgeon	B								3						3
	Y								24						24
B.W./Cinnamon Teal	B	12	9	15	4		1	6	9	9	3		5	3	76
	Y	77	75	89	32		10	35	61	71	25		19	32	526
G. W. Teal	B							2							2
	Y							12							12
Shoveler	B		3	1											4
	Y		23	7											30
Pintail	B		4	2			1		4						11
	Y		27	13			9		24						73
Wood Duck	B									5		2	5	1	13
	Y									40		11	27	6	84
Redhead	B	135	23	17	3	1					1				180
	Y	820	149	106	17	3					6				1,101
Canvasback	B	13	5												18
	Y	58	35												93
Bufflehead	B											1			1
	Y											6			6
Ruddy Duck	B	16		15			1					1			33
	Y	70		82			7					14			173
H. Merganser	B											2			2
	Y											11			11
Unidentified	B	13													13
	Y	76													76
TOTAL	B	236	89	85	11	6	8	15	45	20	12	8	15	16	566
	Y	1,374	608	573	76	36	71	79	317	152	101	58	71	146	3,662

Table 5

DUCK PRODUCTION BY SPECIES 1963-66

Species	Number of Broods				Number of Young			
	1966	1965	1964	1963	1966	1965	1964	1963
Dabblers:								
Mallard	161	167	184	165	1,108	1,071	1,188	1,068
Pintail	11	23	13	24	73	159	89	153
Gadwall	49	25	62	67	345	186	508	551
B.W./Cinn. Teal	76	48	115	110	526	316	831	718
G. W. Teal	2	3	0	0	12	15	0	0
Widgeon	3	12	6	1	24	85	34	7
Shoveler	4	0	5	4	30	0	30	25
Wood Duck	13	20	1	0	84	111	3	0
Subtotals	319	298	386	371	2,202	1,943	2,683	2,522
Divers:								
Redhead	180	114	183	82	1,101	643	1,196	604
Canvasback	18	2	2	4	93	9	15	21
Scaup	0	3	0	6	0	16	0	33
Bufflehead	1	3	0	0	6	16	0	0
Goldeneye	0	1	0	0	0	5	0	0
Ruddy	33	13	45	102	173	69	269	559
Subtotals	232	136	230	194	1,373	758	1,480	1,217
Miscellaneous:								
A. Merganser	0	0	2	3	0	0	12	33
H. Merganser	2	1	0	0	11	6	0	0
Unid. Ducks	13	15	11	6	76	79	54	38
Subtotals	15	16	13	9	87	85	66	71
TOTALS	566	450	629	574	3,662	2,786	4,229	3,810

Fall Migrations

Weekly tabulations of waterfowl populations during the fall migration periods are presented in Tables 6 through 13.

1. Southeastern Oregon

The size of the migration flights of ducks through southeastern Oregon was approximately 30 percent higher than in 1964 but far below populations recorded during peak years of 1958 to 1960. Flights arrived on normal dates in September and October and remained until early November when populations gradually declined as the southward migration was continued. In late November a sharp drop in temperatures forced the departure of most of the remaining migrants.

The buildup of northern migrant geese also occurred on normal dates in October but the size of the flights was approximately 40 percent below the number recorded in 1964. Much of this decrease can be attributed to the very low proportion of juveniles in the snow goose population. The freeze in late November also forced the geese to continue their migration.

2. Northeastern Oregon

The first large movement of mallards to the Columbia Basin wintering area in northeastern Oregon came during early November. The buildup in duck numbers continued until mid-December.

Lesser Canada geese arrived on their wintering grounds in small numbers in late October. No large influx of geese was observed during the fall months as the population remained considerably lower than in prior years. A large influx of birds from eastern Washington did, however, take place during the first week of January.

3. Western Oregon

No large migration of wintering waterfowl occurred in western Oregon until mid-November. Populations continued to increase until the last week in December.

Table 6

WATERFOWL POPULATIONS

Sauvie Island

October 5, 1965 through February 1, 1966

Date	Whistling Swan	Canada Goose	Lesser Canada	Cackling Goose	Mallard	Pintail	Widgeon	G.W. Teal	Shoveler	*Diving Ducks	Unidentified Waterfowl	**Other Waterfowl	Coot	Total
Oct. 5	-	5	230	-	240	200	335	1,455	-	30	-	-	-	2,495
Oct. 12	-	-	200	70	1,840	5,850	240	2,300	15	30	-	11	-	10,556
Oct. 18	-	80	1,370	15	4,075	5,090	3,015	3,150	-	45	-	14	-	16,854
Nov. 1	4	50	1,920	110	3,085	9,400	4,950	8,830	-	-	-	18	45	28,412
Nov. 9	40	75	1,705	110	11,455	19,750	6,625	5,195	-	18	-	3	30	45,006
Nov. 17	30	675	2,845	5	32,155	42,575	13,555	3,625	5	17	-	6	70	95,563
Nov. 29	200	865	1,775	415	22,690	23,990	33,035	3,295	30	40	-	88	95	86,518
Dec. 7	220	905	2,770	635	22,415	41,355	23,475	2,960	10	25	-	4	20	94,794
Dec. 29	182	839	2,215	825	14,740	60,125	39,550	1,280	-	96	-	65	6	119,923
Jan. 7	367	-	3,114	-	18,090	34,200	28,275	-	-	50	1,275	50	25	85,446
Feb. 1	19	225	1,103	-	10,800	975	12,205	710	25	303	-	-	443	26,808

* Peak of 5 redheads on Oct. 5; 15 hooded mergansers on Oct. 12; 5 buffleheads on Oct. 18; 5 scaup on Nov. 9; 1 canvasback on Nov. 17; 27 ring-necked ducks on Nov. 29; and 162 ruddy ducks and 135 common mergansers on Feb. 1.

**Peak of 10 white-fronted geese on Nov. 1; and 65 snow geese on Dec. 29.

Sandhill cranes: Oct. 5, 588; Oct. 12, 555; Oct. 18, 618; Nov. 1, 330; Nov. 9, 191.

Table 7

WATERFOWL POPULATIONS
Columbia River from The Dalles Dam to Mouth of John Day River
October 13, 1965 through January 31, 1966

Date	Canada Goose	Mallard	Pintail	Widgeon	Canvas-back	Scaup	*Other Waterfowl	Coot	Total
Oct. 13	450	300	150	200	-	20	12	15	1,147
Oct. 21	1,000	400	100	150	-	12	4	-	1,666
Oct. 26	1,182	546	73	606	1	-	3	124	2,535
Nov. 8	2,386	887	38	503	-	106	9	59	3,988
Nov. 15	3,470	1,424	280	758	-	214	36	67	6,249
Nov. 22	2,724	2,036	478	1,087	7	154	13	36	6,535
Nov. 29	2,176	1,684	187	1,166	-	138	19	72	5,442
Dec. 6	2,609	2,717	345	2,018	12	207	100	49	8,057
Dec. 13	3,134	3,066	250	2,517	7	91	36	56	9,157
Dec. 20	2,027	2,882	245	1,351	1	45	9	22	6,582
Dec. 29	1,921	3,692	500	2,345	6	77	66	80	8,687
Jan. 6	4,425	3,886	648	5,316	12	158	46	17	14,508
Jan. 10	2,849	4,503	536	4,084	6	53	21	47	12,099
Jan. 17	54	3,455	193	897	4	133	22	73	4,833
Jan. 24	173	3,253	142	624	-	40	9	25	4,266
Jan. 31	653	2,754	75	860	10	107	18	13	4,490

*Peak of 9 white-fronted geese and 1 Ross' goose on Oct. 13; 4 snow geese on Oct. 21; 1 ruddy duck on Nov. 15; 4 wood ducks on Nov. 29; 3 scoters on Dec. 6; 55 common mergansers on Dec. 29; and 6 green-winged teal, 11 redheads, 19 goldeneyes, and 2 buffleheads on Jan. 6.

Table 8

WATERFOWL POPULATIONS
Cold Springs National Refuge
October 13, 1965 through February 6, 1966

Date	Canada Goose	Mallard	Pintail	Widgeon	G. W. Teal	*Other and Unidentified	Coot	Total
Oct. 13	2,000	5,000	1,000	500	500	34	-	9,034
Oct. 20	10,000	8,000	2,000	1,000	1,000	35	100	22,135
Oct. 27	10,000	8,000	1,500	1,000	1,000	37	-	21,537
Nov. 2	13,000	10,000	1,000	200	-	20	-	24,220
Nov. 10	15,000	21,000	5,000	4,000	-	67	-	45,067
Nov. 17	15,000	25,000	2,000	3,000	1,000	49	-	46,049
Nov. 24	16,000	30,000	2,500	5,000	-	136	-	53,636
Dec. 1	4,000	40,000	5,000	5,000	-	18	-	54,018
Dec. 8	350	52,000	18,000	8,000	300	12	-	78,662
Dec. 15	5,000	55,000	15,000	4,000	-	10	25	79,035
Dec. 22	250	60,000	20,000	5,000	-	-	-	85,250
Dec. 29	400	50,000	18,000	5,000	-	-	-	73,400
Jan. 6	7,000	130,000	20,000	10,000	-	10	-	167,010
Jan. 12	10,000	70,000	20,000	10,000	-	10	-	110,010
Jan. 21	10,000	22,000	-	2,500	-	13	-	34,513
Jan. 27	15,000	42,300	-	10,000	-	38	-	67,388
Feb. 3	5,000	22,000	2,500	5,000	100	25	-	34,625
Feb. 6	5,300	12,000	2,500	2,500	-	53	10	22,363

*Peak of 30 white-fronted geese on Oct. 13; 10 wood ducks on Oct. 20; 30 snow geese on Oct. 27; 111 whistling swans on Nov. 24; 10 buffleheads on Dec. 15; 10 ring-necked ducks on Jan. 27; 100 gadwalls on Feb. 3; and 50 common mergansers on Feb. 6.

Table 9

WATERFOWL POPULATIONS
McKay Creek National Refuge
October 13, 1965 through February 10, 1966

Date	Canada Goose	Mallard	Pintail	Widgeon	G. W. Teal	*Other and Unidentified	Coot	Total
Oct. 13	-	3,000	3,000	500	250	20	50	6,820
Oct. 20	50	2,000	4,000	3,000	100	15	50	9,215
Oct. 27	150	2,000	5,000	3,000	-	-	-	10,150
Nov. 2	700	1,700	2,500	525	-	89	100	5,614
Nov. 10	610	8,000	10,000	8,000	-	-	-	26,610
Nov. 17	300	6,000	10,000	4,000	-	100	-	20,400
Nov. 24	500	8,000	10,000	4,000	-	50	-	22,550
Dec. 1	5,500	10,000	8,000	4,000	-	13	-	27,513
Dec. 8	5,000	4,100	11,000	5,700	200	46	-	26,046
Dec. 15	7,000	10,000	4,000	3,000	-	17	-	24,017
Dec. 22	7,000	8,000	5,000	5,000	-	1	-	25,001
Dec. 29	3,000	8,000	5,000	4,000	-	-	-	20,000
Jan. 6	6,500	10,000	2,500	1,500	-	5	-	20,505
Jan. 12	10,000	12,800	6,000	5,000	-	4	-	33,804
Jan. 21	5,000	19,000	2,200	8,000	-	50	-	34,250
Jan. 27	5,000	18,000	2,000	8,000	-	50	-	33,050
Feb. 3	2,500	20,000	4,000	6,000	-	100	-	32,600
Feb. 10	4,900	6,000	8,000	5,000	-	64	-	23,964

*Peak of 20 ruddy ducks on Oct. 13; 5 redheads on Oct. 20; 25 shovelers and 50 bufflheads on Nov. 2; 100 whistling swans on Nov. 17; 10 canvasbacks and 30 common goldeneyes on Dec. 8; 7 snow geese on Dec. 15; 50 common mergansers on Jan. 21; and 50 lesser scaups on Feb. 3.

Table 10

WATERFOWL POPULATIONS

Malheur National Refuge
August 25, 1965 through January 4, 1966

Date	Swan	Canada Goose	Snow Goose	Mallard	Gadwall	Widgeon	Pintail	G.W. Teal	Shoveler	Redhead	Canvasback	Ruddy Duck	*Other Species	Coot	Total
Aug. 25	35	5,000	-	50,000	15,000	12,000	60,000	2,000	6,000	2,000	3,000	1,100	9,900	90,000	256,035
Sept. 2	35	5,000	-	50,000	10,000	30,000	80,000	20,000	15,000	2,000	3,000	1,000	7,400	80,000	303,435
Sept. 16	35	6,000	-	60,000	10,000	40,000	90,000	20,000	20,000	2,000	3,000	1,000	6,800	100,000	358,835
Sept. 22	35	6,000	50	60,000	30,000	90,000	100,000	24,000	20,000	4,000	8,000	1,200	6,100	150,000	499,385
Sept. 28	35	6,000	500	60,000	20,000	90,000	100,000	25,000	20,000	3,000	8,000	2,200	6,100	100,000	440,835
Oct. 8	100	5,200	3,000	30,000	15,000	70,000	80,000	20,000	15,000	3,000	8,000	1,500	6,025	100,000	356,825
Oct. 19	135	4,200	5,000	30,000	15,000	50,000	70,000	10,000	12,000	2,000	6,000	2,000	3,300	125,000	334,635
Oct. 26	640	5,100	10,000	25,000	15,000	100,000	90,000	20,000	15,000	10,000	22,000	1,500	3,935	100,000	418,175
Nov. 3	1,040	5,100	12 000	20,000	10,000	70,000	60,000	15,000	15,000	6,000	18,000	1,500	3,935	85,000	322,575
Nov. 10	5,640	5,500	10,000	12,000	5,000	66,000	25,000	3,200	23,500	3,500	23,000	1,100	5,400	75,000	263,840
Nov. 18	6,040	5,500	10,000	12,000	3,000	60,000	25,000	3,000	20,000	3,000	20,000	1,000	5,400	75,000	248,940
Nov. 27	3,040	4,100	5,000	10,000	1,000	30,000	6,000	2,000	15,000	1,500	15,000	1,000	3,600	50,000	147,240
Dec. 2	3,540	4,000	500	11,000	500	25,000	2,000	1,200	3,000	1,200	12,000	500	3,600	50,000	118,040
Dec. 8	4,840	10,100	-	9,000	500	12,000	1,400	2,000	1,000	1,200	4,000	900	3,700	5,000	56,640
Dec. 16	2,540	10,000	-	9,000	300	8,000	1,000	500	400	600	2,000	300	2,700	3,000	40,340
Dec. 23	1,540	8,000	-	8,000	300	2,000	600	200	100	400	1,000	200	1,200	1,000	24,540
Dec. 30	340	6,000	-	8,000	300	1,500	400	100	50	50	200	100	1,600	300	18,940
Jan. 4	240	5,000	-	8,000	300	1,500	200	100	50	50	10	50	1,500	200	17,200

*Peak of 800 white-fronted geese on Oct. 8; 8,000 cinnamon teal and 500 blue-winged teal on Aug. 25; 50 white-winged scoters on Oct. 19; 10 old squaws on Oct. 26; 500 Ross' geese, 500 wood ducks and 900 buffleheads on Nov. 10; 800 ring-necked ducks, 1,200 scaups, and 500 common mergansers on Nov. 27; 1,400 common goldeneyes on Dec. 8; and 200 hooded mergansers on Dec. 30.

