

California Department of Fish and Game
Resources Building
1416 Ninth Street
Sacramento, CA 95814

REPORT OF THE 1982 GAME TAKE HUNTER SURVEY

Hunter game take questionnaires were mailed to 19,084 hunting licensees in January 1983. Two follow-up mailings were made to nonrespondents; the first approximately four weeks, and second approximately seven weeks after the initial mailing. One thousand one questionnaires were returned undelivered making a total possible response of 18,083. This was a randomly selected sample of 3.5 percent of the estimated 513,000 hunting license purchasers in 1982.

Thirteen thousand five hundred and forty (13,540) usable questionnaires were returned, a response of 70 percent. The survey indicated that there was hunting effort by about 551,630 hunting licensees who spent about 8,145,920 days in the field.

For the past several years, follow-up mailings to nonrespondents have significantly increased response percentage. The increase in response reduces nonresponse bias, the phenomenon of more successful individuals (e.g., hunters) being more inclined to return a questionnaire than unsuccessful or nonparticipating individuals. Nonresponse bias is one of the principal causes of inflated bag and hunter use figures in surveys of this type. However, statistical analysis of survey data indicates high validity for species pursued by large numbers of hunters.

<u>Hunters From License Sales*</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
Hunting Licenses	540,000	513,000	-1%
Deer Hunters (applications)	303,251	295,600	-2%
Deer Tags	380,216	383,036	+2%
Bear Tags	31,486	25,859	-18%
Federal Duck Stamps	108,367	107,213	-1%
State Duck Stamps	103,439	89,919	-13%

*Estimates

HUNTING REGULATION CHANGES

Dove

The bag limit was increased to 15.

Bear

The season was shortened by 21 days.

Deer

A Zone - Archery season extended one week.

Zones D1, X6, X9 - Rifle season shortened by one week.

Zone D2x - Rifle season extended by one week. Quotas established for Tehama Wildlife Area.

Zone X5a - A quota of 300 tags was established.

Zone X5b - The quota of permits was increased from 500 to 600.

Zone X10 - A quota of 650 permits was established. Three different hunting periods.

The following tables are appended to this report:

Table 1 - Summary of State-wide Bag - 1982.

Table 2 - Reported Hunting License and Tag Sales, Hunter Harvest and Effort - 1970-1982.

Table 3 - State-wide Hunters - 1970-1982.

Table 4 - Game Bag, Ten Leading Counties - 1982 (Pheasants, Quail, Doves, Band-tailed Pigeons, Jack Rabbits, Cottontail/Brush Rabbits, Ducks and Geese).

Table 5 - Regional Game Bag, Major Species - 1982.

Table 6 - Distribution of Hunter Effort by Game Species - 1982.

Table 7 - Hunter Success Summary - 1957-1981.

Table 8 State-wide Bag by Species - 1982.

Table 9 - State-wide Hunters by Species - 1982.

Table 10- Mailing and Return of Questionnaires

It is important to note that statistical biases are inherent in this survey and that the principal value of its bag figures is trend indication. Total respondents represent only about 3.0 percent of all hunting license buyers; consequently, those species of game which attract smaller numbers of hunters can be greatly affected by sampling bias. For all species, the use of this survey should be limited to determining long-range trends in most cases.

The estimated total hunting license sales divided by the number of questionnaires returned provides the projection factor for calculating total figures. The projection factor used for the 1982 hunter survey calculations was 38.

BAG AND HUNTER EFFORT BY SPECIES

UPLAND GAME

<u>PHEASANTS</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	375,330	317,000	-15.5%
Hunters Reported	132,200	123,230	- 6.7%
Average Seasonal Bag	2.8	2.6	- 0.2%
Total Days Hunted	505,160	461,890	- 8.5%
Average Days Hunted	3.8	3.7	- 0.1%
<u>QUAIL</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	1,541,490	1,172,950	-23.9%
Hunters Reported	151,330	125,250	-17.2%
Average Seasonal Bag	10.2	9.4	- 0.8%
Total Days Hunted	815,890	643,800	-21.0%
Average Days Hunted	3.3	5.1	+ 1.8%
<u>DOVES</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	3,336,920	3,272,560	- 1.9%
Hunters Reported	206,020	204,970	- 0.5%
Average Seasonal Bag	16.2	16.0	- 0.2%
Total Days Hunted	903,540	871,720	- 3.5%
Average Days Hunted	4.4	4.3	- 0.1%
<u>BAND-TAILED PIGEONS</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	213,860	118,220	-44.7%
Hunters Reported	29,970	22,760	-24.0%
Average Seasonal Bag	7.1	5.2	- 1.9%
Total Days Hunted	102,010	70,340	-31.0%
Average Days Hunted	3.4	3.1	- 0.3%
<u>CHUKAR PARTRIDGE</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	45,990	32,720	-22.8%
Hunters Reported	16,280	13,870	-14.8%
Average Seasonal Bag	2.8	2.4	- 0.4
Total Days Hunted	61,050	54,070	-11.4%
Average Days Hunted	3.8	3.9	+ 0.1%
<u>SAGE GROUSE</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	4,660	3,190	-31.5%
Hunters Reported	5,770	4,370	-24.2%
Average Seasonal Bag	0.8	0.7	- 0.1
Total Days Hunted	8,360	6,760	-19.1%
Average Days Hunted	0.9	1.6	+ 0.7%

<u>SIERRA/RUFFED GROUSE</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	9,250	7,790	-15.7%
Hunters Reported	6,330	5,850	- 7.5%
Average Seasonal Bag	1.5	1.3	- 0.2%
Total Days Hunted	20,500	18,540	- 9.5%
Average Days Hunted	3.2	3.2	None

<u>JACK RABBITS</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	726,680	568,560	-21.7%
Hunters Reported	73,300	61,670	-15.8%
Average Seasonal Bag	9.9	9.2	- 0.7%
Total Days Hunted	657,010	623,390	- 5.1%
Average Days Hunted	9.0	10.1	+ 1.1%

