

California Department of Fish and Game  
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**REPORT OF THE 1983 GAME TAKE HUNTER SURVEY**

Hunter game take questionnaires were mailed to 15,874 hunting licensees in January 1984. Two follow-up mailings were made to nonrespondents; the first approximately four weeks, and second approximately seven weeks after the initial mailing. Seven hundred ninety three questionnaires were returned undelivered making a total possible response of 15,081. This was a randomly selected sample of 3 percent of the estimated 508,000 hunting license purchasers in 1983.

Eleven thousand eighty five (11,085) usable questionnaires were returned, a response of 70 percent. The survey indicated that there was hunting effort by about 526,746 hunting licensees who spent about 7,833,340 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>1982</u>	<u>1983*</u>	<u>% Change From 1982</u>
Hunting Licenses	532,000	507,400	-5
Deer Hunters (applications)	306,770	274,500	-10
Deer Tags	383,036	355,581	-7
Bear Tags	25,859	11,332	-56
Federal Duck Stamps	109,258	109,660	+1
State Duck Stamps	105,144	97,000	-8

\*Estimates

HUNTING REGULATION CHANGES

Sage Grouse

The sage grouse season was closed in 1983.

Pheasant

The season was extended by 7 days.

## Deer

Zones D3 through D10, and D13 - Rifle season shortened by one week.

Zone D2x - Rifle season shortened by one week. Two hunting periods established.

Zone D14 - New Zone

The Goodale special hunt was not held.

The Tejon Ranch and San Luis Obispo special hunts were held for the first time.

The following tables are appended to this report:

Table 1 - Summary of State-wide Bag - 1983.

Table 2 - Reported Hunting License and Tag Sales, Hunter Harvest and Effort - 1970-1983.

Table 3 - State-wide Hunters - 1971-1983.

Table 4 - Game Bag, Ten Leading Counties - 1983 (Pheasants, Quail, Doves, Band-tailed Pigeons, Jack Rabbits, Cottontail/Brush Rabbits, Ducks and Geese).

Table 5 - Regional Game Bag, Major Species - 1983.

Table 6 - Distribution of Hunter Effort by Game Species - 1983.

Table 7 - Hunter Success Summary - 1960-1983.

Table 8 - State-wide Bag by Species - 1983.

Table 9 - State-wide Hunters by Species - 1983.

Table 10- State-wide Hunter Days by Species - 1983

Table 11- 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 1983 hunter survey calculations was 47.

# BAG AND HUNTER EFFORT BY SPECIES

## UPLAND GAME

<u>PHEASANTS</u>	<u>1982</u>	<u>1983</u>	<u>% Change from 1982</u>
State-wide Bag	317,000	442,200	+39.5
Hunters Reported	123,230	137,220	+11.4
Average Seasonal Bag	2.6	3.2	+23.1
Total Days Hunted	461,890	555,860	+20.3
Average Days Hunted	3.7	4.0	+7.5
 <u>QUAIL</u>			
State-wide Bag	1,172,950	1,410,220	+20.2
Hunters Reported	125,250	145,310	+16.0
Average Seasonal Bag	9.4	9.7	+3.2
Total Days Hunted	643,800	718,520	+11.6
Average Days Hunted	5.1	4.9	-3.9
 <u>DOVES</u>			
State-wide Bag	3,272,560	2,738,660	-16.3
Hunters Reported	204,970	175,350	-14.4
Average Seasonal Bag	16.0	15.6	-2.5
Total Days Hunted	871,720	757,800	-13.06
Average Days Hunted	4.3	3.6	-20.9
 <u>BAND-TAILED PIGEONS</u>			
State-wide Bag	118,220	153,590	+29.9
Hunters Reported	22,760	25,350	+11.4
Average Seasonal Bag	5.2	6.0	+15.4
Total Days Hunted	70,340	84,230	+19.7
Average Days Hunted	3.1	3.3	+6.4
 <u>CHUKAR PARTRIDGE</u>			
State-wide Bag	32,720	67,850	+107.4
Hunters Reported	13,870	19,230	+38.6
Average Seasonal Bag	2.4	3.5	+45.8
Total Days Hunted	54,070	78,110	+44.5
Average Days Hunted	3.9	4.1	+5.1
 <u>SAGE GROUSE</u>			
State-wide Bag	3,190	Season	
Hunters Reported	4,370	Closed	
Average Seasonal Bag	0.7		
Total Days Hunted	6,760		
Average Days Hunted	1.6		

<u>SIERRA/RUFFED GROUSE</u>	<u>1982</u>	<u>1983</u>	<u>% Change From 1982</u>
State-wide Bag	7,790	4,320	-44.5
Hunters Reported	5,850	5,200	-11.1
Average Seasonal Bag	1.3	1.2	-7.7
Total Days Hunted	18,540	18,120	-2.3
Average Days Hunted	3.2	3.5	+9.7