Table 11

WATERFOWL POPULATIONS

Summer Lake
August 24, 1965 through April 5, 1966

Date	Whistling Swan	Canada Goose	W. F. Goose	Snow Goose	Mallard	Pintail	Widgeon	Gadwall	G.W. Teal	Diving* Ducks	Other** Ducks	Unid. Ducks	Coots	Total
Aug. 24	-	56	-	1	561	1,052	100	105	-	22	439	2,005	424	4,765
Sept. 10	-	526	207	3	376	1,906	1,023	24	-	25	2,041	21,585	182	27,898
Sept. 16	-	544	340	3	967	1,822	1,550	56	315	3	104	9,950	684	16,338
Sept. 30	-	615	234	2,116	400	2,500	801	61	75	31	6	17,273	136	24,248
Oct. 5	-	691	565	8,779	1,293	2,461	4,800	60	75	9	6	25,150	4,200	48,089
Oct. 12	-	600	400	50,000	17	500	34	3	-	13	1	25,000	2,800	79,368
Oct. 20	-	350	-	100,000	23	287	-	2	2	1	-	10,000	325	110,990
Oct. 26	86	41	-	100,065	12	1,291	-	-	26	12	1	11,065	3,308	115,907
Nov. 10	372	-	-	150,000	12	3,347	-	21	50	56	51	16,745	2,886	173,540
Nov. 16	94	271	-	190,000	40	2,607	9	41	526	95	30	17,600	3,473	214,786
Nov. 22	280	210	-	200,000	76	2,360	15	8	380	118	-	14,500	2,656	220,603
Nov. 29	445	637	-	47	765	950	100	26	40	35	7	6,450	405	9,907
Dec. 6	761	1,209	-	46	116	693	705	23	100	84	-	2,867	145	6,749
Dec. 13	627	1,301	-	1	251	2,975	79	26	-	125	-	6,804	124	12,313
Dec. 20	886	1,672	-	-	514	1,500	1	-	79	113	-	4,767	19	9,551
Dec. 31	620	824	-	-	44	698	25	3	42	8	-	1,864	14	4,142
Jan. 5	1,142	1,351	-	-	916	824	43	64	133	338	-	1,027	14	5,852
Mar. 23	32	119	65	175,000	620	4,124	62	103	719	204	15	4,525	87	185,675
Apr. 5	-	147	-	-	170	58	44	76	51	32	44	5,960	358	6,940

* Peak of 30 redheads on Sept. 30; 125 buffleheads on Dec. 13; 183 ruddy ducks on Jan. 5; and 40 canvasbacks, 125 buffleheads, and 22 common mergansers on Mar. 23.

** Peak of 2,022 cinnamon teal on Sept. 10; and 104 shovelers on Sept. 16.

Table 12

WATERFOWL POPULATIONS
William L. Finley National Refuge
October 13, 1965 through January 4, 1966

Date	Canada Goose	Mallard	Pintail	Widgeon	G.W.Teal	Wood Duck	*Other & Unidenti-fied	Coot	Total
Oct. 13	5	10	-	-	-	100	-	-	115
Oct. 21	5	25	50	-	-	200	-	-	280
Oct. 29	35	25	25	-	-	400	-	-	485
Nov. 3	40	25	25	-	-	400	1	-	491
Nov. 11	25	400	200	-	500	100	-	-	1,225
Nov. 18	275	400	100	-	700	25	-	-	1,500
Nov. 23	150	200	100	50	500	20	5	-	1,025
Dec. 1	206	800	400	400	1,000	25	9	25	2,865
Dec. 8	525	4,000	4,000	2,000	3,000	25	55	100	13,705
Dec. 15	7,000	6,000	2,000	3,000	2,000	25	55	100	20,180
Dec. 22	9,000	9,000	2,000	3,000	2,000	35	77	200	24,312
Dec. 29	7,000	5,000	6,000	2,000	3,000	25	41	400	23,466
Jan. 4	5,020	5,200	7,000	4,000	5,300	10	64	200	26,794

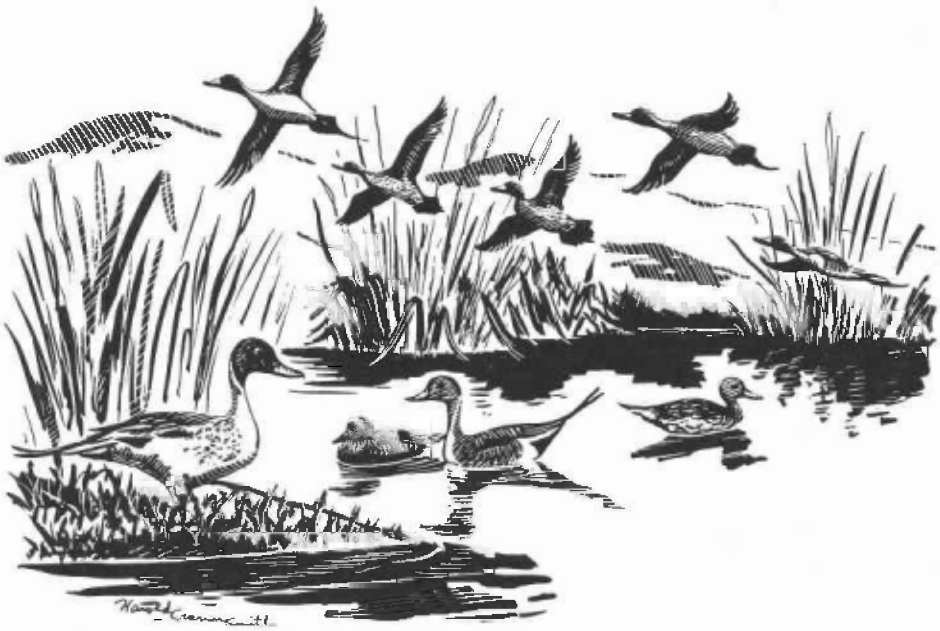
*Peak of 10 ring-necked ducks, 25 lesser scaups, and 10 buffleheads on Dec. 8; 2 snow geese on Dec. 15; 5 ruddy ducks on Dec. 22; and 59 whistling swans on Jan. 4.

Table 13

WATERFOWL POPULATIONS

Baskett Slough National Refuge

Date	Swan	Canada Goose	Mallard	Pintail	Widgeon	G.W. Teal	Coot	Total
Nov. 4	-	2,300	3,000	1,500	300	500	-	7,600
Nov. 23	5	2,300	400	800	100	500	-	4,105
Dec. 8	-	1,600	3,000	1,000	1,000	1,000	100	7,700
Dec. 15	-	4,700	3,000	1,000	800	500	100	10,100
Ankeny National Refuge								
Dec. 14	-	-	50	25	-	50	-	125



Banding

At various times during the year waterfowl banding operations were conducted at five sites by the Game Commission and at three sites by the U. S. Fish and Wildlife Service. Banding during the preseason and postseason periods was conducted to mark samples of predominant species for determination of hunting mortality, distribution, and migration patterns.

During the year 8,930 ducks, 81 geese, and 7 coots were banded in Oregon (Table 14). All ducks and coots banded at Sauvie Island, Summer Lake, Denman Management Area, Cold Springs Refuge, and Malheur Refuge were taken in bait traps. Geese were captured by drive trapping, while wood ducks and hooded mergansers in Benton, Klamath, and Jackson Counties were caught in nest boxes. The number and species of waterfowl banded in each area is tabulated in Table 14.

Recoveries from these bandings and bandings of prior years are shown in Table 15. Oregon banded waterfowl were recovered in 14 states, 5 Canadian provinces, Mexico, and Siberia.

During the 1965 season Oregon hunters reported recovering the following number of banded waterfowl: 1,295 ducks, 221 geese, 4 brant, and 1 swan. These birds were banded in 17 states and 4 Canadian provinces or districts. The returns by state or area of banding are given in Table 16.

Thirteen Russian-banded snow geese were also taken in the state, with 9 shot at Summer Lake, 1 at Silver Lake, 1 near Madras, 1 at Trillium Lake, and 1 in Warner Valley. Reports from Moscow show the birds were banded on Wrangel Island between July 1961 and July 1965.

A summary of the direct returns of preseason banded waterfowl is presented in Table 17. Hunting pressure on the mallard remains high, especially on public hunting areas. Approximately 20 percent of those banded on state areas were reported killed during the season, while only 5.5 percent of those banded on Malheur Refuge were taken. Less than 5 percent of the pintails were shot.

Recovery rates are relatively high at Summer Lake and Sauvie Island as bands are collected at check stations. Rates at each management area, however, are comparable with returns of previous years.

Table 14

WATERFOWL BANDING
May 1, 1965 through April 30, 1966

Species	BANDING STATION								Total
	Sauvie Island	Summer Lake	Denman Mgt. Area	*Malheur Refuge	*Cold Spr. Refuge	*Benton County	Klamath County	Jackson County	
Mallard	1,499	638	147	2,091	742	-	-	-	5,117
Gadwall	-	3	-	47	-	-	-	-	50
Am. Widgeon	614	17	-	431	111	-	-	-	1,173
Eur. Widgeon	-	-	-	2	-	-	-	-	2
G. W. Teal	69	11	2	11	-	-	-	-	93
B. W. Teal	7	-	-	-	-	-	-	-	7
Cinnamon Teal	-	134	-	57	-	-	-	-	191
Shoveler	2	-	-	4	-	-	-	-	6
Pintail	912	83	5	960	12	-	-	-	1,972
Wood Duck	169	-	53	9	-	12	5	6	254
Redhead	-	-	-	31	-	-	-	-	31
Canvasback	-	-	-	1	-	-	-	-	1
Lesser Scaup	26	-	-	-	-	-	-	-	26
Greater Scaup	1	-	-	-	-	-	-	-	1
Ring-necked Duck	1	-	-	-	-	-	-	-	1
Bufflehead	1	-	-	-	-	-	-	-	1
Ruddy Duck	1	-	-	-	-	-	-	-	1
Hooded Merganser	1	-	-	-	-	3	2	-	6
TOTAL DUCKS	3,303	886	207	3,644	865	15	7	6	8,930
Coot	1	2	-	4	-	-	-	-	7
Snow Goose	-	-	-	1	-	-	-	-	1
Canada Goose	-	2	-	50	-	-	-	28	80
TOTAL WATERFOWL	3,304	890	207	3,699	865	15	7	34	9,021

*Banded by U. S. Fish and Wildlife Service.

Table 15

RECOVERY OF OREGON-BANDED WATERFOWL
1965 Hunting Season

Species	State of Recovery												
	Oregon	Calif.	Wash.	Idaho	Mont.	Nevada	Alaska	*Other States	B. C.	Alta.	Sask.	Mexico	Total
Canada Goose	14	8	4	4	1					6			37
Mallard	357	93	117	18	5	1	3	3	18	27	1		643
Gadwall	2	5										2	9
American Widgeon	52	18	19	1	1				9	3	1	1	105
Green-winged Teal	8	10	5										23
Cinnamon Teal	1	3										9	13
Shoveler	3	1	1										5
Pintail	61	72	12	2	1	1	4	9	8	7	1	4	182
Wood Duck	12	11											23
Redhead	1	4	3	1				3					12
Common Goldeneye		2									1		3
Hooded Merganser		1											1
TOTALS	511	228	161	26	8	2	7	15	35	43	4	16	1,056

*Arizona - 1 pintail
Utah - 1 mallard, 2 pintails
Colorado - 1 pintail
New Mexico - 1 mallard
Texas - 3 pintails, 1 redhead
North Dakota - 1 redhead
Florida - 1 redhead
Manitoba - 1 pintail
Ontario - 1 mallard
U.S.S.R. - 1 pintail

Table 16

WATERFOWL BAND RECOVERIES IN OREGON
1965 Hunting Season

State or Province Where Banded	Ducks	Geese	Brant	Swans
Oregon	1,019	37	-	-
Washington	76	12	-	-
California	100	71	-	-
Idaho	38	2	-	-
Nevada	4	1	-	-
Utah	2	1	-	-
Montana	14	6	-	1
North Dakota	1	-	-	-
South Dakota	2	-	-	-
Kansas	1	-	-	-
Illinois	1	-	-	-
Wisconsin	-	1	-	-
New Mexico	-	1	-	-
Arkansas	1	-	-	-
Oklahoma	1	-	-	-
Florida	1	-	-	-
Alaska	17	75	3	-
Alberta	14	3	-	-
Saskatchewan	1	3	-	-
McKenzie District	2	7	1	-
Keetwatin District	-	1	-	-
TOTALS	1,295	221	4	1

Table 17

DIRECT RETURNS FROM PRESEASON BANDED WATERFOWL

Oregon, 1965

Species	Banding Area	Number Banded			Direct Returns			% Direct Returns		
		AD.	IM.	TOTAL	AD.	IM.	TOTAL	AD.	IM.	TOTAL
Mallard	Sauvie Island	83	417	500	12	83	95	14.5	19.9	19.0
	Summer Lake	66	68	134	4	12	16	6.1	17.6	11.9
	Denmen Mgt. Area	49	98	147	16	27	43	32.7	27.6	29.3
	Malheur Refuge	198	690	888	12	37	49	6.1	5.4	5.5
Total Mallards		396	1,273	1,669	44	159	203	11.1	12.5	12.2
Gadwall	Malheur Refuge	0	46	46	0	3	3	0	6.5	6.5
Pintail	Sauvie Island	185	206	391	9	18	27	4.9	8.7	6.9
	Summer Lake	5	3	8	0	0	0	0	0	0
	Denman Mgt. Area	1	4	5	0	0	0	0	0	0
	Malheur Refuge	158	483	641	5	31	36	3.2	7.5	5.6
Total Pintails		349	696	1,045	14	49	63	4.0	6.0	4.7
Am. Widgeon	Sauvie Island	6	70	76	1	9	10	16.7	12.9	13.2
	Malheur Refuge	0	17	17	0	1	1	0	5.9	5.9
Total Am. Widgeons		6	87	93	1	10	11	16.7	11.5	11.8
Shoveler	Sauvie Island	0	2	2	0	1	1	0	50.0	50.0
	Malheur Refuge	0	4	4	0	1	1	0	25.0	25.0
Total Shovelers		0	6	6	0	2	2	0	33.3	33.3
B.W./Cinn. Teal	Sauvie Island	0	7	7	0	0	0	0	0	0
	Summer Lake	0	134	134	0	1	1	0	0.7	0.7
	Malheur Refuge	0	57	57	0	1	1	0	1.8	1.8
Total B. W./Cinn. Teal		0	198	198	0	2	2	0	1.0	1.0

Table 17

DIRECT RETURNS FROM PRESEASON BANDED WATERFOWL

Oregon, 1965
(continued)

Species	Banding Area	Number Banded			Direct Returns			% Direct Returns		
		AD.	IM.	TOTAL	AD.	IM.	TOTAL	AD.	IM.	TOTAL
G. W. Teal	Sauvie Island	11	51	62	1	5	6	9.1	9.8	9.7
	Denman Mgt. Area	1	1	2	0	0	0	0	0	0
	Malheur Refuge	0	7	7	0	0	0	0	0	0
Total G. W. Teal		12	59	71	1	5	6	8.3	8.5	8.5
Wood Duck	Sauvie Island	15	154	169	0	11	11	0	7.1	6.5
	Klamath County	5	0	5	0	0	0	0	0	0
	Jackson County	26	33	59	2	1	3	7.7	3.0	5.1
	Malheur Refuge	0	6	6	0	0	0	0	0	0
Total Wood Ducks		46	193	239	2	12	14	4.3	6.2	5.9
Redhead	Malheur Refuge	0	31	31	0	0	0	0	0	0
Canvasback	Malheur Refuge	0	1	1	0	0	0	0	0	0
Hooded Merganser	Klamath County	2	0	2	0	0	0	0	0	0
	Sauvie Island	1	0	1	0	0	0	0	0	0
Total H. Mergansers		3	0	3	0	0	0	0	0	0
Canada Goose	Malheur Refuge	11	6	17	0	1	1	0	16.7	5.9
	Summer Lake	0	2	2	0	0	0	0	0	0
	Malheur County	8	11	19	1	0	1	12.5	0	5.3
	Jackson County	0	28	28	0	4	4	0	14.3	14.3
Total Canada Geese		19	47	66	1	5	6	5.3	10.6	9.1
Coot	Sauvie Island	1	0	1	0	0	0	0	0	0

Hunting Season

The 90-day waterfowl season opened on October 9 and terminated January 6 except in the Columbia Basin counties of Baker, Gilliam, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, and Wasco, where the season was extended on ducks and coots through January 16. In these nine counties shooting was permitted until one-half hour after sunset.