<u>COTTONTAIL/BRUSH RABBITS</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	477,370	345,720	-27.5%
Hunters Reported	72,780	58,670	-19.3%
Average Seasonal Bag	6.6	5.9	- 0.7%
Total Days Hunted	466,900	356,930	-23.5%
Average Days Hunted	6.4	6.1	- 0.3%

<u>TREE SQUIRRELS</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	246,820	165,340	-33.0%
Hunters Reported	52,610	42,140	-99.9%
Average Seasonal Bag	4.7	3.9	- 0.8%
Total Days Hunted	300,220	218,010	-27.4%
Average Days Hunted	5.7	5.2	- 0.5%

<u>WILD TURKEY</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	4,550	4,830	+ 6.1%
Hunters Reported	12,730	13,790	+ 8.3%
Average Seasonal Bag	0.4	.4	None
Total Days Hunted	42,850	50,310	+17.4%
Average Days Hunted	3.4	3.7	+ 0.3%

WATERFOWL

<u>DUCKS</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	1,623,740	1,531,740	- 5.6%
Hunters Reported	119,990	105,830	-11.8%
Average Seasonal Bag	13.5	14.5	+ 1.0%
Total Days Hunted	865,060	777,210	-10.1%
Average Days Hunted	7.2	7.3	+ 0.1%

<u>GEESE</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	137,750	100,210	-27.2%
Hunters Reported	48,990	48,110	- 1.7%
Average Seasonal Bag	2.8	2.1	- 0.7%

BIG GAME

<u>DEER (Hunter Survey)</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	83,030	55,780	-32.8%
Hunters Reported	385,500	364,000	- 5.5%
Total Days Hunted	2,547,380	2,370,670	- 6.9%
Average Days Hunted	6.6	6.5	- 0.1%

<u>DEER (Tag Returns)</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	42,231	31,492	-25.4%
Deer Tag Sales	380,200	383,036	+ 0.7%

The state-wide deer and bear take is estimated both by tag returns and by the Hunter Survey Questionnaire. Actual kill should fall between the two estimates.

<u>BEAR (Hunter Survey)</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	1,440	1,180	-18.0%
Hunters Reported	22,530	19,870	-11.8%
Total Days Hunted	121,540	100,850	-17.0%
Average Days Hunted	5.4	5.1	- 0.3%

<u>BEAR (Tag Returns)</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	766	783	+ 2.2%
Bear Tag Sales	31,486	25,859	-17.87%

<u>WILD PIGS</u>	<u>1981</u>	<u>1982</u>	<u>Change from 1981</u>
State-wide Bag	36,670	26,300	-28.2%
Hunters Reported	32,780	31,620	- 3.5%
Total Days Hunted	195,990	168,800	-13.8%
Average Days Hunted	6.0	5.3	- 0.7%

TABLE 1

SUMMARY OF STATE-WIDE BAG - 1982

<u>Species</u>	<u>Yearly Average 1976-1980</u>	<u>1981</u>	<u>1982</u>	<u>% Change From 1981</u>
Pheasant	532,350	375,330	317,000	- 16
Quail	1,799,010	1,541,490	1,172,950	- 24
Dove	3,361,600	3,336,920	3,272,560	- 2
Chukar Partridge	88,070	45,990	32,720	- 29
Sage Grouse	4,580	4,660	3,190	- 32
Sierra/Ruffed Grouse	9,240	9,250	7,790	- 16
Band-Tailed Pigeons	140,750	213,860	118,220	- 45
Wild Turkeys	2,600	4,550	4,830	+ 6
Jack Rabbits	807,330	726,680	568,560	- 22
Cottontail/Brush Rabbits	544,110	477,370	345,720	- 28
Tree Squirrels	240,190	246,830	165,340	- 33
Ducks	2,955,290	1,623,740	1,531,740	- 6
Geese	185,330	137,750	100,210	- 27
Jacksnipe	68,600	33,520	29,300	- 13
Coots	309,060	172,570	153,250	- 11
Buck Deer (Hunter Survey)	73,170	83,030	55,780	- 33
Buck Deer (Tag Returns)	33,230	42,321	31,492	- 26
Bear (Hunter Survey)	2,090	1,440	1,180	- 18
Bear (Tag Returns)	600	767	783	+ 2
Wild Pigs	28,460	36,670	26,300	- 28