#### JACK RABBITS

State-wide Bag	568,560	569,850	+0.2
Hunters Reported	61,670	64,630	+4.8
Average Seasonal Bag	9.2	8.8	-4.3
Total Days Hunted	623,390	563,130	-9.7
Average Days Hunted	10.1	8.7	-13.9

#### COTTONTAIL/BRUSH RABBITS

State-wide Bag	345,720	441,690	+27.8
Hunters Reported	58,670	67,850	+15.6
Average Seasonal Bag	5.9	6.5	+10.2
Total Days Hunted	356,930	429,590	+20.4
Average Days Hunted	6.1	6.3	+3.3

#### TREE SQUIRRELS

State-wide Bag	165,340	141,400	-14.5
Hunters Reported	42,140	38,360	-9.0
Seasonal Bag	3.9	3.7	-5.1
Total Days Hunted	218,010	199,090	-8.7
Average Days Hunted	5.2	5.2	None

#### WILD TURKEY

State-wide Bag	4,830	4,050	-16.1
Hunters Reported	13,790	13,110	-4.9
Average Seasonal Bag	0.4	0.3	-25.0
Total Days Hunted	50,310	46,090	-8.4
Average Days Hunted	3.7	3.5	-5.4

#### WATERFOWL

##### DUCKS

State-wide Bag	1,531,740	1,741,050	+13.7
Hunters Reported	105,830	113,070	+6.8
Average Seasonal Bag	14.5	15.4	+6.2
Total Days Hunted	777,210	902,240	+16.1
Average Days Hunted	7.3	8.0	+9.6

##### GEESE

State-wide Bag	100,210	160,630	+60.3
Hunters Reported	48,110	54,510	+13.3
Average Seasonal Bag	2.1	3.0	+33.3
Total Days Hunted	328,210	394,820	+20.3
Average Days Hunted	6.8	7.3	+7.4

**BIG GAME**

<u>DEER (Hunter Survey)</u>	<u>1982</u>	<u>1983</u>	<u>% Change From 1982</u>
State-wide Bag	55,780	51,800	-7.1
Hunters Reported	364,000	361,330	-0.7
Total Days Hunted	2,370,670	2,320,100	-2.1
Average Days Hunted	6.5	6.4	-1.5

DEER (Tag Returns)

State-wide Bag	32,520	26,886	-17.3
Deer Tag Sales	383,036	350,731	-8.4

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>1982</u>	<u>1983</u>	<u>% Change From 1982</u>
State-wide Bag	1,180	970	-17.8
Hunters Reported	19,870	13,850	-30.3
Total Days Hunted	100,850	70,660	-29.9
Average Days Hunted	5.1	5.1	None

BEAR (Tag Returns)

State-wide Bag	783	601	-23.2
Bear Tag Sales	25,859	11,332	-56.2

WILD PIGS

State-wide Bag	26,300	35,600	+35.4
Hunters Reported	31,620	39,380	+24.5
Total Days Hunted	168,800	224,340	+32.9
Average Days Hunted	5.3	5.7	+7.5

TABLE 1

## SUMMARY OF STATE-WIDE BAG - 1983

<u>Species</u>	<u>Yearly Average 1976-1980</u>	<u>1982</u>	<u>1983</u>	<u>% Change From 1982</u>
Pheasant	532,350	317,000	442,200	+39
Quail	1,799,010	1,172,950	1,410,220	+20
Dove	3,361,600	3,272,560	2,738,660	-16
Chukar Partridge	88,070	32,720	67,850	+107
Sage Grouse	4,580	3,190	Season	Closed
Sierra/Ruffed Grouse	9,240	7,790	4,320	-44
Band-Tailed Pigeons	140,750	118,220	153,590	+30
Wild Turkeys	2,600	4,830	4,050	-16
Jack Rabbits	807,330	568,560	569,850	+<1
Cottontail/Brush Rabbits	544,110	345,720	441,690	+28
Tree Squirrels	240,190	165,340	141,400	-14
Ducks	2,955,290	1,531,740	1,741,050	+14
Geese	185,330	100,210	160,630	+60
Jacksnipe	68,600	29,300	22,500	-23
Coots	309,060	153,250	161,460	+5
Deer (Hunter Survey)	73,170	55,780	51,800	-7
Deer (Tag Returns)	33,230	31,492	26,886	-17
Bear (Hunter Survey)	2,090	1,180	970	-18
Bear (Tag Returns)	600	783	601	-23
Wild Pigs	28,460	26,300	35,600	+35