The brant season extended from December 1, 1965 through February 13, 1966, and the snipe season ran from October 23, 1965 through December 11, 1965.

The bag limit remained at 4 ducks per day and 8 in possession for the fifth consecutive year. However, the daily limit could not include more than 3 mallards or pintails singly or collectively. In the nine Columbia Basin counties the bag limit was 6 ducks daily and 12 in possession providing the daily bag contained at least 3 mallards. The bag limit could not include more than 2 wood ducks or canvasbacks daily or in possession. One hooded merganser daily and 2 in possession were allowed in the merganser limits of 5 and 10.

Goose bag limits remained the same as in previous years. Six geese were permitted daily or in possession providing at least 3 in the daily bag were snow geese. One Ross' goose could be part of the bag or possession limit.

The brant bag limit was 3 daily or in possession; coot, 25 daily or in possession; and snipe, 8 daily with a possession limit of 16.

Harvest

Results of the annual random mail survey, presented in Table 18, indicate that hunting pressure is continuing to decline. Only 44,470 hunters hunted waterfowl as compared with 46,121 in 1964 and 77,257 during the peak year of 1957.

The indicated harvest of ducks and geese was the lowest since annual surveys were initiated in 1950. Only 348,997 ducks and 43,654 geese were taken; a decline of 9.5 percent from 1964. Hunting success was also down, with hunters averaging 1.2 ducks and 0.15 geese per man-day.

On opening weekend, hunters averaged 2.5 birds per man but success rapidly declined to less than one bird per hunter-day during October and early November. With the arrival of wintering birds in late November, success rose to an average of nearly 2 birds per hunter.

Very few hunters took advantage of the extended season or increased bag limit in the Columbia Basin counties. Success remained low due to an absence of hunting sites and relatively mild weather.

A summary of results on four public hunting areas is presented in Table 19, with the species composition of birds taken during the past two years shown in Table 20.

Age classification of 1,025 snow geese shot at Summer Lake showed only 47 juveniles to 971 adults. In 1964 a random bag check revealed 389 young birds to 184 adults. Apparently, some disaster struck the breeding grounds on Wrangel Island, the source of the majority of Summer Lake snow geese, to practically eliminate the annual production.

Table 18

WATERFOWL HARVEST

	1965	1964	1963
Size of sample	14,827	17,604	17,801
Percent of license holders hunting waterfowl	13.6%	14.4%	15.3%
Number of waterfowl hunters	44,470	46,121	46,498
Average times afield	6.53	6.38	6.73
Ducks killed per day	1.20	1.30	1.19
Geese killed per day	0.15	0.18	0.17
Total ducks killed	348,997	382,187	371,129
Total geese killed	43,654	51,761	54,666
TOTAL WATERFOWL KILLED	392,651	433,948	425,795
CHANGE FROM PRECEDING YEAR	-9.5%	+1.9%	+4.2%

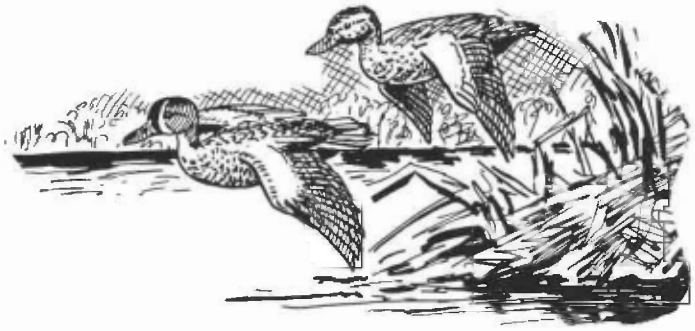


Table 19

SUMMARY OF SHOOTING GROUNDS SUCCESS

Area	Days of Season	Hunter Days	HARVEST					Success Ratio
			Ducks	Geese	Coots	Snipe	Total	
Summer Lake	75	4,840	4,930	1,025	234	3	6,192	1.28
Sauvie Island	46	9,049	15,406	159	33	7	15,605	1.72
Warner Valley	36	354	356	176	12	-	544	1.54
Gov't. Island	7	74	185	2	-	-	187	2.53
TOTALS		14,317	20,877	1,362	279	10	22,528	1.57

Table 20

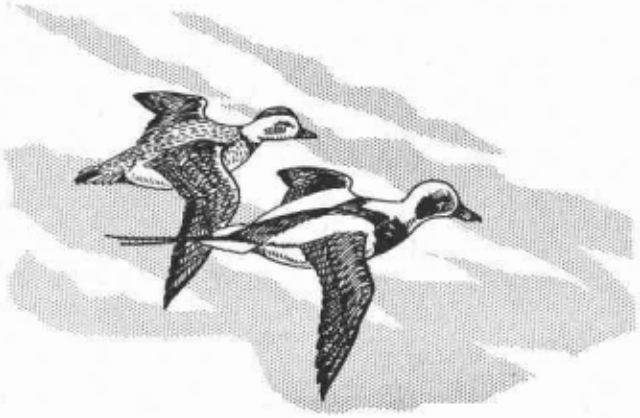
SPECIES TAKEN ON PUBLIC SHOOTING GROUNDS, 1965 and 1964 SEASONS

Species	Summer Lake		Sauvie Island		Govt. Island		Warner Valley		Total	
	1965	1964	1965	1964	1965	1964	1965	1964	1965	1964
Mallard	1,700	1,793	5,937	4,851	42	72	188	324	7,867	7,040
Am. Widg.	840	807	2,958	2,605	81	131	23	20	3,902	3,563
Eur. Widg.	1	-	-	1	-	-	-	-	1	1
G. W. Teal	390	467	3,071	2,220	44	32	1	2	3,506	2,721
Pintail	1,081	1,206	2,918	1,318	11	36	97	79	4,107	2,639
Shoveler	208	190	268	196	-	1	-	-	476	387
Gadwall	474	394	52	32	5	-	13	17	544	443
Cinn. Teal	62	31	-	-	-	-	-	2	62	33
B. W. Teal	-	-	2	7	-	-	-	-	2	7
Wood Duck	7	4	17	22	-	-	-	-	24	26
Ruddy	9	18	12	7	-	-	-	-	21	25
Goldeneye	15	25	6	3	-	-	1	-	22	28
Bufflehead	21	63	18	12	1	-	-	-	40	75
R. N. Duck	5	3	17	10	-	-	2	-	24	13
Scaup	19	23	78	56	1	2	-	3	98	84
Canvasback	11	13	7	11	-	1	-	-	18	25
Redhead	80	95	5	2	-	-	9	2	94	99
Hooded Merg.	1	2	23	30	-	-	-	-	24	32
Common Merg.	5	12	16	19	-	-	-	-	21	31
W. W. Scoter	-	1	1	6	-	-	-	-	1	7
Surf Scoter	1	-	-	3	-	-	-	-	1	3
Scoter (Unid.)	-	-	-	1	-	-	-	-	-	1
Old Squaw	-	1	-	-	-	-	-	-	-	1
Muscovy	-	-	-	1	-	-	-	-	-	1
TOTAL DUCKS	4,930	5,148	15,406	11,413	185	275	334	449	20,855	17,285

Table 20 (Continued)

SPECIES TAKEN ON PUBLIC SHOOTING GROUNDS, 1965 and 1964 SEASONS

Species	Summer Lake		Sauvie Island		Govt. Island		Warner Valley		Total	
	1965	1964	1965	1964	1965	1964	1965	1964	1965	1964
Snow Goose	836	4,795	4	14	1	-	30	119	871	4,928
Canada Goose	110	171	50	48	1	7	78	39	239	265
Lesser Canada	2	1	81	61	-	2	-	20	83	84
Cackler	19	42	18	16	-	-	53	123	90	181
White-front	49	87	5	17	-	-	15	18	69	122
Ross' Goose	9	20	-	-	-	-	-	-	9	20
Black Brant	-	1	-	-	-	-	-	-	-	1
TOTAL GEESE	1,025	5,117	158	156	2	9	176	319	1,361	5,601
Coot	234	58	33	24	-	-	11	2	278	84
Snipe	3	1	7	5	-	-	-	-	10	6



Winter Inventory

The annual mid-winter inventory was conducted during the first week in January and revealed a total of 417,563 ducks, 68,039 geese, 798 brant, 4,389 swans, and 44,391 coots wintering in Oregon. See Table 21 for comparative results for the past five winters.

A substantial increase from 1965 was recorded in the number of pintails and geese wintering in the state, but a slight decline was noted in the number of mallards and widgeon.

Overall, the waterfowl population was up 2.5 percent; with ducks up 5.2 percent, geese up 70.1 percent, and swans up 2.9 percent. Coots were down 42.6 percent and brant down 39.8 percent.

Black Brant

Very little interest is shown in hunting brant due to the low wintering population and their presence during the season in only four bays (Tillamook, Netarts, Yaquina, and Coos). Special decoys and equipment are necessary for any chance of success.

During the 75-day season, 38 hunters were checked with 13 brant for a success of .34 birds per hunter-day. To take the 13 brant required 124 hours of hunting.

Snipe

Trends in snipe densities are measured in western and southern Oregon each spring in conjunction with the upland game census. Results obtained are presented in Table 22 with the average densities for the previous four years included for comparison.

In northeastern and southeastern Oregon where 20-mile crow count samples traverse snipe habitat, the number of snipe seen or heard is also recorded. On 280 miles of established routes, 137 snipe were recorded as compared with 117 in 1965 (Table 23).

Table 21

WINTER INVENTORY TRENDS IN OREGON

Species	1966	1965	1964	1963	1962
Mallard	211,992	229,350	168,795	221,441	364,019
Gadwall	1,050	566	2,686	1,207	555
Amer.Widgeon	63,674	72,255	45,544	100,996	64,023
Eur. Widgeon	-	-	3	2	1
G. W. Teal	7,276	8,317	8,390	7,484	7,259
B.W./Cinn. Teal	1	-	25	5	-
Shoveler	1,020	370	1,014	18,217	609
Pintail	77,901	53,557	83,091	89,483	101,896
Wood Duck	67	57	60	69	149
Redhead	328	143	174	34	122
Canvasback	2,712	2,509	4,676	2,922	3,020
Scaup	4,144	6,635	19,033	7,470	8,756
Ring-necked Duck	2,542	1,403	1,471	887	1,249
Harlequin	14	11	17	14	7
Goldeneye	1,501	1,201	3,639	2,119	2,784
Bufflehead	3,853	3,670	2,707	3,138	6,007
Ruddy Duck	7,764	8,381	4,634	11,959	6,800
Merganser	2,467	1,431	3,316	2,657	1,404
Scoter	817	946	627	948	958
Unid. Ducks	28,440	5,796	12,726	16,676	12,841
TOTAL DUCKS	417,563	396,598	362,628	487,728	582,459
Coot	44,391	80,828	53,300	26,718	28,464
Snow Goose	57	427	3	700	73
Cackling Goose	4,435	930	1,948	5,794	5,277
White-fronted Goose	4	16	1	93	14
Canada Goose	63,543	37,623	47,689	51,426	106,533
Black Brant	798	1,325	1,626	1,155	2,266
TOTAL GEESE	68,837	40,321	51,267	59,348	114,163
Swan	4,389	4,265	6,873	4,396	4,903
TOTAL WATERFOWL	535,180	522,012	474,068	578,190	729,989
Percent Change From Previous Year	+2.5%	+10.1%	-18.0%	-20.8%	-29.5%

Table 22

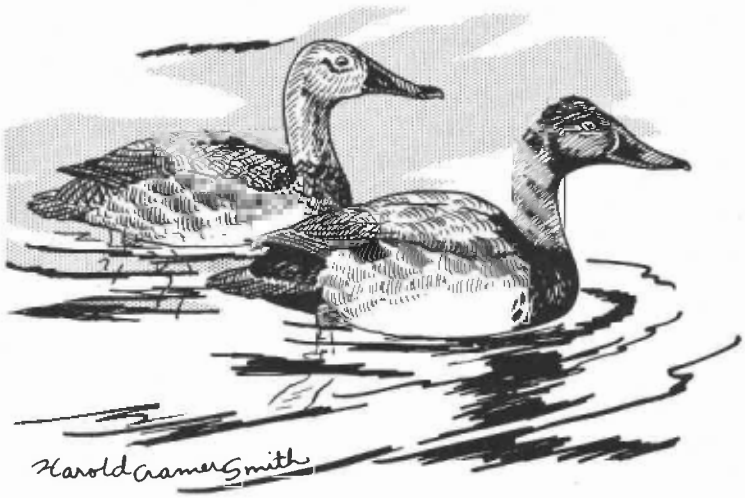
SNIPE CENSUS
(Western Oregon)

Region	Birds per 100 Acres 1966	1965	1964	1963	1962	1966 No. Birds Observed	1966 Acres Censused
Northwest	9.49	5.15	5.10	5.81	3.69	275	2,898
Southwest	0.17	0.30	0.17	0.67	0.80	1	600

Table 23

SNIPE CENSUS
(Eastern Oregon)

County	No. Samples	Mileage	Snipe 1966	1965	1964
Baker	5	100	46	33	26
Union	4	80	20	19	9
Wallowa	3	60	28	40	28
Lake	1	20	22	11	24
Harney	1	20	21	14	-
TOTALS	14	280	137	117	87



During the 1965-66 trapping season a record low of only 787 residents obtained licenses to trap in Oregon. This included the landowner, who obtains a free license, as well as the general trapper. A steady decline in raw fur prices since the period immediately following World War II has resulted in fewer trappers each year. The number of trappers has decreased steadily from the record high of 2,681 during the 1946-47 season.