TABLE 2

REPORTED HUNTING LICENSE AND TAG SALES, HUNTER HARVEST AND EFFORT - 1970-1982

LICENSE & TAG SALES	1970	1971	1972	1973	1974	1975*	1976	1977	1978*	1979	1980	1981	1982
Hunting License	756,000	714,000	628,800	668,500	661,000	617,000	580,080	572,000	532,000	522,443	553,124	540,000	513,000
Deer Hunters	354,000	380,000	353,300	387,400	352,426	322,413	324,000	349,000	287,900	283,897	294,400	303,251	295,600
Deer Tags	32,500	26,000	24,300	30,528	30,273	27,322	29,395	26,150	16,745	21,847	27,347	31,486	25,859
Bear Tags	235,000	207,000	184,100	194,303	213,683	143,289	135,268	138,280	124,191	122,764	114,825	108,367	107,213
Pheasant Tags	188,861	173,474	152,414	144,582	149,548	157,204	141,049	151,500	127,234	114,028	111,786	102,853	89,919
Duck Stamps (Federal)				155,556	169,395								
Duck Stamps (State)													
		NOT ISSUED						NOT ISSUED					
STATE-WIDE BAG													
Deer (Buck Tag Returns)	38,645	38,907	37,487	30,402	23,124	26,314	29,784	36,687	30,689	36,415	32,377	42,231	31,492
Deer (Hunter Survey)	92,200	93,300	86,200	81,200	76,200	62,800	74,700	90,700	69,300	70,100	61,060	83,030	55,780
Bear (Tag Return)	555	559	626	767	632	553	486	451	555	731	655	766	1,180
Bear (Hunter Survey)	2,300	1,200	1,600	3,400	1,800	1,750	1,800	1,200	1,700	2,800	2,970	1,440	1,180
Wild Pigs	14,200	15,100	15,900	23,300	20,100	23,900	32,100	32,000	27,300	21,200	29,710	36,670	26,300
Pheasants	730,200	700,300	493,300	638,900	776,300	613,900	528,200	490,600	493,700	562,600	566,650	375,330	317,000
Quail	2,105,500	1,905,200	1,334,800	1,774,300	2,188,400	2,150,300	1,553,400	1,607,900	1,781,100	2,021,900	2,030,760	1,151,490	1,172,950
Doves	4,712,200	4,248,300	3,850,500	4,350,200	4,551,000	4,151,600	3,306,100	3,543,300	3,326,600	3,369,400	3,262,410	3,336,920	3,272,560
Cuckoo Partridge	77,900	57,400	35,500	51,900	102,900	70,700	44,400	51,300	96,800	136,300	111,540	45,990	32,720
Sparrows and	2,700	4,700	5,400	12,600	10,000	9,400	8,600	9,100	9,200	9,300	10,020	9,250	7,790
Ruffed Grouse			7,400	2,800	4,400	3,700	3,600	4,000	4,000	5,000	6,280	4,660	3,190
Sage Grouse	11,800	9,900	7,400	2,800	4,400	3,700	3,600	4,000	4,000	5,000	6,280	4,660	3,190
Band-tailed Pigeons	181,100	285,800	536,800	271,600	209,900	132,400	90,200	160,900	136,500	183,300	132,830	213,860	118,220
Jack Rabbits	1,738,100	1,166,400	1,129,100	1,009,800	953,400	884,600	711,000	710,500	757,100	956,300	901,750	726,680	568,560
Cottontail/Brush	727,100	570,300	443,800	642,400	848,400	766,900	500,700	498,400	463,400	621,300	636,740	477,370	345,720
Rabbits			219,100	225,400	188,200	195,400	254,200	346,500	241,600	191,300	167,360	246,830	165,340
Tree Squirrels	251,100	217,600	219,100	225,400	188,200	195,400	254,200	346,500	241,600	191,300	167,360	246,830	165,340
Ducks	3,513,000	3,401,300	2,890,400	2,781,400	3,966,700	3,081,500	3,240,400	2,074,400	2,673,000	2,376,800	2,038,850	1,623,740	1,531,740
Geese	377,700	373,900	295,700	350,500	346,300	270,300	297,000	215,500	188,600	115,700	108,830	137,750	100,210
Coots	565,200	420,300	445,300	445,300	545,300	590,100	417,000	280,300	274,600	322,000	251,420	172,570	153,250
Jacksnipe	58,500	92,000	75,600	71,600	92,800	121,400	86,300	72,100	72,700	61,000	50,700	33,520	29,300
Wild Turkeys	58,500	1,100	1,900	1,500	1,900	2,300	2,200	2,300	2,800	1,600	4,085	4,559	4,830
Mountain Lichen (Tag Returns)	33	35											
NUMBER HUNTER DAYS	9,931,900	8,689,200	7,954,500	9,299,000	9,428,600	8,251,700	8,097,100	8,357,900	6,941,800	7,360,900	7,256,680	8,145,920	7,610,600
NOT AVAILABLE													

*1975 - This was the first year that follow-up questionnaires were sent. This resulted in smaller, but more accurate estimates of kill from this year forward.
 *1978 - This was the first year that the deer tag option was established.

TABLE 3

STATE-WIDE HUNTERS

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Deer (Applications Sold)	394,000	380,000	353,300	387,400	352,426	322,413	324,000	349,000	287,900	283,897	294,400	299,217	303,251
Deer (Hunter Survey)	390,400	375,200	337,100	382,700	361,500	326,000	334,700	337,400	295,100	291,100	364,950	385,500	364,000
Bear (Applications Sold)	32,500	26,000	24,300	30,528	30,273	27,322	29,395	26,150	16,745	21,847	27,347	31,485	25,859
Bear (Hunter Survey)	28,400	20,600	20,200	32,500	31,000	25,700	25,500	26,900	19,600	19,500	20,810	22,530	19,880
Wild Pigs	22,100	22,400	23,700	29,300	32,200	30,500	28,600	32,100	27,800	23,900	27,900	32,780	31,610
Pheasants	253,800	227,900	197,200	212,800	226,900	205,400	183,700	172,000	155,500	144,500	146,760	132,200	123,240
Quail	211,400	181,500	156,400	173,700	189,400	175,300	152,800	151,200	141,400	147,100	150,580	151,330	125,250
Doves	276,400	242,600	226,300	252,100	235,100	236,600	202,600	203,600	184,200	187,400	189,030	206,020	204,970
Chukar Partridge	32,700	21,500	15,900	20,600	26,300	22,900	16,300	17,500	19,900	26,100	26,920	16,280	13,870
Sierra and Ruffed Grouse	4,200	4,700	4,600	8,400	8,500	6,300	5,900	5,900	6,600	6,600	7,050	6,330	5,850
Sage Grouse	10,100	10,100	7,600	5,500	6,000	4,600	5,000	3,900	4,400	5,000	5,670	5,770	4,370
Band-tailed Pigeons	33,000	38,000	50,900	39,400	38,600	26,800	18,300	24,500	22,000	25,400	24,510	29,970	22,760
Jack Rabbits	149,900	120,100	107,500	112,200	114,500	100,800	84,900	83,400	76,300	80,400	79,380	73,300	61,670
Cottontail/Brush Rabbit	107,500	89,600	76,700	89,200	104,200	93,300	74,600	73,700	64,300	78,000	79,980	72,780	58,670
Tree Squirrels	65,100	58,700	58,800	59,000	55,600	49,700	54,900	63,900	52,400	43,800	43,690	52,610	42,140
Ducks	223,100	204,000	176,200	196,100	204,700	174,300	158,600	146,300	131,200	124,200	114,200	119,990	105,830
Geese	91,600	86,300	79,300	93,600	87,200	67,900	68,500	60,900	56,900	48,100	48,890	49,000	48,100
Coots	40,700	31,000	29,800	36,100	38,300	33,800	25,000	19,100	19,800	18,700	17,540	14,210	11,660
Jacksnipe	11,300	11,400	10,200	11,300	14,700	13,900	11,100	8,700	10,100	9,600	7,570	5,250	4,900
Wild Turkey	1,900	3,900	5,500	7,300	9,900	9,300	10,500	9,800	7,100	6,000	10,240	12,730	13,790