TABLE 3  
STATE-WIDE HUNTERS

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Deer (Applications Sold)	380,000	353,300	387,400	352,426	322,413	324,000	349,000	287,900	283,897	294,400	299,217	306,770	274,770
Deer (Hunter Survey)	375,200	337,100	382,700	361,500	326,000	334,700	337,400	295,100	291,100	304,950	385,500	364,000	361,330
Bear (Applications Sold)	26,000	24,300	30,528	30,273	27,322	29,395	26,150	16,745	21,847	27,347	31,486	25,859	11,332
Bear (Hunter Survey)	20,600	20,200	32,500	31,000	25,700	25,500	26,900	19,600	19,500	20,810	22,530	19,880	13,850
Wild Pigs	22,400	23,700	29,300	32,200	30,500	28,600	32,100	27,800	23,900	27,900	32,780	31,610	39,380
Pheasants	227,900	197,200	212,900	228,900	205,400	183,700	172,000	155,500	144,500	146,760	132,200	123,240	137,220
Quail	181,500	156,400	173,700	189,400	175,300	152,800	151,200	141,400	147,100	150,580	151,330	123,250	145,310
Doves	242,600	226,300	252,100	255,100	236,600	202,600	203,600	184,200	187,400	189,030	206,020	204,970	175,350
Chukar Partridge	21,500	15,900	20,600	28,300	22,900	16,300	17,500	19,900	26,100	26,920	16,280	13,870	19,230
Sierra and Ruffed Grouse	4,700	4,800	8,400	8,500	6,300	5,900	5,900	6,600	6,600	7,050	6,330	5,850	5,200
Sage Grouse	10,100	7,600	5,500	6,000	4,600	5,000	3,900	4,400	5,000	5,670	5,770	4,370	Closed
Band-tailed Pigeons	38,000	50,900	39,400	38,600	26,800	18,300	24,300	22,000	25,400	24,510	29,970	22,760	25,350
Jack Rabbits	120,100	105,500	112,200	114,500	100,800	84,900	83,400	76,300	80,400	79,380	73,300	61,670	64,630
Cottontail/Brush Rabbit	89,600	76,700	89,200	104,200	93,300	74,600	73,700	64,300	78,000	79,980	72,780	58,670	67,850
Tree Squirrels	58,700	58,800	59,000	55,600	49,700	54,900	63,900	52,400	43,800	43,690	52,610	42,140	38,360
Ducks	204,000	176,200	196,100	204,700	174,300	158,600	146,300	131,200	124,200	114,590	119,990	105,830	113,070
Geese	86,300	79,300	93,600	87,200	67,900	68,500	60,900	56,900	48,100	48,890	49,000	46,100	54,510
Coots	31,000	29,800	36,100	38,300	33,800	25,000	19,100	19,800	18,700	17,540	14,210	11,660	12,880
Jacksnipe	11,400	10,200	11,300	14,700	13,900	11,100	8,700	10,100	9,600	7,570	5,250	4,900	4,000
Wild Turkey	3,900	5,500	7,300	9,900	9,300	10,500	9,800	7,100	6,000	10,240	12,730	13,790	13,110

TABLE 2

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

	1970	1971	1972	1973	1974	1975*	1976	1977	1978*	1979	1980	1981	1982	1983
<b>LICENSE &amp; TAG SALES</b>														
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	532,000	507,400
Deer Hunters	394,000	380,000	353,300	387,400	352,426	322,413	324,000	349,000	287,900	283,897	294,400	303,251	306,768	274,410
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	11,332
Bear Tags	235,000	207,000	184,100	194,303	213,683	143,289	135,268	128,280	124,191	122,764	114,825	108,367	109,258	109,654
Pheasant Tags	188,861	173,474	152,414	144,582	149,548	137,204	141,049	151,300	127,234	114,028	111,786	102,853	105,144	96,937
Duck Stamps (Federal)														
Duck Stamps (State)														
		NOT ISSUED			169,395									
<b>STATE-WIDE BAG</b>														
Deer (Buck Tag Returns)	38,645	38,907	37,487	30,402	23,124	26,314	29,784	36,687	30,889	36,415	32,377	42,231	32,520	26,886
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	53,780	51,800
Bear (Tag Return)	555	559	626	767	632	553	486	451	655	731	655	766	783	601
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	970
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	35,600
Pheasants	750,200	700,300	493,300	638,900	776,300	613,900	528,200	490,600	493,700	562,600	586,650	375,330	317,000	442,200
Quail	2,025,600	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	1,410,220
Doves	4,712,200	4,248,300	3,850,500	4,350,200	4,551,900	4,151,600	3,306,100	3,543,500	3,326,600	3,369,400	3,262,410	3,336,920	3,272,560	2,738,660
Grouse Partridge	77,200	57,400	25,500	51,900	102,900	70,700	44,400	51,300	96,800	136,300	111,540	45,990	32,720	67,850
Sierra and Ruffed Grouse	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	4,320
Sage Grouse	11,800	9,900	7,400	2,800	4,400	3,700	3,500	4,000	4,000	5,000	6,280	4,660	3,190	Closed
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	153,590
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	729,680	568,560	569,850
Cottontail/Brush Rabbits	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	441,690
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	141,400
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	1,741,050
Geese	377,700	373,300	296,700	350,500	346,500	270,000	297,000	216,500	188,600	113,700	108,830	137,750	100,210	160,630
Coots	566,200	420,300	446,300	445,300	545,800	590,100	417,000	280,300	274,600	322,000	251,420	172,570	153,250	161,460
Jackknife Wild Turkeys	59,500	92,000	75,600	71,600	92,800	121,400	86,500	72,100	72,700	61,000	50,700	33,520	29,300	22,500
Mountain Lion (Tag Returns)	83	1,100	1,900	1,500	1,900	4,300	2,200	2,300	2,800	1,600	4,085	4,550	4,830	4,050
						CLOSED SEASON								
<b>NUMBER HUNTER DAYS</b>	9,931,900	8,689,200	7,994,500	9,299,000	9,428,600	8,251,700	8,097,100	8,357,900	6,941,800	7,380,900	7,256,680	8,145,920	7,610,600	7,833,340