Only eight animals are classified as furbearers by the legislature, but 17 species produce fur of commercial value. Most of the trapping effort is directed toward the taking of beaver, otter, mink, and muskrat, the most valuable species. During the last two winters, however, wildcat and coyote fur prices have increased markedly and created an increase in trapping effort toward these long-neglected species.

BEAVER AND OTTER

The beaver and otter season extended from November 15, 1965 through February 15, 1966 in all counties except Grant, Lake, Malheur, and Harney. A November 1 opening was authorized in these four counties to permit trapping of the high country before snow and cold weather made operation of a trapline difficult.

During the season trappers purchased 11,493 beaver seals at $1.00 each. They reported using 8,788 on beaver and submitted most of the balance for refund.

The catch of beaver, otter, and other fur-producing species is presented by county in Table 1.

Census

Twelve beaver trend samples of one mile each on 12 streams in Douglas County were checked. Sixty-nine slides, 27 dens, and 7 dams were tallied in the census.

Damage

During the year, 176 complaints of beaver damage were received and acted upon. Some dead-trapping and live-trapping was conducted by Commission personnel to remove nuisance animals, but most of the complainants remedied their own problems through use of kill permits or the use of repellents. Many deferred action until the open season and engaged a private trapper.

Table 2 shows the number and disposition of complaints of beaver damage by region for the last three years.

Table 1

1965-66 FUR CATCH

County	No. Trappers' Reports	Beaver	Otter	Mink	Muskrat	Raccoon	Marten	Skunk	Civet Cat	Weasel	Opossum	Badger	Gray Fox	Red Fox	Wildcat	Coyote	Nutria
Baker	12	88	2	33	175	12	-	-	-	1	-	3	-	-	13	11	-
Benton	22	391	4	26	74	71	-	2	-	-	-	-	-	-	-	-	215
Clackamas	28	397	5	35	182	64	-	-	2	-	42	-	15	3	6	2	319
Clatsop	40	512	28	152	1,440	210	-	-	-	19	36	-	-	-	19	13	-
Columbia	24	361	10	40	536	71	-	21	2	3	87	-	-	9	16	27	312
Coos	32	472	33	25	725	28	-	1	4	-	-	-	-	-	6	3	-
Crook	5	122	-	27	96	1	-	-	-	-	-	-	-	-	6	9	-
Curry	10	202	24	5	147	17	1	2	2	-	-	-	-	-	1	-	-
Deschutes	19	46	5	83	240	-	6	-	-	-	-	1	-	-	47	20	-
Douglas	61	900	49	118	244	119	-	2	8	-	-	-	7	2	6	8	18
Gilliam	3	30	-	18	64	12	-	-	-	-	-	1	-	-	5	1	-
Grant	20	219	-	87	606	33	-	-	-	-	-	-	-	-	8	3	-
Harney	12	92	-	7	24	18	-	-	1	-	-	12	-	-	102	108	-
Hood River	6	34	-	6	107	64	-	3	10	4	-	-	-	-	17	8	-
Jackson	27	119	5	23	727	64	-	7	1	-	-	-	16	-	21	46	-
Jefferson	5	17	-	3	49	1	-	3	3	3	-	1	-	-	7	2	-
Josephine	15	61	25	10	481	91	-	20	14	-	-	-	9	-	11	5	-
Klamath	39	189	18	108	11,272	49	15	43	22	1	-	1	3	11	52	9	-
Lake	3	187	-	1	14	7	-	-	-	1	-	5	-	-	71	7	-
Lane	80	1,176	33	168	488	182	-	6	79	3	-	-	23	13	49	19	100
Lincoln	32	499	26	83	133	177	-	-	43	1	10	-	2	1	54	32	115
Linn	31	499	10	24	144	89	-	2	11	1	3	-	27	14	7	-	356
Malheur	30	114	14	5	3,565	38	-	-	8	-	-	32	-	-	361	156	-
Marion	21	379	8	49	188	66	-	16	-	-	21	-	2	3	3	-	571
Morrow	2	25	-	5	6	-	-	-	-	-	-	-	-	-	22	-	-
Multnomah	21	161	5	38	1,414	29	-	-	1	1	28	-	1	-	2	-	46
Polk	8	108	2	2	18	24	-	-	-	-	-	-	8	16	-	4	42
Sherman	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tillamook	25	272	32	124	678	63	-	-	-	-	1	-	-	-	3	-	9
Umatilla	22	254	-	62	1,972	15	-	3	-	-	-	1	-	-	34	1	1
Union	21	135	2	62	2,350	22	-	1	-	2	-	-	-	-	6	-	-
Wallowa	21	110	5	56	2,080	95	-	2	3	3	-	4	-	-	87	14	-
Wasco	8	98	3	13	30	7	-	-	-	-	-	-	1	-	7	-	-
Washington	14	230	10	22	322	79	-	6	4	1	9	-	15	1	9	-	355
Wheeler	-	59	-	2	4	-	-	-	-	-	-	-	-	-	1	2	-
Yamhill	12	193	3	16	49	37	-	-	7	2	-	-	3	2	4	3	301
TOTALS	731	8,788	361	1,538	30,644	1,855	22	140	225	46	237	61	132	75	1,063	513	2,760

Ringtail Cat: Coos, 4; Douglas, 1.

Table 2

BEAVER COMPLAINT DISPOSITION

Region	Complaints			Beaver Dead-trapped			Beaver Live-trapped and Transplanted			Kill Permits Issued		
	1965	1964	1963	1965	1964	1963	1965	1964	1963	1965	1964	1963
Northwest	68	62	73	0	3	2	2	0	0	18	17	49
Southwest	24	45	37	0	0	0	0	0	0	10	14	13
Central	8	10	9	1	14	4	0	5	8	2	2	0
Northeast	62	47	62	55	53	27	0	2	7	1	0	6
Southeast	14	10	13	1	5	10	0	0	2	0	0	0
TOTALS	176	174	194	57	75	43	2	7	17	31	33	68

OTHER FURBEARERS

Fur Catch

Seven hundred thirty-one of the 787 licensed trappers (92 percent) submitted reports of their fur catch. They reported catching a total of 48,465 animals of 17 species whose pelts sold for $192,291.74. Some additional trapping took place by children under 14 years of age who were not required to obtain a license or file a report of their catch.

Nutria and opossum, two illegally introduced species, continued to increase and spread throughout western Oregon. Some trapping effort was devoted to the trapping of nutria when an outlet was found for extra-large pelts. Most of the catch of nutria and opossum, however, was incidental to other fur trapping.

Fur Values

The market for the popular furs (muskrat, otter, and beaver) was slightly higher than for the 1964-65 season but the popularity of wild mink continued its decline. Long-haired furs brought higher prices, with most destined for export to Japan.

The average prices for all fur animals, as computed from the trappers' report cards, are presented in Table 3.

Table 3

AVERAGE PELT PRICES

Species	1965-66	1964-65	1963-64	1962-63	1961-62
Mink	$ 7.33	$ 7.64	$ 8.31	$ 7.68	$ 8.89
Muskrat	1.24	.98	1.11	.95	.62
Marten	6.40	9.42	6.83	5.89	3.08
Otter	24.48	21.71	20.89	19.63	19.65
Beaver	11.90	7.94	10.55	10.24	9.69
Wildcat	14.08	5.78	5.25	4.57	3.73
Coyote	6.42	4.37	3.08	2.63	2.11
Badger	3.01	1.47	1.88	1.31	1.46
Raccoon	2.31	1.45	1.62	2.08	1.84
Gray Fox	1.83	1.16	.70	.80	.62
Red Fox	3.97	1.51	3.34	3.69	1.82
Skunk	1.10	.86	.72	.77	.46
Civet Cat	1.71	1.44	1.13	.83	.91
Weasel	.41	.49	.25	.52	.28
Opossum	.47	.30	.39	.29	.23
Ring-tailed Cat	1.50	1.25	-	.88	.50
Nutria	2.00	1.22	1.26	.85	.57

Muskrat Cenus (Summer Lake)

The annual muskrat house census was conducted on January 10. A total of 68 active houses was counted, the lowest count on record. The next lowest count was last year when 325 houses were tallied. The downward trend in muskrats appears to be due to high water in the marsh and, because of the decline, no muskrats have been trapped on the area during the past two winters. Comparative muskrat house counts and harvest data are presented in Table 4.

Table 4

SUMMER LAKE MUSKRAT CENSUS AND HARVEST

Year	Number of Houses	Muskrats Harvested	No. of Trap Nights	Av. No. Trap Sets per Catch
1955	771	827	3,141	3.7
1956	726	835	2,160	2.5
1957	527	0	-	-
1958	1,033	1,652	3,994	2.4
1959	1,342	1,543	3,344	2.1
1960	1,228	1,602	3,920	2.4
1961	568	0	-	-
1962	588	550	1,238	2.2
1963	627	438	972	2.2
1964	712	417	1,271	3.0
1965	324	0	-	-
1966	68	0	-	-
TOTALS	8,514	7,864	20,040	

Predators

The control of predatory and nuisance animals in Oregon is a cooperative effort participated in by several private, county, state, and federal agencies. The program is administered by the Division of Wildlife Services of the U. S. Fish and Wildlife Service and operates on funds supplied by these agencies.

A change in the federal predator control program places emphasis on the control of specific nuisance or destructive animals rather than on a general program to keep predatory animal populations low. With this change in policy no figures on the overall predator take are released.

The accelerated program of predator control on problem game ranges, however, was continued. Heavy predator control measures were conducted on antelope kidding grounds, turkey release sites, and deer winter areas.

Coyote populations remain high throughout the state and comparable with peak numbers in 1964 and 1965 when 17 coyotes per 1,000 miles were observed on big game routes.

Bobcat populations, however, are down, due to intensive commercial trapping. Bobcat pelts brought as high as $27.00 per pelt on the market last winter which stimulated trapping effort.

A check of Jackson County bounty records revealed the following number of predators bountied during the last four years.

Table 5

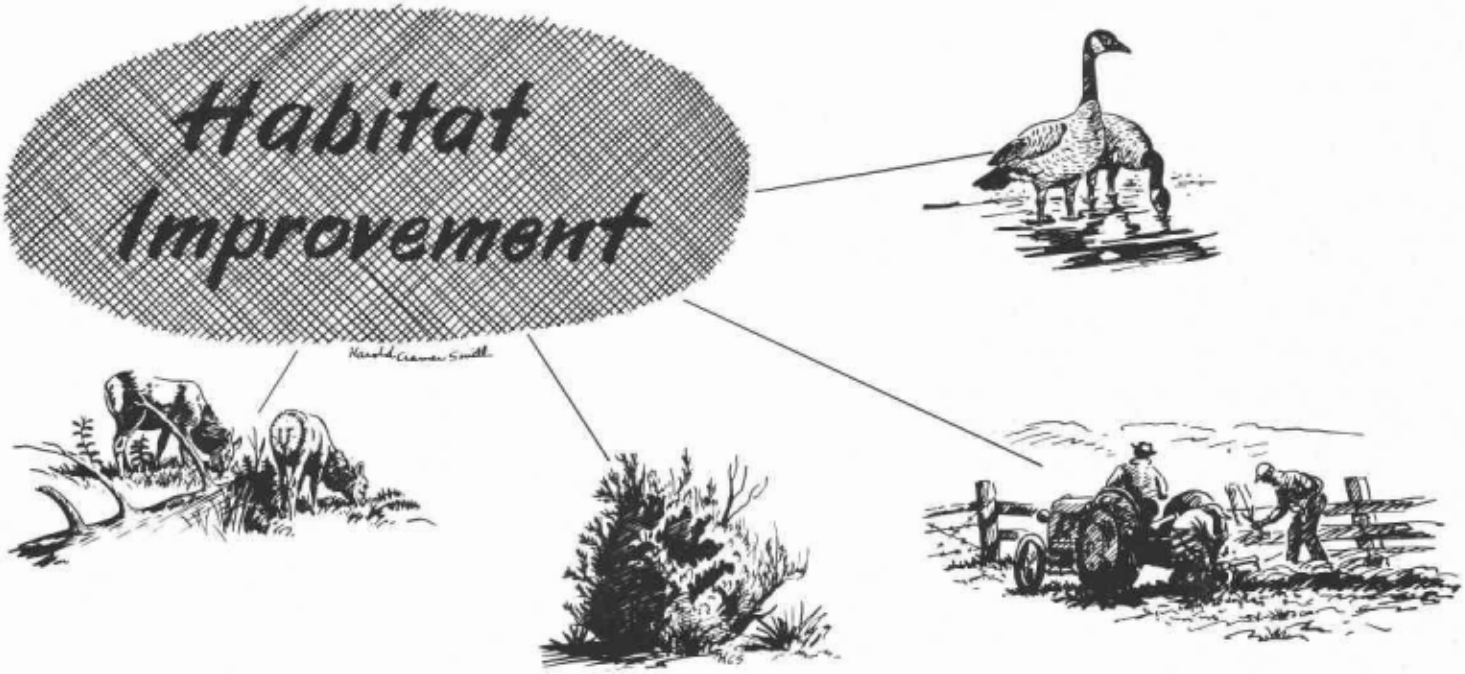
PREDATORS BOUNTIED
(Jackson County)

Species	1965	1964	1963	1962
Coyote	707	728/1	538	504
Bobcat	318	426	332	259
Fox/2	76	-	-	-
Cougar/3	0	0	0	0

/1 Coyote bounty raised to $7.50 from $5.00; government hunters discontinued.

/2 First year bounty paid on fox; $3.50.

/3 Last record of cougar bountied in county was in 1959 when two were bountied.



Six major practices are executed to enhance wildlife habitat. Plantings of shrubs and trees, primarily in the Columbia Basin, are made for upland game bird cover. Herbaceous and browse seedings are planted to provide food for upland game birds, waterfowl, and big game. Self-filling cisterns placed in areas lacking water provide this essential ingredient for upland game birds. Water holes and big game cisterns developed on deer summer ranges increase the distribution of deer in otherwise suitable habitat. Waterfowl nesting is enhanced by erection of wood duck nest boxes and construction of goose nesting platforms. Fencing is erected to protect new plantings, upland game bird cisterns, water developments, trial plantings, evaluation plots on big game range revegetation projects, and desirable stands of native vegetation.