TABLE 4

MAJOR SPECIES GAME BAG -- 1982
(TEN LEADING COUNTIES)

<u>PHEASANTS</u>	<u>% OF STATE TOTAL</u>	<u>POSITION 1981</u>	<u>JACK RABBITS</u>	<u>% OF STATE TOTAL</u>	<u>POSITION 1981</u>
1. Colusa	8.6	5	1. Kern	11.3	2
2. Butte	8.3	1	2. Lassen	10.6	3
3. Yolo	8.1	2	3. San Bernardino	9.3	1
4. Stanislaus	8.0	8	4. San Joaquin	6.8	5
5. San Joaquin	7.1	7	5. Tulare	5.7	4
6. Sutter	6.9	3	6. Fresno	3.5	11
7. Merced	5.6	9	7. Los Angeles	2.9	7
8. Solano	5.0	4	8. Modoc	2.7	6
9. Glenn	4.7	10	9. Riverside	2.6	9
10. Sacramento	4.7	6	10. Shasta	2.6	8
ALL OTHERS	33.0		ALL OTHERS	42.0	
TOTAL	100.00		TOTAL	100.00	
<u>QUAIL</u>			<u>RABBITS (COTTONTAIL/BRUSH)</u>		
1. Kern	7.9	1	1. Kern	16.2	2
2. Fresno	5.4	7	2. San Bernardino	10.0	1
3. Riverside	5.2	2	3. San Diego	6.4	3
4. Tulare	4.9	8	4. Riverside	6.2	4
5. San Bernardino	4.8	3	5. Los Angeles	5.4	10
6. Shasta	4.3	4	6. Tulare	4.7	14
7. Monterey	4.2	9	7. Fresno	4.3	5
8. San Luis Obispo	3.7	6	8. Imperial	4.1	7
9. Santa Barbara	3.6	10	9. Monterey	3.7	6
10. Los Angeles	3.1	17	10. Merced	3.7	12
ALL OTHERS	52.9		ALL OTHERS	35.3	
TOTAL	100.00		TOTAL	100.00	
<u>DOVES</u>			<u>DUCKS</u>		
1. Kern	10.5	1	1. Merced	15.7	2
2. Imperial	9.6	2	2. Colusa	13.5	1
3. Tulare	8.4	3	3. Butte	9.0	3
4. Fresno	8.3	5	4. Solano	5.6	4
5. Riverside	6.8	4	5. Sutter	4.0	6
6. Merced	4.0	9	6. Glenn	3.7	9
7. San Joaquin	3.4	11	7. Fresno	3.5	8
8. Butte	3.4	7	8. Siskiyou	3.4	5
9. Madera	2.9	12	9. Yuba	3.0	12
10. Stanislaus	2.7		10. Imperial	2.8	7
ALL OTHERS	40.0		ALL OTHERS	35.8	
TOTAL	100.00		TOTAL	100.00	
<u>BAND-TAILED PIGEONS</u>			<u>GEESE</u>		
1. Shasta	13.6	3	1. Colusa	17.7	1
2. Monterey	11.7	1	2. Butte	12.6	3
3. Kern	7.0	6	3. Glenn	8.7	4
4. Siskiyou	6.3	15	4. Siskiyou	8.7	2
5. Butte	4.4	10	5. Modoc	6.0	6
6. Amador	3.4	9	6. Merced	5.6	9
7. Placer	3.3	22	7. San Joaquin	4.1	11
8. San Luis Obispo	3.2	2	8. Imperial	4.0	7
9. Tulare	2.7	28	9. Yolo	3.8	14
10. Humboldt	2.6	24	10. Lassen	3.5	5
ALL OTHERS	41.8		ALL OTHERS	25.3	
TOTAL	100.00		TOTAL	100.00	

TABLE 7
HUNTER SUCCESS
As Reported by Hunter Survey Respondents
(In Percent)

	<u>Did Not Hunt</u>	<u>Hunted Unsuccessfully</u>	<u>Hunted Successfully</u>
1957	12	22	66
1958	8	23	69
1959	7	27	66
1960	7	28	65
1961	8	28	64
1962	8	28	64
1963	9	25	66
1964	7	23	70
1965	10	24	67
1966	11	23	66
1967	10	22	68
1968	10	22	68
1969	10	21	69
1970	11	22	67
1971	13	23	64
1972	12	23	65
1973	10	25	65
1974	10	22	68
1975	12	23	65
1976	11	25	64
1977	11	25	64
1978	14	24	62
1979	14	22	63
1980	11	26	64
1981	13	29	58
1982	12	32	56