\*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

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Deer (Applications Sold)	380,000	353,300	387,400	352,426	322,413	324,000	349,000	287,900	283,897	294,400	299,217	306,770	274,770
Deer (Hunter Survey)	375,200	337,100	382,700	361,500	326,000	334,700	337,400	295,100	291,100	304,950	385,500	364,000	361,330
Bear (Applications Sold)	26,000	24,300	30,528	30,273	27,322	29,395	26,150	16,745	21,847	27,347	31,486	25,859	11,332
Bear (Hunter Survey)	20,600	20,200	32,500	31,000	25,700	25,500	26,900	19,600	19,500	20,810	22,530	19,880	13,850
Wild Pigs	22,400	23,700	29,300	32,200	30,500	28,600	32,100	27,800	23,900	27,900	32,780	31,610	39,380
Pheasants	227,900	197,200	212,900	228,900	205,400	183,700	172,000	155,500	144,500	146,760	132,200	123,240	137,220
Quail	181,500	156,400	173,700	189,400	175,300	152,800	151,200	141,400	147,100	150,580	151,330	125,250	145,310
Doves	242,600	226,300	252,100	255,100	236,600	202,600	203,600	184,200	187,400	189,030	206,020	204,970	175,350
Chukar Partridge	21,500	15,900	20,600	28,300	22,900	16,300	17,500	19,900	26,100	26,920	16,280	13,870	19,230
Sierra and Ruffed Grouse	4,700	4,800	8,400	8,500	6,300	5,900	5,900	6,600	6,600	7,050	6,330	5,850	5,200
Sage Grouse	10,100	7,600	5,500	6,000	4,600	5,000	3,900	4,400	5,000	5,670	5,770	4,370	Closed
Band-tailed Pigeons	38,000	50,900	39,400	38,600	26,800	18,300	24,500	22,000	25,400	24,510	29,970	22,760	25,350
Jack Rabbits	120,100	105,500	112,200	114,500	100,800	84,900	83,400	76,300	80,400	79,380	73,300	61,670	64,630
Cottontail/Brush Rabbit	89,600	76,700	89,200	104,200	93,300	74,600	73,700	64,300	78,000	79,980	72,780	58,670	67,850
Tree Squirrels	58,700	58,800	59,000	55,600	49,700	54,900	63,900	52,400	43,800	43,690	52,610	42,140	38,360
Ducks	204,000	176,200	196,100	204,700	174,300	158,600	146,300	131,200	124,200	114,390	119,990	105,830	113,070
Geese	86,300	79,300	93,600	87,200	67,800	68,500	60,900	56,900	48,100	48,890	49,000	48,100	54,510
Coots	31,000	29,800	36,100	38,300	33,800	25,000	19,100	19,800	18,700	17,540	14,210	11,660	12,880
Jacksnipe	11,400	10,200	11,300	14,700	13,900	11,100	8,700	10,100	9,600	7,370	5,250	4,900	4,000
Wild Turkey	3,900	5,500	7,300	9,900	9,300	10,500	9,800	7,100	6,000	10,240	12,730	13,790	13,110