Cover Plantings

Trees and shrubs planted in 1966 totaled 86,735. Fifty-three acres of block shrub and tree plantings were made on 27 sites in the Columbia Basin and Union and Jefferson Counties. Seven and three-fourths miles of rose fence rows were planted on fifteen sites in northwestern, central, and northeastern Oregon. Tables 1, 2, and 3 list planting details.

Plant survival of new stock in 1966 was only fair in the Northeast Region. Weather conditions were excellent at the time of planting but late, record-setting freezes after new growth had started were extremely detrimental. Black locust suffered heavily from frost damage. Four-year-old trees were killed back to ground level in Union County. Survival of locust seedlings is roughly 65 percent. American plum was also damaged in Umatilla County. Honeysuckle has made good growth with 90 percent survival. Wood rose has an 80 percent survival including plantings on highly alkaline soils. Russian olive and sumac survival in Union County is sporadic, often good and poor within the same row. In Union County first-year shrub survival was: Wood rose, 80 percent;

American plum, 70 percent; black locust, 65 percent; Russian olive, 75 percent; honeysuckle 90 percent; and sumac, 50 percent. Survival of all species planted averaged 71 percent. Willow cuttings survival at Prineville Reservoir was 50 percent.

Weed control with Simazine-80 and 2,4-D amine was continued. Twenty-two sites in Union County and twenty-nine sites in Umatilla and Morrow Counties were sprayed. Drought conditions after application made the sprays ineffective on many areas. Rod weeding, discing, and hand hoeing were used to eliminate weed competition from these sites.

Fruits were collected from native and planted shrubs to obtain seed for propagation. Seed processing and drying was performed at the Pendleton habitat shop. Seed delivered to the State Forest nursery for propagation was as follows:

Species	No. Seed
American Plum	16,000
Chokecherry	120,000
Hawthorn	150,000
Honeysuckle	210,000
Blue Elderberry	600,000
Sumac	200,000
Wood Rose	210,000

Thirty-five pounds of wedge-leaf Ceanothus seed were collected in Klamath County for planting on big game winter ranges.

Table 1

Shrub Plantings by Species and County

Species	Benton	Crook	Deschutes	Jefferson	Lane	Morrow	Umatilla	Union	Wasco	Total
American Plum						1,200	2,325	2,255		5,780
Black Locust						800	2,960	2,870		6,630
Chokecherry						1,300	2,850			4,150
Honeysuckle						2,250	7,750	3,980		13,980
Multiflora Rose	2,400	11,500	2,600	7,200	7,600				8,700	40,000
Three-leaved Sumac						800	5,200	1,850		7,850
Russian Olive		450	150	1,400		700	280	1,020		4,000
Willow		350								350
Wood Rose						400	400	3,195		3,995
TOTALS	2,400	12,300	2,750	8,600	7,600	7,450	21,765	15,170	8,700	86,735

Table 2

Sites and Acres
of New Block Shrub and Tree Plantings

County	Number of Sites	Acres	Number Planted
Jefferson	1	7	1,400
Morrow	5	20	16,495
Umatilla	5	15	7,450
Union	16	11	11,670
TOTALS	27	53	37,015

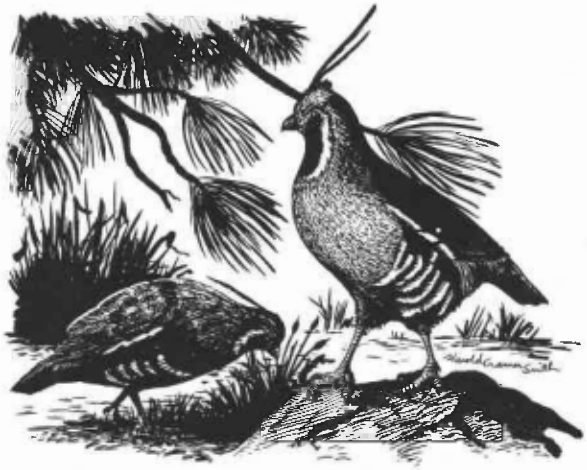


Table 3

Rose Plantings

County	New Sites	Multiflora Rose	Wood Rose	Replacements	Miles of Fence Rows
Benton	2	2,400			1/2
Crook	2	9,300		2,200	1 3/4
Deschutes	1	1,500		1,100	1/4
Jefferson	2	7,000		200	1 1/2
Lane	2	7,600			1 1/2
Morrow	1		400		1/4
Umatilla	1		400		
Union	2		3,195		3/4
Wasco	2	5,700		3,000	1 1/4
TOTALS	15	33,500	3,995	6,500	7 3/4

Ten-year agreements are signed with landowners for habitat improvement developments on private lands. These agreements also provide for public access for hunting. New agreements this year opened over 11,500 acres to hunting. Under memorandums of understanding and agreements with the U. S. Bureau of Land Management, U. S. Forest Service, and U. S. Bureau of Reclamation, habitat developments were made on public lands in Crook, Deschutes, Grant, Harney, Jefferson, Klamath, Lake, and Lane Counties.

Table 4

Ten-Year Agreements With Private Landowners

County	New Agreements	Agreements In Effect	Sites Completed** 1965-66	Sites Completed** Total	Acres Newly Opened to Hunting
Baker		3	3	3	
Gilliam		19	9	46	
Grant		2		19	
Morrow	3	53	14	143	11,360
Umatilla		103	5	417	
Union	1*	24	12	41	
Benton	1	1	1		60
Lane	1	1	1		100
Polk		1		18	
Crook	3	8		11	Not Recorded
Deschutes		2		3	
Jefferson	1	5		36	Not Recorded
Klamath		7			
Sherman	2*	55		216	
Wasco		10		19	
TOTAL	12	294	45	972	11,520+

* Renewal

**Sites completed no longer require shrub cultivation and have grass seeded between the shrub rows for nesting cover.

Browse and combination browse and grass seedings for deer were planted on 1,555 acres on 11 sites. At Antelope Springs on the Malheur National Forest, 80 acres were seeded to bitterbrush. The Forest Service is to fence and also make grass seedings in this area. On the Camp Creek U. S. Bureau of Land Management cooperative project, 200 acres of the Ammon pasture were seeded with the browse seeder to bitterbrush and wedge-leaf Ceanothus at approximately 50-foot intervals. On the Cold Springs area the U. S. Bureau of Land Management cooperatively seeded bitterbrush from two drill openings of their 10-foot rangeland drills on 380 acres. The same procedure was followed in seeding the 800-acre Severance area. Crested wheat-grass was the companion grass sown. Other cooperative browse and grass seeding trials included 10 acres of B.L.M. land in Rabbit Valley seeded with four wheat grasses, nomad alfalfa, and bitterbrush; fifty-five acres of silver sage on two sites on the Ochoco National Forest seeded to bitterbrush and wheat grass; ten acres of pine forest on the Ochoco interseeded to bitterbrush with the browse seeder; and 15 acres on an old burn near the Ochoco Ranger Station seeded with browse seeders to bitterbrush, wedge-leaf Ceanothus, and ponderosa pine. On private land near Prineville Reservoir, five acres of an abandoned rye field was plowed and drilled with four wing saltbush, wheat grass, and nomad alfalfa. Seedings made for big game are listed in Table 6.

Table 5

Herbaceous Seedings for Game Birds

County	Area	Sites	Acres	Varieties
Crook	Prineville Reservoir	4	27	Grain
Coos	Henderson Marsh	2	15	Grain
Deschutes	Wickiup Reservoir	1	15	Fall grain, green feed
Grant	Lower John Day	1	1	Lana vetch (doves)
Columbia	Sauvie Island	1	5	Annual aquatics
Lane	Florence Sand Dunes	1	25	Grain
	Fern Ridge Reservoir	11	200	Corn, Sudan gr.
Marion	Salem	1	3	Sudan grass
Malheur	Patch Island	2	40	Grain
Sherman	Farmland	2	5	Perennial grass
Umatilla	Shrub plantings	9	100	Perennial grass
Morrow	Shrub plantings	9	80	Perennial grass
Union	Shrub plantings	12	16	Perennial grass
TOTALS		56	532	

Table 6

Big Game Herbaceous and Browse Seedings

County	Area	Sites	Acres	Varieties
Clatsop	Coast Range	3	200	Big trefoil, burnett
Crook	Prineville Reservoir	2	27	Grass, legumes
	Camp Creek (Ammon Area)	1	200	Bitterbrush, wedge-leaf Ceanothus
	Camp Creek (Cold Sprs.)	1	380	Bitterbrush, wedge-leaf Ceanothus
	Camp Cr.(Severance Area)	1	800	Bitterbrush, wedge-leaf Ceanothus
	Rabbit Valley	1	10	Bitterbrush, grass, legumes
	Ochoco National Forest	5	80	Bitterbrush, grass, legumes
	Prineville Res.(Private)	1	5	Four wing saltbush, legumes, grass
Coos	Coast Range	7	15	Grass, legumes
Curry	Coast Range	3	5	Grass, legumes
Deschutes	Deschutes Nat. Forest	1	20	Grass, legumes
	Paulina Unit	2	50	Grass, legumes
Lake	Cabin Lake	4	20	Bitterbrush, grass, legumes
Klamath	Pokegama	2	6	Grass, legumes
Douglas	Umpqua National Forest	1	200	Legumes,trefoil
Grant	Malheur National Forest	1	80	Bitterbrush
TOTALS		36	2,098	

The job of locating sites that are feasible to revegetate was undertaken on big game winter ranges. Land ownership, critical areas, and soils suitable for revegetation were determined on the several deer winter ranges on Steens Mountain. A similar survey has been initiated in the Drewsy area.

Evaluation observations have been made on all seedings. Bitterbrush seeded at Camp Creek in 1964 is increasing in size and density. Bitterbrush seed broadcast in juniper root cavities is still emerging and plants are making good growth. On the 3,000 acres chained 35 percent of the root cavities seeded contain bitterbrush plants. The chained revegetated areas are highly attractive to deer. Downed junipers, young bitterbrush, and crested wheat grass are being eaten. Ten pellet group transects were established on chained areas and ten control transects were established on the adjacent unchained junipers. Transect readings listed in Table 7 indicate that deer are spending nearly three times as much time on the revegetated areas as on the adjacent untreated areas.

Table 7

Camp Creek Pellet Group Transects

Transect Number	1965 Pellet Groups		1966 Pellet Groups	
	Samples	Controls	Samples	Controls
1	30	17	138	133
2	25	24	92	55
3	23	27	110	101
4	21	1	43	2
5	31	0	88	2
6	24	15	84	14
7	62	8	111	11
8	55	5	92	2
9	9	4	22	25
10	36	4	36	6
AVERAGE NO. OF GROUPS	31.6	10.5	81.6	35.1

Generally, bitterbrush emerged poorly this spring. It is presumed that the drought conditions in March, April, and May are the cause. Bitterbrush seeded in ponderosa pine stands is an exception. Here, plants emerged normally and are making good growth. The four wing saltbush trial seeding emerged at a favorable late date and is making vigorous growth.

Grass and legume seedings have exhibited a wide range of establishment, presumably according to the drought conditions of the particular site where planted. Seedings on the Deschutes National Forest emerged well but appear to have failed later when lack of moisture was critical. However, it is still too recent to judge the success of many of these seedings.

Cooperative fertilizer trials on the Butte Falls black-tailed deer winter range were evaluated. Five hundred pounds per acre of 16-20-0 fertilizer was applied to 29 acres. Grass and forbs made up 16 percent of the ground cover before fertilizer application and 55 percent after application. Animal use determined from four pellet group transects is shown below. Use of the fertilized area was approximately double that on the control area for both cattle and deer.

Pellet Groups

	Deer				Cattle			
	1965		1966		1965		1966	
Plots	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Fertilized	120	39	94		19*	69	0	
Control	59	20	49		19*	36	0	

*Cattle groups from the 1964 summer grazing season.

Twenty-mile track count samples (shown in Table 8) established on the high desert south of Hampton to evaluate the effect of sage spraying and grass rehabilitation on antelope present no conclusive data to date.

Table 8

High Desert Range Practices Evaluation Summary,
Tracks per Mile, 1963, 1964, and 1965

Species	Pine Mtn. Sample			Dickerson Well Control			Hampton Sample			Stauffer Control		
	1963	1964	1965	1963	1964	1965	1963	1964	1965	1963	1964	1965
Deer	0.74	0.48	2.15	0.68	-	-	-	0.04	-	0.11	0.56	-
Antelope	1.22	2.48	4.59	0.75	1.29	0.85	0.26	4.85	0.37	0.22	0.78	0.37
Coyote	1.11	1.67	0.63	1.79	2.21	1.57	3.67	3.63	5.19	1.70	5.92	6.66
Sage Grouse	3.41	3.63	0.07	8.46	3.57	0.53	0.52	0.41	0.22	0.48	1.07	3.66

Upland Game Bird Cisterns

Eighteen cisterns were installed at new locations in the Columbia Basin and two old concrete cisterns were replaced with fiber glass cisterns. Twenty-four fiber glass cisterns were fabricated for future use. All cisterns are inspected annually and any needed maintenance performed. Cisterns installed to date are listed in the following table.

Table 9

Upland Game Bird Cisterns

County	Installed 1965-66	Total in Operation
Crook		2
Deschutes		2
Gilliam		32
Grant		12
Jefferson		45
Lake		31
Morrow	9	121
Sherman		160
Umatilla	9	207
Wasco		5
TOTALS	18	617

Cistern utilization is increasing on drier range land sites. Chukars have become established north of Fort Rock where cisterns were installed two years ago. Mourning doves are also utilizing cisterns extensively. Inspection in May revealed from four to twelve doves at each of several cisterns in the Central Region.

Water Holes and Big Game Cisterns

Eight catchment-type big game cisterns were constructed cooperatively with the Deschutes and Ochoco National Forests. Three are in the Fort Rock district, three in the Crescent district, and two in the Snow Mountain district. The 20 cisterns now in operation on the Deschutes Forest are receiving good use. Deer trails leading to the cisterns become well developed within two or three years after the cisterns are installed. Two cisterns with septic tank-type storage tanks and different interior coatings were dismantled this spring to determine if there is any deterioration on the inside of this type of tank. Both the red lead and tar interiors were in excellent condition.

Nine cooperative spring developments were made with the U. S. Bureau of Land Management; five in the Lakeview district and four in the Burns district. The Game Commission furnished materials including fencing. Spring developments have facilities for multiple use of livestock, big game, and upland game. Pipe outlets are normally located so that hunters also have access to uncontaminated water.

One big game water hole was excavated in the Sisters ranger district on the Deschutes National Forest. Four hundred pounds of bentonite were applied to previously dug water holes on Green Ridge to stop seepage loss. The dam at the Prairie Farms impoundment north of Sisters was repaired to stop leaking. Water holes in the Sisters district are being used by both deer and wild turkeys.