TABLE 6

DISTRIBUTION OF HUNTER EFFORT BY GAME SPECIES - 1982

Species	Number of Individual Hunters			Percent of		
	Successful	Unsuccessful	Total	Successful	Unsuccessful	Total
Deer	51,640	312,360	364,000	10	61	71
Doves	185,550	19,420	204,970	36	4	40
Pheasants	80,640	42,600	123,240	16	8	24
Ducks	88,240	17,590	105,830	17	3	20
Quail	98,990	26,260	125,250	19	5	24
Jack Rabbits	53,120	8,550	61,670	10	2	12
Cottontail/ Brush Rabbits	49,020	9,650	58,670	10	2	12
Geese	27,280	20,820	48,100	5	4	9
Tree Squirrels	33,630	8,510	42,140	7	2	8
Band-tailed Pigeons	16,000	6,760	22,760	3	1	4
Coots	11,130	530	11,660	2	<0.1	2
Wild Pigs	11,130	20,480	31,610	2	4	6
Bear	1,180	18,700	19,880	<0.2	4	4
Chukar	6,690	7,180	13,870	1	2	3
Partridges						
Jacksnipe	4,220	680	4,900	1	<0.1	1
Wild Turkeys	3,530	10,260	13,790	1	2	3
Sierra/Ruffed Grouse	3,460	2,390	5,850	1	0.5	1
Sage Grouse	2,090	2,280	4,370	<0.5	0.5	1

Total Individual Hunters - 514,410

Due to one hunter often hunting multiple species, percent totals exceed 100% and hunter numbers exceed the total number of individual hunters reported.

TABLE 7
HUNTER SUCCESS
As Reported by Hunter Survey Respondents
(In Percent)

	<u>Did Not Hunt</u>	<u>Hunted Unsuccessfully</u>	<u>Hunted Successfully</u>
1957	12	22	66
1958	8	23	69
1959	7	27	66
1960	7	28	65
1961	8	28	64
1962	8	28	64
1963	9	25	66
1964	7	23	70
1965	10	24	67
1966	11	23	66
1967	10	22	68
1968	10	22	68
1969	10	21	69
1970	11	22	67
1971	13	23	64
1972	12	23	65
1973	10	25	65
1974	10	22	68
1975	12	23	65
1976	11	25	64
1977	11	25	64
1978	14	24	62
1979	14	22	63
1980	11	26	64
1981	13	29	58
1982	12	32	56

TABLE 8

STATE-WIDE BAG BY SPECIES - 1982

	DEER	BEAR	BOAR	PHEASANT	CHICKEN	QUAIL	DOVES	PIGEON	SIERRA GROUSE	SAGE GROUSE	JACK RABBIT	SCURRELL	BRUSH RABBIT	TURKEY	DUCKS	GEESE	JACK- SNIPES	COOTS	
Alameda	190			1,254		6,916	20,444	134			3,116	1,330	2,668		12,368		304	1,634	
Alpine	456			456		874	38	76				304						190	
Amador	494	38		266	413	15,504	23,940	4,028	36		1,746	3,220	2,052		7,410			390	
Butte	1,178	38		26,334		17,532	169,668	5,266			5,966	8,208	1,492	228	138,472		760	9,234	
Calaveras	646					31,084	19,266	228			1,672	5,776	1,492	36	206,416				
Colusa				27,694		9,994	50,198	1,102			1,444	1,444	766		13,308		2,128	11,894	
Contra Costa				6,080		2,356	23,598	684			7,864	38	342		9,082		1,406	1,976	
Del Norte	266	36		342		2,280	1,900	228				364	1,026		9,082			3,448	
El Dorado	1,482					21,622	12,882	1,140			1,900	4,522	1,532	157	52,820		874	2,782	
Fresno	684			1,976		63,422	233,562	1,178			16,812	8,512	14,820		56,362		722	7,410	
Glenn	1,140			14,972		5,738	59,866	2,128			6,306	3,980	300		12,452		3,040	304	
Humboldt	4,436	39		114		16,644	90,950	3,040	938		3,306	4,560	2,470		13,054		2,508	608	
Imperial	38					25,118	313,918	608		304	7,448		14,174		5,586		38	2,728	
Imperial	342			3,186		31,918	31,084				64,030		6,208		39,570		1,444	3,572	
Inyo	1,026			2,432		92,264	341,848	8,284			3,244	9,474	56,302	76	1,140			2,690	
Kern				6,992		9,158	66,804				3,116	2,149	2,866		4,988			418	
Kings	874					17,518	14,858	684			3,244	2,149	836	114	6,042			988	
Lake						33,060	32,034	342			60,154	2,894	9,424	38	9,874		152	988	
Lassen	2,508			3,306		36,218	55,188	2,546			16,454	2,894	19,544		7,253		38	418	
Los Angeles	418	76		2,166		24,054	94,962	1,520			8,588	3,496	1,726		4,856		190	190	