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	1983
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	532,000	507,400
Deer Hunters	394,000	380,000	353,300	387,400	352,426	322,413	324,000	349,000	287,900	283,897	294,400	303,251	306,768	274,410
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	11,332
Reasant Tags	235,000	207,000	184,100	194,303	213,683	143,289	135,268	128,280	124,191	122,764	114,825	108,367	109,258	109,654
Buck Stamps (Federal)	188,861	173,474	152,414	144,582	149,548	157,204	141,049	151,300	127,234	114,028	111,786	102,853	105,144	96,937
Buck Stamps (State)	NOT ISSUED	NOT ISSUED	143,400	155,556	169,395	157,204	151,300	151,300	127,234	114,028	111,786	102,853	105,144	96,937
STATE-WIDE BAC														
Deer (Buck Tag Returns)	38,645	38,907	37,487	30,402	23,124	26,314	29,784	36,687	30,889	36,415	32,377	42,221	32,520	26,886
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	51,800
Bear (Tag Return)	355	559	626	767	632	553	486	451	655	731	655	766	783	601
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	970
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	35,600
Phasants	750,200	700,300	493,300	638,900	776,300	613,900	528,200	490,600	493,700	562,600	586,650	375,330	317,000	442,200
Quail	2,025,600	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	1,410,220
Doves	4,712,200	4,248,390	3,850,500	4,350,200	4,551,000	4,151,600	3,306,100	3,543,500	3,326,600	3,369,400	3,262,410	3,336,920	3,272,560	2,738,660
Chukar Partridge	77,200	57,400	25,500	51,900	102,900	70,790	44,400	51,390	96,800	136,300	111,540	45,990	32,720	67,850
Sierra and Ruffed Grouse	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	4,320
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	Closed
Hard-tailed Pigeons	181,100	283,800	536,800	271,600	209,900	132,400	90,200	160,900	136,500	183,300	132,830	213,860	118,220	153,590
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	569,850
Cottontail/Brush Rabbits	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	441,690
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	141,400
Ducks	3,513,000	3,401,300	2,390,400	2,781,400	3,966,700	3,081,500	3,240,400	2,074,400	2,673,000	2,376,800	1,623,880	1,623,740	1,531,740	1,741,050
Geese	377,700	373,900	296,700	350,500	346,500	270,000	297,000	216,500	188,600	115,700	108,850	137,750	100,210	160,630
Coots	566,200	420,000	446,300	445,300	545,800	590,100	417,000	280,300	274,600	322,000	251,420	172,570	153,250	161,460
Jacksnipe	59,500	92,000	75,600	71,600	92,800	121,400	86,500	72,100	72,700	61,000	50,700	33,520	29,300	22,500
Wild Turkeys	500	1,100	1,900	1,500	1,900	4,300	2,200	2,300	2,800	1,600	4,085	4,550	4,830	4,050
Mountain Lion (Tag Returns)	83	35												
NUMBER HUNTER DAYS	9,931,900	8,689,200	7,994,500	9,299,000	9,428,600	8,251,700	8,097,100	8,357,900	6,941,800	7,380,900	7,256,680	8,145,920	7,610,600	7,833,340

\*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 4

**MAJOR SPECIES GAME BAG - 1983**  
(TEN LEADING COUNTIES)

	% OF STATE TOTAL	POSITION 1982		% OF STATE TOTAL	POSITION 1982
<b><u>PHEASANTS</u></b>			<b><u>JACK RABBITS</u></b>		
1. Yolo	10.6	3	1. Kern	19.6	1
2. Butte	7.6	2	2. San Bernardino	11.8	3
3. Sutter	7.5	6	3. Lassen	6.4	2
4. Colusa	6.6	1	4. San Joaquin	4.7	4
5. Sacramento	6.5	10	5. Tulare	3.7	5
6. Merced	6.1	7	6. Riverside	3.7	9
7. Glenn	5.9	9	7. Los Angeles	3.7	7
8. Solano	5.9	8	8. Fresno	3.3	6
9. San Joaquin	5.6	5	9. Merced	2.4	13
10. Fresno	4.3	11	10. San Diego	2.4	11
All Others	33.4		All Others	38.3	
<b><u>QUAIL</u></b>			<b><u>RABBITS (COTTONTAIL/BRUSH)</u></b>		
1. Kern	9.8	1	1. Kern	12.8	1
2. Riverside	8.2	3	2. San Bernardino	11.3	2
3. San Bernardino	6.7	5	3. Los Angeles	4.8	5
4. Monterey	5.7	7	4. San Diego	4.4	3
5. San Luis Obispo	5.2	8	5. Monterey	4.3	9
6. Santa Barbara	4.6	9	6. Ventura	4.3	12
7. Fresno	4.0	2	7. Fresno	4.3	7
8. Los Angeles	3.4	10	8. Santa Barbara	4.3	16
9. San Diego	3.4	13	9. Tulare	4.0	6
10. Imperial	3.2	16	10. San Luis Obispo	4.0	14
All Others	45.8		All Others	41.5	
<b><u>DOVES</u></b>			<b><u>DUCKS</u></b>		
1. Imperial	11.1	2	1. Merced	15.0	1
2. Kern	11.0	1	2. Colusa	11.3	2
3. Fresno	9.3	4	3. Butte	8.9	3
4. Riverside	8.3	5	4. Sutter	5.4	5
5. Tulare	6.3	3	5. Solano	5.2	4
6. San Joaquin	4.0	7	6. Glenn	3.8	6
7. San Bernardino	3.4	11	7. Siskiyou	3.8	8
8. Kings	3.4	12	8. Imperial	3.3	10
9. Merced	3.2	6	9. Kern	3.3	11
10. Butte	2.4	8	10. Fresno	3.2	7
All Others	37.6		All Others	36.8	
<b><u>BAND-TAILED PIGEONS</u></b>			<b><u>GEESE</u></b>		
1. Monterey	22.2	2	1. Colusa	15.9	1
2. Shasta	10.0	1	2. Merced	12.1	6
3. San Luis Obispo	6.4	8	3. Butte	11.9	2
4. Siskiyou	6.2	4	4. Glenn	9.3	3
5. Mendocino	5.8	13	5. Modoc	6.6	5
6. Ventura	5.2	16	6. Siskiyou	6.1	4
7. Trinity	4.3	21	7. Imperial	5.4	8
8. Kern	4.1	3	8. Sutter	4.7	13
9. San Diego	3.9	12	9. Lassen	3.9	10
10. Tuolumne	2.2	39	10. Sacramento	2.8	11
All Others	29.7		All Others	21.3	