Table 10

1965 Big Game Water Developments

County	Cooperating Agency	Number of Developments	Type
Deschutes	U.S.F.S.	6	Deer cisterns
Deschutes	U.S.F.S.	1	Water hole
Harney	U.S.F.S.	2	Deer cisterns
Harney	B.L.M.	5	Spring development
Lake	B.L.M.	4	Spring development
TOTAL		18	

Waterfowl Nesting Sites

Two hundred thirty-eight wood duck nest boxes were erected this year. One hundred ninety-nine were placed in the Northwest Region, 31 in the Southwest Region, and 8 in the Northeast Region. Table 11 lists the counties in which boxes were placed. Use is continuing at about the 65 percent level. Hooded mergansers are utilizing up to 20 percent of the boxes in some areas. Squirrels are utilizing several of the boxes on the Deschutes National Forest. Of the 50 boxes inspected in Klamath County 26 were used by wood ducks, 10 by hooded mergansers, and 1 by both wood ducks and mergansers. The 26 wood ducks successfully hatched broods averaging 12 young, and the 10 mergansers hatched broods averaging ten young.

At Prineville Reservoir one new goose nesting platform was constructed to replace one destroyed by flooding and the five existing platforms were raised in elevation. The Game Commission cooperated with the Forest Service in erecting 23 platforms in old snags at Crane Prairie Reservoir. Goose broods were hatched from five of the six platforms at Prineville.

At Fern Ridge Reservoir 300 yards of low, dozer-built dike was constructed to impound winter runoff water and provide nesting sites for waterfowl.

Table 11

Wood Duck Nest Box Placement and Uses

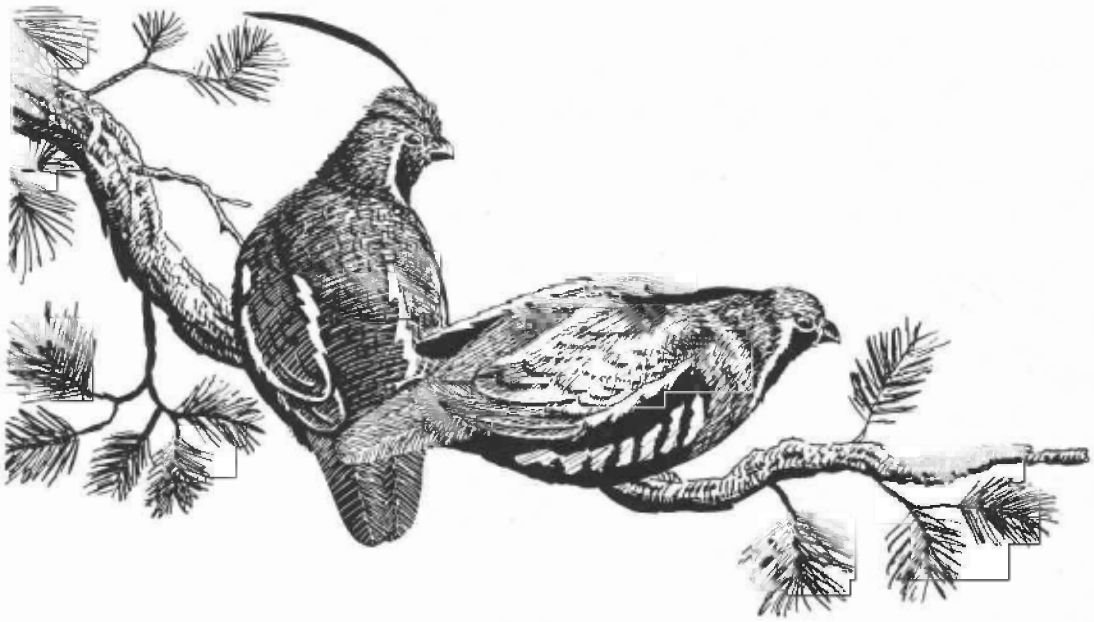
County	Number Placed	Total Placed to Date	Inspected	Used
Benton	32	392		
Clackamas	12	109		
Clatsop	30	175		
Columbia		115		
Coos		43		
Deschutes		2	39*	31
Douglas	12	104	45	30
Jackson	10	103	74	44
Josephine	9	23	10	6
Lane	15	321		
Lincoln		38		
Linn	45	580	60	44
Klamath		60	50	37
Marion	22	235		
Polk	12	193	20	14
Tillamook	4	64		
Union	8	8		
Washington	8	110		
Wasco		10		
Yamhill	19	152		
TOTALS	238	2,863	298	206

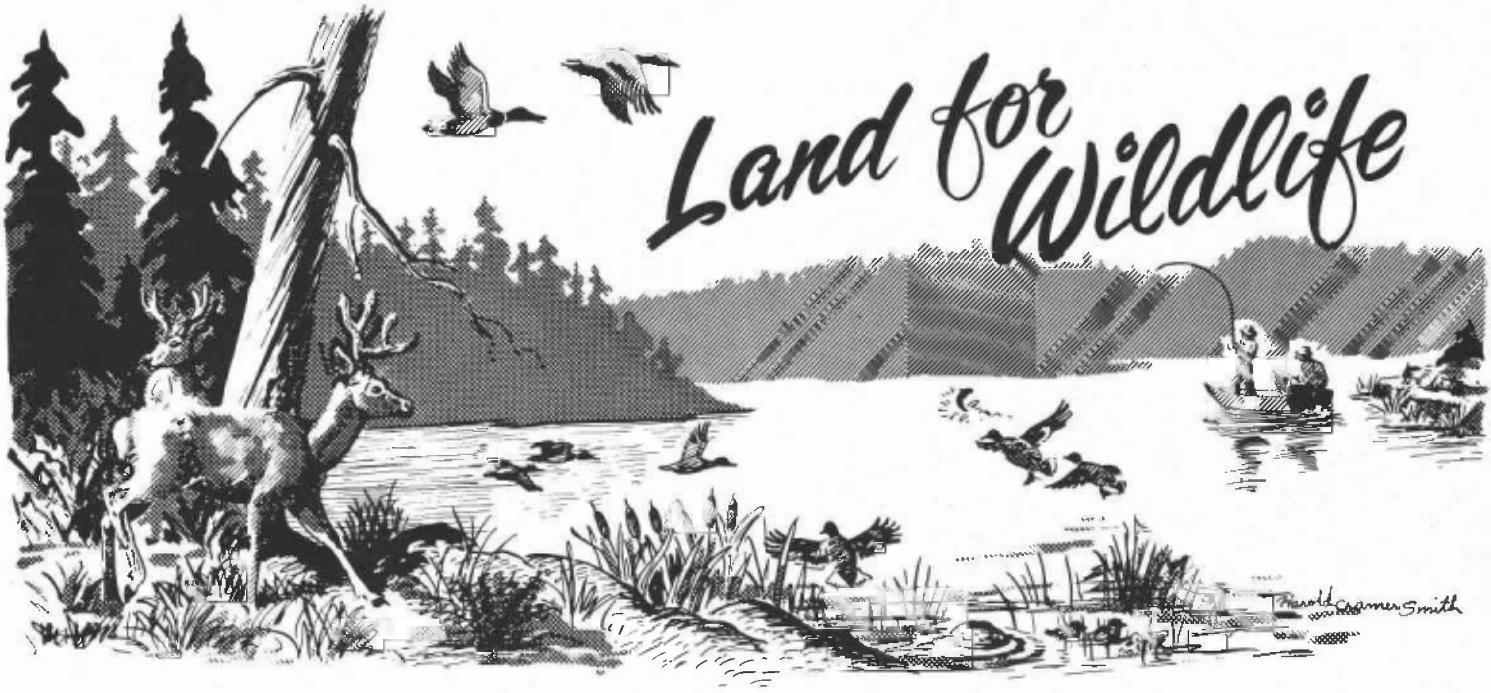
*Boxes erected by Boy Scouts.

Fencing

Fences were utilized to protect new woody and herbaceous plantings, upland game bird cisterns, and evaluation plots on range revegetation projects as follows: Northeast Region, 360 rods of fencing constructed around six shrub planting sites; Northwest Region, 300 rods of fencing placed along the south boundary of Fern Ridge Reservoir; Crook County, 4 one-acre exclosures constructed on the Camp Creek revegetation projects (fencing will exclude rabbits and deer from one half and livestock only from the other half); Harney County, materials furnished the U. S. Forest Service for the cooperative fencing of 4 one-acre spring and cover developments and 100 rods of livestock fencing constructed around a squawapple browse stand near Drewsy on B.L.M. lands; and in Deschutes County, one rose planting protected with 40 rods of fencing.

Fences were maintained around cover plantings in Sherman, Jefferson, Crook, and Umatilla Counties. Considerable maintenance was necessary at Prineville Reservoir to protect herbaceous seedings from livestock and to provide livestock access to water.





Seventeen land acquisition and development projects have been initiated since 1942. Most projects have received federal assistance through the Pittman-Robertson Act and Public Law 537.

Three of the project areas are being developed primarily for big game, five for waterfowl, three for upland game, and the remainder for a combination of waterfowl and upland game use. Project areas total 109,583 acres of which 61,182 acres have been purchased to date, while 26,735 acres are controlled under lease or agreement. The remainder remains in private ownership, making it difficult to exercise efficient control and management.

During the period from July 1, 1965 through June 30, 1966, 1,118 acres in three tracts have been purchased at a cost of $61,040. Twelve acres were sold for a price of $300 during the same period. Expenditures for all land purchased to date total $2,771,041, while the cost for lands leased total $2,660 annually.

ORS 496.340 specifies that certain real properties, exclusive of improvements, administered by the Game Commission are subject to county taxes. These include most of the project areas listed with the exception of military lands. Taxes and assessments during the year totaled $47,163.82.

Table 1 summarizes the status of land management projects, followed by a detailed account of activities on the respective areas.

Table 1
WILDLIFE LANDS

Area	Date Initiated	Project Area Acres	Purchased to Date Acres	Cost	Lease or Agreement Acres	Lease or Agreement Annual Cost	1965-66 Taxes & Assessments
Bridge Creek	1962	15,375	7,311	$ 143,713	-	-	$ 3,143.96
Camas Swale	1942	2,700	2,522	100,000	-	-	5,800.83
Kenneth Denman	1953	1,920	160	48,000	2,037 /1	-	2,119.06
Fern Ridge	1949	3,972	-	-	3,936 /1 36 /1	- -	76.00 -
Fort Stevens	1950	1,447	-	-	1,447 /1	-	-
Government Island	1949	2,565	2,093	158,878	1 /2	-	4,839.55
Henderson Marsh	1960	700	-	-	700	-	-
Klamath	1949	7,656	2,511	271,300	2,410	-	1,370.73
Ladd Marsh	1949	3,747	2,224	336,780	-	-	3,811.57
McNary	1953	100	-	-	100	-	-
Prineville Res.	1962	3,360	-	-	3,360	-	-
Sauvie Island	1946	12,129	7,578	877,337	3,495	$1,500	13,416.61
Snake Riv. Islands	1959	219	219	-	-	-	-
Summer Lake	1944	17,400	11,853	244,000	1,505 3,963 /3	- 1,150	2,888.91 -
Wenaha	1953	17,652	10,510	201,758	40 1,285 /4	10 -	2,505.81 -
White River	1953	17,016	14,116	339,275	880 /4	-	7,190.79
E. E. Wilson	1950	1,625	85	50,000	1,540 /1	-	-
TOTALS		109,583	61,182	$2,771,041	26,735	$2,660	$47,163.82

/1 Conveyed by U.S.A. to State with restrictions under Public Law 537.
/2 Public domain withdrawn from disposal and reserved for wildlife and recreational use.
/3 Executive order reserving land for wildlife use.
/4 Management agreement with B.L.M. making lands available primarily for wildlife use.

GAME MANAGEMENT AREAS

SAUVIE ISLAND

In 1947 the Game Commission initiated acquisition of the northern half of Sauvie Island in order to preserve and develop wintering grounds for waterfowl and to provide an area for public hunting. The project area encompasses 12,129 acres of which 11,073 acres have now been purchased or are under long-term lease from the State Land Board. No additional land purchases were made during the year.

Development and Maintenance

1. Buildings

   The west side checking station, which was washed away by the 1964 Christmas flood, was replaced with a 15-foot trailer house. It can be removed after the close of waterfowl season and used for other purposes.

   A new concrete septic tank and drain field were installed at the Assistant Manager's residence and a new sump pump installed at the headquarters residence.

   Many additional small construction and maintenance projects were undertaken to preserve the buildings and improve their usefulness.

2. Impoundments and Dikes

   Preliminary studies were conducted and plans drawn for early fall pumping of water into dry lake beds within the Columbia Drainage District.

   All dikes, dams, and ditches required considerable maintenance due to extensive erosion from previous floods.

3. Bridges

   Twelve footbridges on the area required major repairs or replacement because of heavy damage from flood waters. One

additional footbridge was constructed across the A-1 canal.

4. Roads and Fences

The North Unit road was relocated into Ruby Lake after high water had washed out the old road.

Other roads and parking areas were maintained by grading and graveling. Two hundred forty-eight yards of crushed rock were purchased and used.

Replacement of the fence around the Lyons tract was started, 600 rods of old fencing removed, and other fences on the area maintained.

5. Farming

A total of 485 acres was planted to wildlife food crops and left standing for winter waterfowl use. Acreages were as follows: Buckwheat, 242; corn, 80; millet, 100; spring barley, 18; fall wheat, 20; and red clover-rye grass, 20.

Six acres of waterfowl food trial plantings were made in cooperation with the Soil Conservation Service. The trials will test many varieties for yield and waterfowl food preference.

All corn, millet and barley plantings were sprayed with atrazine or 2,4-D to control annual weeds. Fifty acres of quackgrass was sprayed with Amitrol T, and 10 acres of field bindweed and 15 acres of Canada thistle with 2,4-D and 2,4,5T. Heavy stands of cattails in sloughs were killed with Dalapon. An additional 163 acres of pastureland and ditch banks were mowed to control noxious weeds.

Biological

Tables showing waterfowl populations, banding results, and hunting success are presented in the waterfowl section of this report. Hunting success by unit is shown in the following table.

SAUVIE ISLAND
HUNTING SUCCESS BY UNIT

Unit	Waterfowl & Pheasants	No. of Hunters	Birds per Hunter-Day 1965-66	1964-65	1963-64
McNary	5,383	3,605	1.49	1.59	1.50
Sturgeon	4,371	2,591	1.69	1.66	1.58
West	4,869	2,527	1.93	1.69	1.66
Racetrack Blinds	1,213	578	2.10	1.56	1.74
Oak Island Blinds	295	247	1.19	1.29	1.21
TOTALS	16,131	9,548	1.69	1.63	1.57

GOVERNMENT ISLAND

The Government Island Management Area is administered as a part of the Sauvie Island project with most of the development work conducted by a lessee in exchange for grazing. The project boundaries encompass 2,565 acres on Government, Lemon, and Maguire Islands. All but 472 acres on the eastern tip of Government Island have been acquired and comprise the management unit.