Madera	722			5,548		3,534	11,552	1,140			570	114	76		9,804		114		
Mariposa	988			738		14,174	8,284					4,864	836		5,342				
Mendocino	190	76				20,558	4,522	114			3,040	2,280	950		240,416		378	5,286	
Merced	4,218			17,860		12,368	132,050	1,792			11,248	4,674	12,806		21,908		3,078	646	
Merced	38			3,040		8,208	7,828			190	15,580	1,330	3,078		3,458			380	
Modoc	1,596			436		2,584	8,018				4,960	1,634	3,078		13,490		190	570	
Monterey	1,482			552		49,950	39,064				9,766	1,216	12,882		1,406			1,900	
Monterey	1,426			3,040		8,208	18,126				7,410	3,634	1,900		1,406			380	
Monterey	1,064			304		14,174	8,284				3,040	2,280	950		240,416		378	5,286	
Napa	684					12,368	132,050	1,792			11,248	4,674	12,806		21,908		3,078	646	
Nevada	76			304		8,208	7,828				4,960	1,634	3,078		13,490		190	570	
Orange	684			222		1,500	7,372	152			114	1,102	1,862		1,406			1,900	
Piceor	684					14,060	44,118	3,914			3,496	3,042	874	464	2,426			512	
Piutes	304					13,376	6,422	418			1,710	3,852	1,826		16,572		228	8,436	
Riverside	1,368					61,218	222,870	2,546			14,934	5,852	21,526		26,870		228	8,436	
Riverside	304			2,622		22,870	836				12,920	192	1,538		37,430		1,162	2,774	
Sacramento	646			3,040		51,534	52,820	836			12,920	192	1,538		37,430		1,162	2,774	
San Benito				436		16,074	18,202	150			7,306	76	2,090		8,974		38	1,710	
San Bernardino				518		56,050	89,414	760			53,048	76	34,504		6,194		38	1,710	
San Diego	684			3,648		29,374	66,343	2,812			13,984		22,154		12,778		36	1,520	
San Francisco																			
San Joaquin	38			22,534		15,694	112,290	1,634			38,570	984	4,712		30,490		950	2,126	
San Luis Obispo	950			380		42,864	66,322	3,676			4,142	1,550	3,322		3,344			334	
San Mateo	1,114					3,458	2,052	152			3,721	190	3,721		2,892			36	
Santa Barbara	1,254			38		42,864	30,248	2,432			3,116	1,144	2,156		4,598		36	1,786	
Santa Clara	418			1,558		7,638	8,664				2,090	342	1,862		6,634			760	
Santa Cruz	418			38		6,156	17,328	1,938			3,090	342	1,862		6,634			760	
Shasta	2,774	76		3,724		50,592	53,162	16,112			14,782	22,536	1,140		70,824		2,422	3,610	
Sierra	836					3,268	1,026	608			1,282	464	4,258		1,786			330	
Siskiyou	4,524	152		5,510		27,322	29,716	740			7,030	7,638	4,258		10,824			1,936	
Solano				15,656		2,356	20,716	684			11,666	114	1,178		8,310			1,482	
Sonoma	1,482			1,800		11,532	19,988	570			16,906	1,102	3,42		25,668		750	1,482	
Stanislaus	608			31,270		4,894	9,970	646			9,424	1,062	3,42		6,512			4,322	
Sutter	266			1,868		4,894	33,706				6,018	1,862	3,42		6,512			1,900	
Tehama	2,546			8,616		25,080	85,310	1,482			10,944	7,974	1,102		60,950		2,850	10,164	
Tulare	3,524	152		76		12,768	570	1,482			10,944	7,974	1,102		60,950		608	3,524	
Tulare	494			9,082		57,570	274,398	1,786			1,292	7,144	418		13,316		608	3,524	
Tuolumne	1,254	114		152		9,462	3,154	532			30,452	5,552	16,264		15,770		304	10,982	
Ventura	304					27,688	67,652	2,356			3,444	13,072	1,536		11,462			76	
Yuba	342			35,754		8,616	47,114	780			3,444	13,072	1,536		11,462			76	
Yuba	152			9,432		8,616	34,318	2,356			3,444	13,072	1,536		11,462			76	
Yuba	342			2,584		7,900	26,524	1,862			10,330	3,192	4,998		45,562		36	18,654	
Yuba	342			2,584		7,900	26,524	1,862			10,330	3,192	4,998		45,562		36	18,654	
TOTAL	55,784	1,178	25,296	315,996	72,178	1,172,946	3,272,560	118,218	7,790	3,192	534,596	165,358	345,724	4,826	1,531,742	100,206	29,798	137,254	