TABLE 5

DISTRIBUTION OF MAJOR GAME SPECIES BY ADMINISTRATIVE REGION\*  
1983

(Percentage of State Bag)

	<u>Pheasants</u>		<u>Quail</u>		<u>Doves</u>		<u>Jack Rabbits</u>		<u>Cottontail</u>		<u>Ducks</u>	
	<u>1982</u>	<u>1983</u>	<u>1982</u>	<u>1983</u>	<u>1982</u>	<u>1983</u>	<u>1982</u>	<u>1983</u>	<u>1982</u>	<u>1983</u>	<u>1982</u>	<u>1983</u>
Region 1	8	9	15	13	6	5	20	14	6	6	10	12
Region 2	59	61	17	11	21	18	20	16	7	5	48	46
Region 3	4	4	16	19	7	9	9	8	10	10	7	7
Region 4	25	22	26	23	39	38	26	33	35	31	26	25
Region 5	3	3	25	33	26	29	23	28	40	46	8	10
Unknown	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>   </u>
	100	100	100	100	100	100	100	100	100	100	100	100

\*See annual deer report for deer statistics.

TABLE 6  
DISTRIBUTION OF HUNTER EFFORT BY GAME SPECIES - 1983

Species	Number of Individual Hunters			Percent of Total Individual Hunters		
	Successful	Unsuccessful	Total	Successful	Unsuccessful	Total
Deer	48,390	312,940	361,330	9	59	69
Bear	966	12,880	13,850	0.2	2	3
Wild Pig	13,660	25,710	39,380	3	3	7
Coyote	16,050	13,570	29,620	3	3	6
Bobcat	1,380	1,980	3,360	0.3	0.4	1
Crow	10,070	1,840	11,910	2	0.4	2
Pheasant	96,830	40,390	137,220	18	8	26
Chukar Partridge	9,480	9,750	19,230	2	2	4
Quail	113,440	31,880	145,310	22	6	28
Doves	156,910	18,450	175,350	30	4	33
Band-tailed Pigeons	18,910	6,440	25,350	4	1	5
Sierra/Ruffed Grouse	2,670	2,530	5,200	0.5	0.5	1
Jack Rabbits	56,440	8,190	64,630	11	2	12
Tree Squirrels	29,620	8,740	38,360	6	2	7
Cottontail/Brush Rabbits	56,530	11,320	67,850	11	2	13
Wild Turkeys	3,130	9,980	13,110	1	2	2
Ducks	95,680	17,390	113,070	18	3	21
Geese	32,750	21,760	54,510	6	4	10
Jack Snipe	3,270	740	4,000	0.6	0.1	1
Coots	12,270	640	12,880	2	0.1	2

Total Individual Hunters - 526,800

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>
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
1983	12	31	57