Development and Maintenance

Field cleanup and routine maintenance of buildings and fences on the area were conducted by the lessee as a condition of his contract.

In the 400-acre section reserved exclusively for wildlife, a total of 70 acres was planted to food crops by the lessee and left standing for winter waterfowl use. This acreage included 40 acres of buckwheat, 23 acres of oats, and 7 acres of corn.

Wildlife

Prior to and during the upland game season, 768 cock pheasants were released on the island. Hunters were not required to check out, but from field checks of 274 hunters who had bagged 313 birds

it was estimated that 382 hunters killed 313 pheasants.

Waterfowl hunting was opened for a limited number of hunters on Wednesdays and Sundays, starting on November 21. Only 74 hunters took advantage of the hunting opportunities and bagged 185 ducks and 2 geese for a success of 2.53 birds per man. In 1964 the success was 2.84 and in 1963, 1.81.

SUMMER LAKE

In 1944 the Game Commission initiated purchase of land for the Summer Lake Management Area with primary objectives of producing and maintaining waterfowl and providing an area for public hunting. The area now controlled totals 17,321 acres, with 11,853 acres purchased, 1,505 acres leased, and 3,963 acres withdrawn for wildlife use. No additional lands were acquired during the year.

Development and Maintenance

1. Buildings

   Many small construction and maintenance projects were undertaken to preserve the buildings and improve their usefulness.

2. Area Development

   A 10-foot-square cement water control box was constructed around the center artesian well on the Williams tract. Three 12-inch headgates were installed in the sides to control diversion of water to new impoundments.

   Considerable erosion was caused to dikes by wave action due to the high water level of Summer Lake. Approximately 1,060 yards of gravel and coarse rock were hauled to repair damages, and an additional 400 yards of rock stockpiled on the area for future use.

   All roads on the area were graded and 1,350 yards of gravel hauled and spread on the main access road and approaches to campgrounds.

   One and one-half miles of fence was replaced, 16 miles of fence repaired, and one mile of old fence removed. One cattle guard was installed.

3. Farming

During the spring of 1966, 776 acres were farmed for production of wildlife food crops or soil building crops. These are left standing for use by migrant and wintering waterfowl. Three hundred acres were planted to cereal crops (wheat, barley, and rye), 73 acres were in established stands of alfalfa, and 403 acres of grass and nomad alfalfa were maintained.

Strip farming was practiced on the larger fields to prevent wind erosion and to facilitate crop rotation, fertilization, and weed control.

Two cuttings of alfalfa on the Williams tract were made, with 4,314 bales of hay harvested and sold.

Biological

Much of the biological work conducted on the area during the year is summarized and presented in the waterfowl and furbearer sections of this report. Included are periodic waterfowl inventories, production success, hunter success, species composition of waterfowl bagged, results of banding programs, and muskrat inventory and harvest.

KLAMATH

In 1949 the Game Commission initiated action to acquire 8,291 acres of land in the Miller Island area six miles southwest of Klamath Falls for a waterfowl management area. To date, 3,240 acres have been purchased and an additional 2,410 acres are under long-term lease. The remaining land within the project boundaries is in private ownershp and remains to be acquired. No purchases were made in 1965.

Development and Maintenance

1. Buildings

The Delameter barn, headquarters buildings, office building, and pump house were painted during the year.

2. Area Development

Many of the dikes which were damaged by the December 1964 flood were repaired or rebuilt. Ditches were also cleaned with a dragline and the spoils used to raise or reinforce the dikes.

Following the flood, the Corps of Engineers rebuilt all damaged dikes along the Klamath River, including those on the management area. The Corps also constructed 1,560 feet of new dike along the north end of the Delameter tract. Three hundred fifty-five tons of rock were hauled by force account to riprap the entire face of this new dike.

A 12-inch irrigation pump was purchased and installed on the Gregory tract to replace an inadequate 8-inch pump. This pump was then moved to the Delameter tract for use as a drain pump.

Roads on the area were graded and resurfaced with 200 tons of gravel. All fences damaged by the flood were repaired and seven gates rebuilt.

3. Farming

Four hundred thirty-five acres were planted to cereal crops and left standing for fall and spring waterfowl use. Sixty-five acres were planted to rye and winter wheat in the fall while 377 acres were spring seeded to wheat and barley.

An additional 157 acres of alfalfa and pasture have been fertilized and irrigated for goose pasture, hay, and grazing.

Very heavy use was made of the crops by local geese in July and August and migrant geese in February and March. Few fall migrants fed on the area, however, due to constant harassment by hunters.

Biological

Approximately 150,000 geese, of which 12,000 were snow geese, fed on the area for two weeks during spring migration.

Thirty-two wood duck nest boxes were constructed for placement in the Shoalwater Bay and Aspen Lake areas.

Fifty serviceable nest boxes were checked and showed an 80 percent use by wildlife. Twenty-six were used by wood ducks, 9 by hooded

mergansers, 1 by both wood ducks and mergansers, 4 by other forms of wildlife, and 10 showed no use.

Twenty-eight small island were bulldozed up on the Delameter tract lowlands for goose nesting sites.

More hunters used the management area this year than in any previous year. A total of 6,424 hunters was counted as compared with 5,538 last year and the previous high of 6,018 in 1962. Only 254 hunters used the area in 1954.

Hunting success has diminished with pressure. A check of 1,493 hunters showed they had bagged 1,492 birds for an average of one bird per man. Species and number of birds taken were as follows: Pheasants, 372; geese, 184; and ducks, 936.

LADD MARSH

Acquisition of land for the Ladd Marsh Management Area was initiated in 1949 and now totals 2,252 acres of the 3,747 acres in the project area. During the year the 33-acre Evans property was added to the project.

Development and Maintenance

1. Buildings

   The Peebler house and shed, the Counsell and Simonis barns, and a derelict house, horse barn, and two sheds on the Peebler tract have been razed. The north house on the Evans tract was sold and removed, and the Powell house was sold and will be moved from the area.

   The Boothman house, three barns, and six sheds were painted. Other routine maintenance and minor repairs were made to buildings and grounds as needed.

2. Dikes and Canals

   A water control was installed on private land one mile north of the Brogoitti tract to divert water from Gekler Slough to ponds on the Boothman tract.

   Eight ponds were dozed in the marsh to break up a solid

stand of cattails. Spoils were used to create goose nesting and resting islands. Twenty-five acres of cattails were also mowed to open up additional marsh.

A pond, 30 feet in diameter, was excavated at a spring site on the Counsell tract both to attract waterfowl and to provide a source of water for irrigation.

Most of the ditches and canals on the area were cleaned and deepened to facilitate the flow of water.

3. Roads and Fences

Two hundred ten yards of gravel were used in resurfacing roads on the area. Two wooden culverts were installed in roads on the Peebler tract.

With the addition of over 500 acres to the project last year, considerable fence razing and construction became necessary. Approximately 720 rods of sub-fencing was removed and 770 rods of old boundary fence replaced with new fencing. Two hundred rods of new fence was also constructed on the Smutz tract located west of the Foothill Road.

Farming

Fifty-nine acres of wheat and 50 acres of barley were planted by a share cropper and left standing for fall, winter, and spring use by waterfowl and other wildlife.

Many additional small acreages throughout the area were planted to rye, alfalfa, millet, oats, sorghum, grass, wheat grass, clover, and giant wild rye to provide food and winter cover for upland game birds.

A total of 9,050 tree and shrub seedlings were planted on 14 sites to serve as windbreaks and food and cover plantings for various species of wildlife.

Biological

Thirty valley quail were live-trapped in the foothills and released on the Peebler and Simonis tracts.

Forty-four adult Canada geese were observed on the project prior to the nesting season. Five broods containing 30 goslings were counted later in the spring. Geese again nested in three of the

four platforms in the marsh. Eight additional platforms were constructed.

A total of 1,127 pheasants and 468 chukars was released on the area periodically throughout the season. A good hunter-take of birds was realized.

Because of the heavy hunting pressure throughout the upland game season very few waterfowl remained on the area. Food crops were lightly used until February and March when 12,000 migrant ducks moved into the grain fields.

CAMAS SWALE

Land acquisition for the Camas Swale Management Area was initiated in 1942. To date, 2,522 acres of the 2,700 acres in the project area have been acquired.

Development and Maintenance

All ponds were cleaned and deepened, and dams repaired.

The work road through the area was graded and approximately 1,200 yards of rock spread. A 12-inch culvert was placed through the road at the north end of the project.

One-half mile of fence damaged by flood waters was rebuilt. Three gates made of railroad iron were constructed and installed at entrances to the area.

Farming

Three hundred acres of Sudan grass and 40 acres of corn were planted by the lessee and left standing for winter waterfowl use. An additional 110 acres of Sudan grass were planted by the lessee on an exchange basis in the Fern Ridge area.

Waterfowl hunting was permitted on the area on Wednesdays and Sundays from November 14 through the season. Although 20,000 ducks wintered on the area, hunters had relatively poor success.

WHITE RIVER

The White River project was initiated in 1953 to provide winter range for a migratory herd of black-tailed deer and to alleviate a serious damage problem on winter wheat. Land adjacent to the east boundary of the Mt. Hood National Forest is being acquired for development, with approximately 14,000 acres of the 17,000-acre project purchased to date. Substantial progress has been made in constructing a deer-proof drift fence to prevent damage and in improving the carrying capacity of irrigated pastures and native ranges.

Acquisition

Twelve acres in the Miller tract were disposed of during the year.

Development

Ten acres on the Barber tract were leveled and seeded to alfalfa, orchard grass, and perennial wheat. Five thousand multiflora rose and 150 hawthorn were planted around the field borders.

One hundred and twenty acres of dry land on the Mayfield tract was prepared but not seeded due to drought.

Approximately 420 acres of yellow pine thickets were thinned for stand improvement.

Twenty acres of land was cleared to maintain the water right.

Fire trails totaling 1¼ miles were constructed and 6½ miles of stock fences were cleared.

Wildlife

Five turkeys were trapped and released in Morrow County.

Forty-one deer were trapped and tagged as part of a distribution study, making a total of 91 deer marked to date.

BRIDGE CREEK

Bridge Creek is the most recent range acquisition project, having been initiated in 1962. Of the 15,375 acres proposed for purchase, 7,300 acres have been acquired to date. The area, which is located south of Ukiah in Umatilla County, consists of bench lands between Camas Creek and the North Fork of the John Day River. Elk and mule deer are the primary species to benefit from the rehabilitation and management planned for the project.

Acquisition

No additional land was acquired during the past year.

Development

Two ½-mile sections of the take-down fence were completed along Bridge Creek and major repairs were completed on two miles of existing fence along the entry road. Three stock ponds were fenced.

Four stock watering tanks were installed and water piped from existing sources.

Forty acres on the Martin tract were prepared but not seeded because of the drought.

WENAHA

The Wenaha project was initiated in 1953 to provide a winter range for deer and elk. Located in northern Wallowa County near Troy, the area consists of bench lands and steep slopes at the confluence of the Wenaha and Grande Ronde Rivers. Agricultural lands are being converted to permanent pastures which are available for use except during the severest weather. Of the 17,652 acres proposed for purchase, 10,510 acres have been acquired to date.

Acquisition

Two tracts totaling 1,085 acres were purchased during the year, including 935 acres acquired from Boise-Cascade Corporation and 150 acres from Salvage.

Development

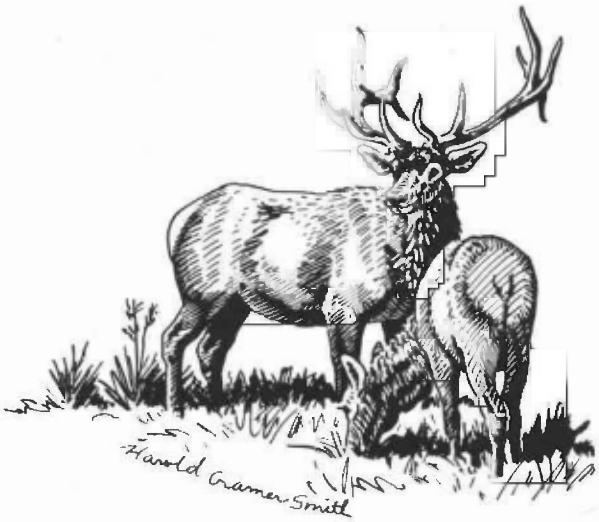
Thirty acres on the DeJean tract were prepared and seeded to nomad alfalfa while an additional 20 acres were summer fallowed.

Seven acres were seeded to rye and one acre to a grass-legume mixture at the headquarters site.

Wildlife

Some hay was fed to elk on Eden Bench as a damage control measure.

Approximately 3,000 pounds of salt were placed at 19 locations in an effort to control the distribution and movements of big game.



E. E. WILSON

The E. E. Wilson area includes about 1,600 acres of habitat valuable chiefly for upland game production. Major uses include the operation of a game farm and recreation in the form of juvenile hunting, dog training, and field trials.

Game Bird Production

Bird production in 1965 totaled 21,484 pheasants, 626 chukar partridge, 142 Hungarian partridge, 126 bamboo partridge, and 27 Kalij pheasants.

Pheasant egg hatching success averaged 70 percent, which was much lower than past years. Of the birds hatched, 94 percent were reared successfully. Liberations totaled 2,920 breeders in the spring, 6,532 young during the summer, and 11,677 adult cocks during the hunting season.

Approximately 72 percent of the chukar eggs hatched and 93 percent of the birds hatched were raised. A total of 553 was released.

Hungarian partridge hatching success averaged 37 percent and 82 percent of the birds were raised. Liberations totaled 354 during the year.

Only 290, or 30 percent, of the bamboo partridge eggs hatched and 43 percent of the birds were reared to maturity. No releases were made.

Kalij pheasant egg production was low. Hatching success averaged 22 percent while rearing success averaged 84 percent. All birds were retained for breeding stock.

Construction and Maintenance

1. A 20' x 60' extension was added to the incubator house.

2. The 18' x 180' concrete slab on the north side of the brooder house was removed and the area filled with topsoil. All brooder house runs were replaced with new posts, netting, and baseboards.

3. All buildings were maintained including complete painting of the conference hall.

4. Four storage buildings were wired for electricity.

Farming and Habitat Development

1. Seventy-two acres of food crops were left standing on 22 different sites. Sudan grass was planted on 43 acres while field corn was planted on the remainder. The Sudan made normal growth but field corn production was poor. Approximately 95 percent of the food crops were utilized.

2. No grain was planted due to a surplus on hand.

3. Noxious weeds were sprayed in compliance with county law. Brush alongside most of the streets also was sprayed.

4. Two round concrete guzzlers were installed by Boy Scout groups.

Recreational Use

Juvenile hunters utilized the area four days while juveniles and accompanying adults participated an additional four days. A total of 440 hunters bagged 115 pheasants and 7 quail. No waterfowl hunting was permitted.

Approximately 175 persons used the area for dog training purposes and 200 participated in field trials. Four clubs held seven trials during the year.