TABLE 5

STATE-WIDE HUNTERS BY SPECIES - 1982

	DEER	BEAR	BOAR	PHEASANT	CHUCKAR	QUAIL	BOWES	PIGLOCH	SIERRA GROUSE	SAGE GROUSE	JACK RABBIT	SCOTTBELL	BRUSH RABBIT	TURKEY	DUCKS	GEELSE	JACK-SNIPPE	CLOVIS
Alameda	570	-	14	646	-	760	1,140	38	-	-	608	76	418	-	765	114	74	114
Alpine	5,472	190	-	114	114	114	38	38	152	-	38	152	38	38	38	38	38	38
Amador	4,104	-	-	114	76	1,432	1,634	418	78	-	190	798	304	38	494	454	-	32
Butte	10,032	570	114	8,664	38	3,230	7,866	1,102	38	-	1,444	1,900	482	960	8,284	3,872	76	988
Calaveras	6,536	304	38	6,916	-	2,122	2,330	228	-	-	304	1,482	436	38	266	1,582	-	-
Colusa	2,318	76	-	2,052	-	1,326	2,192	190	-	-	418	266	152	38	1,308	76	228	228
Contra Costa	380	-	-	383	-	383	1,634	228	-	-	608	38	152	-	1,132	76	76	190
Del Norte	1,862	455	-	76	-	342	38	228	152	-	76	266	76	-	722	132	-	-
El Dorado	12,882	184	1,520	7,980	114	2,324	1,292	494	304	-	304	1,368	228	952	152	114	76	532
Fresno	12,654	1,178	1,520	6,654	646	6,654	14,554	380	190	-	2,546	2,850	2,736	114	4,560	912	76	532
Glenn	4,180	152	-	5,130	-	1,026	2,888	190	38	-	988	532	152	38	3,116	2,204	76	342
Humboldt	11,460	1,140	600	2,774	-	2,774	266	722	646	-	532	1,634	608	114	1,330	742	494	114
Imperial	1,064	-	-	2,346	38	3,782	18,012	76	-	-	1,396	1,634	2,204	-	4,294	2,698	76	532
Inyo	6,064	228	114	4,104	1,996	2,052	2,014	-	228	418	874	-	2,204	-	342	342	38	38
Kern	9,500	584	114	3,724	3,724	9,804	18,126	1,710	-	-	6,764	2,334	7,334	228	3,610	570	266	418
Kings	494	-	532	2,128	76	456	3,666	38	-	-	570	657	418	-	266	266	76	76
Lake	5,738	190	646	228	-	1,786	1,292	114	-	-	722	874	190	76	570	76	38	76
Lassen	14,516	152	456	1,254	342	2,336	2,546	114	304	-	2,470	760	1,710	38	2,090	1,520	114	114
Los Angeles	5,320	304	456	1,368	342	4,446	3,610	570	-	-	2,622	266	3,040	38	684	266	38	114
Madera	3,320	418	152	2,812	76	2,598	5,472	228	38	-	988	1,406	1,598	266	618	152	38	76
Marin	1,596	-	-	342	-	342	494	190	38	-	190	608	38	-	912	152	38	38
Mariposa	3,495	508	76	-	-	3,368	456	76	38	-	76	1,330	380	114	266	-	-	-
Merced	12,084	532	2,660	7,714	38	2,356	546	456	76	-	684	722	266	114	266	38	76	-
Mendocino	1,368	38	532	7,714	38	1,520	7,676	152	-	-	1,444	950	1,824	38	10,421	3,230	570	950
Monterey	1,136	76	-	1,368	114	712	798	152	-	-	1,444	266	760	38	2,470	2,384	-	76
Mono	11,438	190	33	6,118	342	456	684	-	413	-	608	266	684	76	456	766	-	38
Monterey	6,612	-	7,678	190	-	4,066	3,268	2,318	-	-	1,178	608	2,014	366	380	76	76	152
Mrap	3,192	76	38	380	-	570	1,330	76	38	-	190	418	152	950	912	266	-	38
Nevada	6,882	304	114	1,216	38	1,216	266	380	342	-	190	418	152	950	580	114	-	38
Orange	684	-	-	152	-	380	456	76	-	-	76	342	342	76	76	38	-	-
Placer	6,080	380	152	2,508	76	1,748	2,926	684	114	-	608	950	456	988	1,254	760	-	114
Plumas	15,580	836	-	1,716	114	1,746	418	228	418	-	190	1,064	266	76	1,140	608	152	190
Riverside	3,116	-	-	6,080	156	6,080	13,528	646	-	-	2,584	1,064	3,080	76	2,470	1,444	266	342
Sacramento	982	38	-	6,118	38	1,026	4,294	190	-	-	1,216	152	380	-	3,154	1,330	304	656
San Benito	2,318	-	2,584	266	394	1,102	3,228	38	-	-	1,216	38	494	132	1,114	38	38	-
San Bernardino	6,536	760	76	418	2,970	6,498	1,368	456	-	-	5,708	570	596	-	1,178	527	38	76
San Diego	5,016	-	-	3,724	38	3,724	7,220	304	-	-	1,534	304	2,736	-	2,318	570	-	152
San Joaquin	1,254	38	76	7,714	114	1,748	3,116	304	-	-	2,584	190	1,102	-	2,318	1,178	418	380
San Luis Obispo	6,194	-	2,660	3,592	190	3,592	3,040	760	-	-	646	190	1,406	722	532	304	38	38
San Mateo	760	-	38	380	38	380	228	38	-	-	38	38	570	-	304	76	-	38
Santa Barbara	5,310	342	1,140	646	38	2,584	1,862	456	-	-	608	76	1,026	-	304	76	38	38
Santa Clara	1,710	-	992	1,254	-	76	1,140	190	-	-	380	76	380	114	760	38	-	114
Santa Cruz	418	-	152	1,254	-	456	760	532	-	-	1,706	76	266	114	152	38	-	38
Shasta	19,742	1,064	532	5,054	-	5,206	5,054	1,748	76	-	1,706	4,560	546	-	1,938	1,292	190	304
Sierra	5,700	266	532	1,254	114	304	266	380	266	-	1,114	380	190	3,002	342	228	-	-
Siskiyou	20,216	1,140	-	2,622	38	2,926	1,300	1,216	1,102	-	988	1,748	760	114	4,180	1,686	114	114
Solano	722	38	-	5,092	-	1,254	2,166	114	-	-	1,216	76	266	-	4,064	1,254	228	454
Sonoma	4,218	-	3,082	760	-	1,254	1,596	266	-	-	1,748	380	76	-	912	114	152	76
Stanislaus	4,712	228	228	8,094	-	2,204	6,160	152	-	-	1,748	570	1,766	-	4,470	1,064	228	342
Sutter	950	76	38	7,296	-	2,926	2,926	228	-	-	608	152	228	-	4,066	986	38	76
Tehama	14,516	874	38	2,546	-	2,546	5,366	228	-	-	1,292	1,596	190	1,598	1,598	986	38	76
Trinity	16,872	1,254	76	3,382	38	2,090	380	532	38	-	342	1,862	266	152	1,938	342	38	190
Tulare	8,360	1,558	684	6,612	114	4,408	11,894	380	38	-	2,318	1,189	2,356	38	3,424	342	38	38
Tuolumne	13,908	1,406	76	114	-	2,622	950	532	38	-	152	3,116	542	38	1,254	76	-	38
Ventura	2,622	152	114	76	36	2,128	1,800	380	38	-	722	76	1,140	-	494	152	-	190
Yuba	1,406	38	190	7,638	-	1,216	5,130	114	-	-	1,178	76	418	-	2,812	152	-	418
Unknown	3,836	266	190	3,268	-	1,482	2,926	380	-	-	798	608	616	708	2,812	836	-	380
TOTAL	364,002	19,874	31,616	125,234	13,870	25,248	204,972	22,762	5,852	4,370	61,674	42,142	54,672	13,794	105,830	46,108	4,902	11,665