1983 SURVEY HUNTER TOTALS COUNTY RANG

COUNTY	DEER	BEAR	BOAR	COYOTE	ROBCAT	CROM	PHEASANT	CHUKAR	QUAIL	DOVES	PIGEON	CROUSE	RUFFED	RABBIT	JACK	TRUSS	COTTON	TURKEY	DOCKS	GEESE	JACK	COOTS	TOTAL
ALAMEDA	368								6854	12006				46	1456	310	310	46	15226			92	38778
ALPINE	506								1104														2024
AMADOR	588								11868	10074	2698			92	2806	268	318		460			13938	34684
BUTTE	1552	46	46	1794	33810	1426	33810		17710	68874	1840				7084	1820	1820		19274				329498
CALAVERAS	184			414	46				13708	8924	332				1473	1932	506	184	156446				29486
COLUSA	230			276	29164	690	29164		15088	40388				2530	3268	138	138	276	230				319470
CONTRA COSTA	230			92	9108	46	9108		3268	24978	644			3268	1472	2438	2438		25622				76268
DEL NORTE	276			414	966				1426	1196	1288			460	184	230	230		18748				23968
EL DORADO	282	46	644						10626	4278	92			92	1104	1334	1334		2390				27782
FRESNO	588			920	18952	1794	18952		56718	25852	966			92	18584	4646	18582		56166				450294
GLENN	3580			138	1288	2208	25990		17710	34500	920			92	2714	2392	1564		67344				161092
HUMBOLDT	388			1180	368	138	368		13156	1794	1702			598	3036	4140	1564		33764				4278
IMPERIAL	398								44436	304198	230				5198	15042	15042		58926				45256
INYO	370			92	582	582	2254		44436	304198	230			92	10626	14490	56672	230	3358				74214
KEAN	874			3404	138	138	12558		17572	30834	6394			111780	14490	56672	230	58696					14430
KINGS	138			920	1288	2208	1512		19476	92104	414			8924	414	2162	1150		8694				14430
LAKE	736			148	138	138	5152		11960	7498	46			8924	414	2162	1150		8694				14430
LASSEN	2116			46	1564	1564	2714		12348	17296	368			5566	6302	1380	46		506				34350
LOS ANGELES	460			46	1564	1564	2714		12348	17296	368			5566	6302	1380	46		506				34350
MADERA	368			460	1564	1564	2714		12348	17296	368			5566	6302	1380	46		506				34350
MARIN	1012			920	2116	2116	3174		48024	35052	3082			21022	138	21252	138		8050				146684
MARIPOSA	322			322	46	46	5866		30728	59478	736			6348	2576	5290			21022				13918
MENDOCINO	4232			322	138	138	2944		2944	8142	92			46	46	46			18768				32844
MERCED	138			1380	92	92	828		9568	4140	8924			414	2162	1150			138				16308
MODOC	1794			1058	1380	1380	26510		30314	5796	8924			414	2162	1150			4094				68816
MONO	1840			46	1794	1794	5428		10442	8274	92			138	138	138			262062				467590
MONTREY	2300			322	184	184	1564		26220	11500	92			92	7452	1748	19182	46	4232				107134
NAVAJO	920			138	1380	1380	276		80776	56166	34224			92	1794	920	92		46				230000
NEVADA	598			354	46	46	46		12426	1426	690			138	588	414	276		690				20976
ORANGE	2208			46	2484	2484	4794		13272	9844	1856			46	3542	4554	2300		2714				28976
PUMAS	460			46	874	874	9794		14866	18354	3404			46	3542	4554	2300		2714				28976
RAPA	230			322	1380	1380	28642		14866	18354	3404			46	3542	4554	2300		2714				28976
RIVERSIDE	46			322	1380	1380	28642		14866	18354	3404			46	3542	4554	2300		2714				28976
SACRAMENTO	506			828	1334	1334	644		11862	25328	828			21068	46	47518	828		52670				66424
SAN BERNITO	552			1656	1334	1334	3270		94852	58672	2300			17478	552	2070	2254		37904				499974
SAN BERNARDINO	552			1656	1334	1334	3270		94852	58672	2300			17478	552	2070	2254		37904				499974
SAN DIEGO	552			2346	14582	14582	48672		47324	40672	2300			67114	1242	50048	46		18044				157504
SAN JOAQUIN	92			184	2668	2668	184		47324	40672	2300			13800	1242	50048	46		18044				157504
SAN LUIS OBISPO	1748			184	2668	2668	24748		184	184	6118			26884	1610	19320	1012		9522				368450
SANTA BARBARA	184			322	46	46	2692		7308	5770	9844			9200	644	17710	138		53912				25920
SANTA CLARA	1104			956	322	322	184		1436	1544	9844			13616	368	18308	1426		4508				181976
SANTA CRUZ	828			736	1656	1656	8234		65428	36284	1742			782	782	138	184		4508				5198
SHASTA	2392			92	874	874	138		3312	7728	1426			13616	368	18308	1426		4508				146326
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644	920		7956				14306
SIERRA	414			2898	46	46	1426		34776	32154	15364			12098	15948	644							