KENNETH DENMAN

The 1,920-acre Denman Area is used primarily for upland game and waterfowl production. Public uses include hunting, angling, dog trials, and dog training.

Game Production

Approximately 500 pheasant cocks were held from July to October in a covered holding pen and released on the area during the hunting season.

Construction and Maintenance

1. The pump house at Whetstone Pond No. 1 was rebuilt and a concrete pump stand poured.

2. A water control dike 4' high, 8' wide, and 300' long was constructed along the south side of Whetstone Pond No. 2 to control flooding on adjacent farmland.

3. The boundary separating Game Commission from White City property was fenced with 400 rods of barbed wire and two miles of fence in the Little Butte Creek area was partially rebuilt.

4. Twelve miles of fences, four miles of firebreaks, and parking lot and toilet facilities were maintained. Signs and boundary markers were replaced as necessary.

Farming and Habitat Development

1. Shrub plantings on the desert top were cultivated and fertilized.

2. Approximately 88 acres of oats and barley were planted under share crop agreements.

3. Death of the area manager in October 1965 due to an automobile accident prevented further farming and development as planned.

Recreational Use

Anglers fished the area nearly the year around for spiny ray species, and angling for trout and anadromous fish was popular during the respective seasons. Daily hunting occurred from September 1 until the end of the waterfowl season on January 6.

Dog training, field trials, picnicking, and other uses provided considerable recreation.

SUMMARY OF 1965-66 GAME INVENTORIES

Species	Miles of Sample	Number Counted	Average Density /1				Sex/2 Ratio	Pro- /2 duction	1965 Harvest		
			1966	1965	1964	1963			Hunters	Kill	Recreation/3
Mule Deer	3,434	42,579	12.4	12.3	12.7	11.1	20	63	143,618	71,637	773,400
Black-tailed Deer	2,577	13,366	5.2	4.4	5.9	5.0	42	66	108,281	47,732	662,000
Roosevelt Elk	344	1,881	5.5	5.2	6.2	6.7	7	38	19,736	2,904	111,400
Rocky Mtn. Elk	1,535	8,524	5.5	5.5	6.8	5.7	9	49	47,651	9,362	343,200
Antelope	4,000	6,010	1.5	1.6	1.4	1.6	31	39	612	369	1,400
TOTAL BIG GAME	11,890	72,360	-	-	-	-	-	-	327,279	132,004	1,891,400
Pheasants	2,656	3,907	1.5	1.1	1.6	1.7	29	470	75,373	254,575	326,300
Valley Quail	4,219	5,036	1.2	0.9	1.3	1.3	-	760	26,383	168,274	112,500
Mountain Quail	2,404	481	0.2	0.2	0.4	0.4	-	780			
Hun. Partridge	2,766	510	0.2	0.1	0.1	0.1	-	860	6,021	17,288	22,300
Chukar Partridge	2,105	4,935	2.3	1.4	2.4	2.3	-	720	19,653	130,132	68,900
Forest Grouse	2,657	746	0.3	0.1	0.2	0.2	-	580			
Sage Grouse	772	1,575	2.0	0.5	2.0	1.6	-	160			
Pigeons	-	3,862	-	-	-	-	-	-	12,597	105,173	50,000
Doves	1,667	4,495	2.7	2.8	3.2	4.2	-	-	16,205	163,064	66,000
Ducks	-	417,563	418M	397M	363M	488M	-	647	44,470	348,997	290,400
Geese	-	68,837	69M	40M	51M	58M	-	473		43,654	
TOTAL GAME BIRDS	9,315	511,947	-	-	-	-	-	-	200,702	1,231,157	936,400
GRAND TOTAL	21,205	584,307	-	-	-	-	-	-	332,906 /4	1,363,161	2,827,800

/1 Density Indexes: Big game and upland game - per mile of sample route.
Waterfowl - January inventory. (Thousands.)

/2 Per 100 females

/3 Man-days

/4 Total hunting license sales

SUMMARY

During the 1965 hunting seasons 332,906 persons enjoyed 2,827,800 days of hunting. They reported taking 132,000 big game animals and 1,231,157 game birds. In comparison with 1964 there was a 4 percent increase in licensed hunters, a 3 percent decline in days of participation, and 18 percent decline in the yield of big game, and a 13 percent decline in the harvest of game birds.

Greater than normal precipitation during the 1964-65 period created an abundant water supply and exceptional food and cover for wildlife in 1965. This condition benefited most wildlife species by increasing their distribution and survival, but hunters were handicapped by the heavy cover and wide dispersal of birds and animals.

Low precipitation and temperatures in the spring of 1966 created an inverse situation and a critical shortage of food and cover in portions of the state.

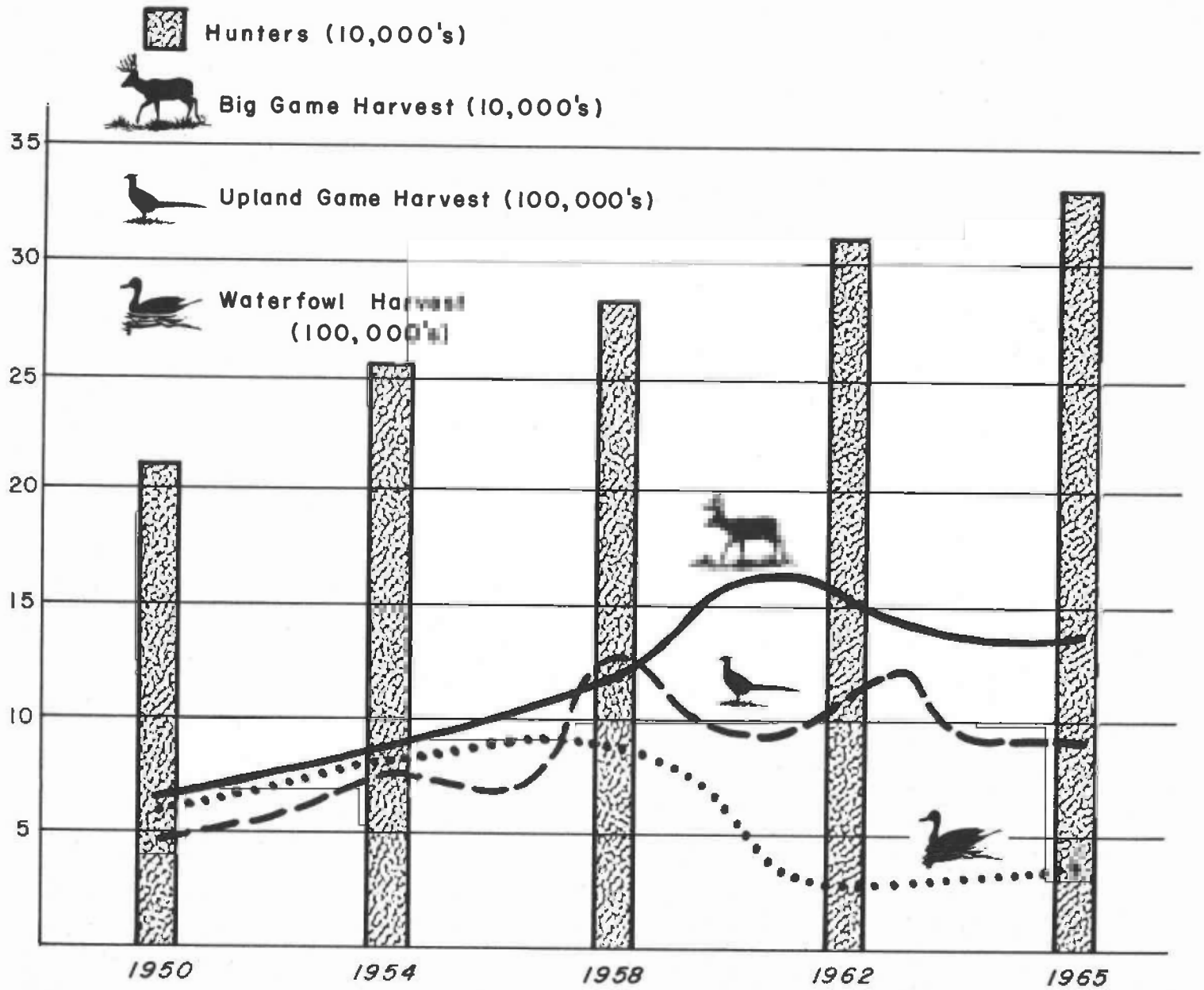
The 1966 game inventories indicated a slight increase of mule deer, a significant increase of black-tailed deer, and little change in the distribution or density of elk and antelope.

Spring densities of most upland game species were slightly below normal, and 1966 production was handicapped by the low temperatures and a lack of nesting cover.

Improved water supplies in 1965 increased the production and survival of both ducks and geese. The 1966 winter inventory indicated a 5 percent increase in ducks and 72 percent increase of the geese wintering in Oregon.

A continued decline in the market for furs reduced trapping pressure and the yield of furbearing animals. Only 787 persons were licensed to trap. They reported taking 48,460 furbearing animals.

Financial limitations precluded expansion of management, development, and service programs for wildlife during the 1965-66 period.



HUNTING DEMAND & YIELD

OREGON STATE GAME COMMISSION
P. O. Box 3503, Portland, Oregon 97208

GAME DIVISION PERSONNEL DIRECTORY

Activity	Personnel	Address	Phone
PORTLAND OFFICE*			
Chief of Operations	McKean, John W.	2545 NE 23rd, Portland 97212	*282-5866
Big Game	Stein, Robert H.	17630 SW Butternut Dr., Beaverton	*644-9467
Upland Game	Mace, Robert U.	8102 SW Capitol Hwy, Portland 97219	*244-9894
Fur & Migratory Birds	Kebbe, Chester E.	5414 NE Emerson, Portland 97218	*282-4066
Habitat Improvement	Cummings, Melvin S.	Rt. 2, Box 59, Salem 97303	*364-4148
NORTHWEST REGION			
Regional Supervisor	Zumwalt, L. C.	*Rt. 4, Box 385Z, Albany 97321	*928-3083
Assistant Supervisor	Schneider, L. F.	*3447 Willamette Ave., Corvallis 97330	*753-4184
District Game Biologist	Batterson, W. M.	Rt. 1, Box 28, Nehalem 97131	368-2265
District Game Biologist	Heintz, James	Rt. 2, Box 245, Molalla 97038	829-8339
District Game Biologist	Ives, Francis F.	1544 Highland Way, Corvallis 97330	752-1798
District Game Biologist	Jubber, Robert N.	2130 Hayes, Eugene 97405	343-7236
Mgr., E. E. Wilson GMA	Kirkpatrick, Don	Rt. 1, Box 325, Corvallis 97330	753-4938
Mgr., Sauvie Island GMA	Sanford, Delmar E.	Rt. 1, Box 85, Portland 97231	621-3488
Mgt. Area Biologist	Trainer, Charles E.	Rt. 1, Box 106A, Portland 97231	621-3517
SOUTHWEST REGION			
Regional Supervisor	Vaughn, James W.	*1556 NW Beacon Way, Roseburg 97470	*673-8103
Assistant Supervisor	Cochrun, Kenneth R.	*1294 NE Ridge Ave., Roseburg 97470	*673-8867
District Game Biologist	Maben, Robert R.	Rt. 4, Box 371C, Medford 97501	772-6087
District Game Biologist	McCaleb, W. L. Jr.	Rt. 2, Box 1433A, Roseburg 97470	673-8682
District Game Biologist	Sturgis, Harold R.	P. O. Box 643, Coquille 97423	396-4048
Mgr., Denman Area	Bowman, Howard D.	1495 Gregory Rd., Central Pt. 97501	826-3618
CENTRAL REGION			
Regional Supervisor	Mathisen, L. M.	*2305 Awbrey Road, Bend 97701	*382-0766
District Game Biologist	Bonn, Paul	674 East Penn Ave., Bend 97701	382-1758
District Game Biologist	Eastman, D. L.	Home: 5244 Barry, K. Falls 97601	884-3571
		Office: P. O. Box 1063, K. Falls	884-4461
District Game Biologist	Ebert, Paul	313 West 21st St., The Dalles 97058	296-2959
District Game Biologist	Maw, Vernon	Rt. 1, Box 615, Prineville 97754	447-5303
Mgr., White River GMA	Laughlin, E. T.	Rt. 1, Tygh Valley 97063 Wamic	544-2126
Mgr., Klamath GMA	Hoffmeister, A. H.	Rt. 3, Box 93B, Klamath Falls 97601	882-1220
Habitat Agent	Winegar, Harold H.	947 E. First St., Prineville 97754	447-7092
NORTHEAST REGION			
Regional Supervisor	Brown, Will H.	*Box 226, La Grande 97850	*963-5116
Assistant Supervisor	Smith, Clyde E.	*2013 Washington Street, La Grande	*963-5068
District Game Biologist	Bartels, Ronald R.	P. O. Box 121, Enterprise 97828	426-3773
District Game Biologist	Denney, Ralph R.	245 NW 1st, John Day 97845	575-1069
District Game Biologist	Ely, John F.	Star Route, Pendleton 97801	276-0744
District Game Biologist	Humphreys, William R.	2735 11th St., Baker 97814	
District Game Biologist	Ward, Glen F.	Box 284 (535 S. Chase) Heppner 97836	676-9195
Mgr., Wenaha GMA	Morton, E. K.	Troy Route, Wallowa 97885	Flora
Habitat Agent	Kemp, Leslie M.	Rt. 2, Box 116, La Grande 97850	963-5515
Habitat Agent	Cleary, Delbert V.	725 NW John's Place, Pendleton 97801	276-7492
SOUTHEAST REGION			
Regional Supervisor	Masson, W. V.	*Box 911, Burns 97720	*573-2785
District Game Biologist	Grogan, Frank B.	919 N. 9th St., Lakeview 97630	947-7592
District Game Biologist	Langdon, Cecil R.	Rt. 1, Box 318, Ontario 97914	889-6775
District Game Biologist	Mason, G. Ellis	Box 237, Hines 97738	573-6350
District Game Biologist	Olson, William E.	Summer Lake 97640	943-3255
Range Technician	Langdon, Miles O.	Box 409, Burns 97720	573-6550
Mgr., Summer Lake GMA	Claggett, A. Boyd	Summer Lake 97640	943-3152
Habitat Agent	Case, Victor I.	1060 S. Egan, Burns 97720	573-6546

HEADQUARTERS AND REGIONAL OFFICE ADDRESSES AND PHONES:*
Portland, 1634 SW Alder, P. O. Box 3503; Phone: 222-9611
Northwest Region, Rt. 1, Box 325, Corvallis 97330; Phone: Albany 926-5571, Ext. 58
Southwest Region, P. O. Box 577, Roseburg 97470; Phone 673-5373
Central Region, Parrell Road, Bend 97701; Phone: 382-5113
Northeast Region, Box 339, La Grande 97850; Phone: 963-4350
Southeast Region, Box 8, Hines 97738; Phone: 573-6582

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