TABLE 10

MAILING AND RETURN OF QUESTIONNAIRES BY COUNTY OF RESIDENCE
1982 HUNTER SURVEY

COUNTY	QUESTIONNAIRES MAILED AND DELIVERABLE	PERCENT OF TOTAL MAILED	NUMBER RETURNED	PERCENT RETURNED
ALAMEDA	587	3.2	440	71.9
ALPINE	-	-	-	-
AMADOR	120	.7	86	70.5
BUTTE	611	3.4	448	67.2
CALAVERAS	91	.5	72	76.6
COLUSA	74	.4	62	83.8
CONTRA COSTA	497	2.7	370	72.0
DEL NORTE	99	.5	69	68.3
EL DORADO	196	1.0	158	72.1
FRESNO	910	5.0	645	67.5
GLENN	157	.9	120	73.2
HUMBOLDT	481	2.7	370	73.6
IMPERIAL	185	1.0	126	64.9
INYO	87	.5	71	79.8
KERN	892	4.9	607	62.6
KINGS	162	.9	108	62.8
LAKE	78	.4	65	75.6
LASSEN	138	.8	113	79.6
LOS ANGELES	1,522	8.4	1,124	69.9
MADERA	188	1.0	147	73.9
MARIN	147	.8	116	77.3
MARIPOSA	28	.2	22	73.3
MENDOCINO	159	.9	119	72.6
MERCED	294	1.6	224	71.1
MODOC	37	.2	31	81.6
MONO	55	.3	46	79.3
MONTEREY	185	1.0	138	71.5
NAPA	197	1.1	123	75.0
NEVADA	93	.5	81	77.9
ORANGE	546	3.0	400	69.4
PLACER	297	1.7	234	75.0
PLUMAS	120	.7	93	76.2
RIVERSIDE	392	2.2	266	63.0
SACRAMENTO	859	4.8	662	73.7
SAN BENITO	55	.3	37	67.3
SAN BERNARDINO	523	2.9	387	68.5
SAN DIEGO	533	2.9	422	74.7
SAN FRANCISCO	102	.6	78	73.6
SAN JOAQUIN	469	2.6	346	69.9
SAN LUIS OBISPO	204	1.1	148	68.8
SAN MATEO	356	2.0	283	78.4
SANTA BARBARA	189	1.0	142	70.3
SANTA CLARA	637	3.5	478	70.5
SANTA CRUZ	151	.8	113	71.5
SHASTA	891	4.9	673	71.5
SIERRA	31	.2	26	83.9
SISKIYOU	341	1.9	266	73.7
SOLANO	328	1.8	254	74.7
SONOMA	389	2.2	317	78.5
STANISLAUS	637	3.5	464	67.9
SUTTER	222	1.2	172	74.5
TEHAMA	228	1.3	173	73.6
TRINITY	83	.4	75	88.2
TULARE	462	2.6	310	63.7
TUOLUMNE	139	.8	103	70.5
VENTURA	205	1.1	156	72.2
YOLO	225	1.2	173	73.3
YUBA	201	1.1	157	72.4
NONRESIDENT	38	.2	31	77.5
TOTAL	18,083	100.0	13,540	70.9

COYOTE

BOBCAT

CROW

		BAG	HUNTER	BAG	HUNTER	BAG	HUNTER
1	Alameda	304	190	-	38	1,710	38
2	Alpine	456	228	-	-	-	-
3	Amador	646	418	-	38	-	-
4	Butte	190	380	-	38	1,824	494
5	Calaveras	1,102	646	38	152	-	-
6	Colusa	228	190	-	-	-	-
7	Contra Costa	-	-	-	-	4,750	304
8	Del Norte	38	38	-	-	-	-
9	El Dorado	570	608	-	76	-	-
10	Fresno	1,368	988	38	152	4,674	646
11	Glenn	532	190	-	-	1,634	342
12	Humboldt	836	570	228	266	1,406	190
13	Imperial	266	608	-	-	76	38
14	Inyo	2,736	304	38	114	152	76
15	Kern	4,864	1,748	228	570	2,774	646
16	Kings	-	114	-	-	608	152
17	Lake	114	190	-	-	76	76
18	Lassen	1,710	1,216	-	152	114	114
19	Los Angeles	1,672	1,064	-	114	4,256	342
20	Madera	836	532	114	152	6,004	418
21	Marin	-	-	-	-	38	38
22	Mariposa	456	304	-	38	-	-
23	Mendocino	494	494	38	114	1,406	228
24	Merced	1,102	494	-	-	2,090	342
25	Modoc	570	532	-	38	-	-
26	Mono	950	304	-	-	-	-
27	Monterey	228	266	114	152	570	114
28	Napa	304	494	38	76	1,596	114
29	Nevada	152	114	76	76	-	-
30	Orange	304	190	-	76	-	-
31	Placer	266	304	76	38	152	38
32	Plumas	760	494	38	38	-	-
33	Riverside	2,090	1,178	114	152	4,636	836
34	Sacramento	-	38	-	-	1,520	190
35	San Benito	114	114	38	38	228	76
36	San Bernardino	4,332	2,280	266	532	1,786	456
37	San Diego	1,710	912	228	190	1,444	304
38	San Francisco	-	-	-	-	-	-
39	San Joaquin	418	532	-	-	4,180	684
40	San Luis Obispo	912	228	76	76	152	190
41	San Mateo	228	152	-	-	-	-
42	Santa Barbara	304	190	114	76	874	114
43	Santa Clara	-	76	-	-	266	38
44	Santa Cruz	-	38	-	38	-	-
45	Shasta	2,318	1,254	38	152	2,280	342
46	Sierra	152	342	-	-	-	-
47	Siskiyou	1,938	912	38	76	798	76
48	Solano	-	38	-	-	342	114
49	Sonoma	114	418	76	76	1,064	190
50	Stanislaus	798	722	-	38	14,364	1,178
51	Sutter	494	190	-	-	2,470	342
52	Tehama	1,976	1,254	76	114	1,292	152
53	Trinity	760	684	76	114	1,406	152
54	Tulare	722	684	152	228	9,006	912
55	Tuolumne	798	532	76	76	-	-
56	Ventura	722	456	-	76	380	190
57	Yolo	608	266	-	-	532	228
58	Yuba	38	38	-	38	3,192	342
	Unknown	2,432	494	152	114	760	152
	TOTAL	48,032	28,234	2,584	4,712	88,882	12,008