TABLE 9 SURVEY HUNTER TOTAL

DEER	BEAR	BOAR	COYOTE	BOBCAT	CROW	PHEASANT	PARTRIDGE	QUAIL	DOWNS	PIGEON	RUFFED Grouse	JACK RABBIT	TREE SQUIRREL	COTTON TAIL	TURKEY	DUCKS	GESESE	JACK SNITPE	COOTS	TOTAL
ALABAMA	13202	414	46	505	138	322	138	1058	736	46	184	506	138	368	138	690	138	46	6302	
ALASKA	1328	46	276	184	46	46	46	1058	46	46	46	46	46	46	46	46	46	46	46	
ARIZONA	4130	230	138	462	460	872	46	1380	96	44	46	46	46	46	46	46	46	46	5888	
ARKANSAS	7034	230	138	462	460	872	46	1380	96	44	46	46	46	46	46	46	46	46	6114	
CALIFORNIA	4876	92	322	276	46	46	46	1380	874	138	46	46	46	46	46	46	46	46	4278	
COLORADO	1610	92	322	276	46	46	46	1380	2896	138	46	46	46	46	46	46	46	46	1822	
CONNECTICUT	644	46	46	46	230	3026	690	690	2070	92	46	46	46	46	46	46	46	46	1058	
DELAWARE	1564	276	46	46	46	184	46	322	92	230	46	46	46	46	46	46	46	46	4508	
FLORIDA	13202	414	46	505	138	322	138	1058	736	46	184	506	138	368	138	690	138	46	6302	
GEORGIA	10994	736	1886	138	46	7482	46	1058	10718	322	46	2668	1656	2830	46	4692	828	184	19318	
HAWAII	3910	230	138	138	46	6532	46	1150	2720	46	46	828	644	552	46	3818	2898	506	21344	
IDAHO	9476	644	690	506	138	46	46	5198	17066	506	690	1104	1150	2300	46	7314	4278	874	42412	
ILLINOIS	1012	644	690	506	138	46	46	5198	17066	506	690	1104	1150	2300	46	7314	4278	874	42412	
INDIANA	4232	644	138	230	46	184	46	1702	16376	92	138	1242	2944	1196	4002	690	782	322	6440	
IOWA	10672	644	138	230	46	184	46	1702	16376	92	138	1242	2944	1196	4002	690	782	322	6440	
KANSAS	644	138	368	184	46	5934	46	966	3728	92	762	1012	274	1104	46	828	46	230	81696	
KENTUCKY	5612	138	368	184	46	5934	46	966	3728	92	762	1012	274	1104	46	828	46	230	81696	
LAKES	11960	460	92	1196	138	782	138	1518	1564	874	230	1702	1012	1564	46	1866	1426	138	11178	
MAINE	7084	460	598	1104	46	598	46	6394	3680	92	3036	598	46	3726	138	368	138	46	28060	
MARYLAND	6026	322	184	644	46	2346	46	1794	3404	92	920	966	1242	1242	138	874	230	92	19688	
MASSACHUSETTS	5016	10934	92	138	184	414	46	580	4232	326	46	134	598	2806	46	828	184	46	6440	
MICHIGAN	3726	46	10934	368	138	414	46	580	4232	326	46	134	598	2806	46	828	184	46	6440	
MINNESOTA	7038	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
MISSISSIPPI	920	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
MISSOURI	5124	230	330	322	46	2284	46	1564	414	414	46	184	782	46	46	1178	350	46	38732	
MONTANA	1224	230	330	322	46	2284	46	1564	414	414	46	184	782	46	46	1178	350	46	38732	
NEBRASKA	524	230	330	322	46	2284	46	1564	414	414	46	184	782	46	46	1178	350	46	38732	
NEVADA	3726	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
NEW HAMPSHIRE	7038	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
NEW JERSEY	920	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
NEW MEXICO	15364	460	3496	736	46	8694	92	1280	736	1058	368	1564	1104	1564	46	1564	782	46	11178	
NEW YORK	1518	92	414	506	46	8694	92	1280	736	1058	368	1564	1104	1564	46	1564	782	46	11178	
NORTH CAROLINA	15686	46	46	1104	46	46	46	1886	1242	46	230	1058	368	46	46	522	3910	46	29026	
NORTH DAKOTA	19028	46	10934	368	138	414	46	580	4232	326	46	134	598	2806	46	828	184	46	6440	
OHIO	5016	10934	92	138	184	414	46	580	4232	326	46	134	598	2806	46	828	184	46	6440	
OKLAHOMA	3726	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
OREGON	7038	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
PENNSYLVANIA	920	46	138	276	46	184	92	1012	1748	138	184	552	276	92	46	522	3910	46	29026	
RHODE ISLAND	1224	230	330	322	46	2284	46	1564	414	414	46	184	782	46	46	1178	350	46	38732	
SOUTH CAROLINA	524	230	330	322	46	2284	46	1564	414	414	46	184	782	46	46	1178	350	46	38732	
SOUTH DAKOTA	460	92	3082	32	46	8970	46	966	4140	230	46	1564	782	46	46	1178	350	46	38732	
TENNESSEE	2300	230	3082	32	46	8970	46	966	4140	230	46	1564	782	46	46	1178	350	46	38732	
Texas	4938	552	184	1840	46	1012	46	3382	6348	1242	828	1702	1702	322	1196	2844	1656	46	28622	
UTAH	6440	276	184	1380	322	414	46	5152	2760	1104	1104	1104	322	322	1196	2844	1656	46	28622	
VERMONT	2840	2898	2898	414	92	230	368	4186	2760	1104	46	46	51	184	1150	52	46	46	24656	
VIRGINIA	6934	276	1586	368	92	92	92	1726	2116	184	1058	368	184	184	230	184	92	46	1656	
WASHINGTON	2234	1290	1290	414	92	92	92	1726	2116	184	1058	368	184	184	230	184	92	46	1656	
WEST VIRGINIA	2234	1290	1290	414	92	92	92	1726	2116	184	1058	368	184	184	230	184	92	46	1656	
WISCONSIN	16982	828	736	1058	138	92	46	4534	2744	2346	460	1298	3496	460	2346	1334	1012	46	46864	
WYOMING	4276	184	46	17066	46	6282	46	2668	1840	46	782	782	1328	920	432	3818	184	138	5796	
ALASKA	17066	736	46	506	46	6782	46	1178	1380	322	1058	690	1328	920	432	3818	184	138	5796	
ARIZONA	5230	46	2896	322	46	6714	46	1242	1380	322	1058	690	1328	920	432	3818	184	138	5796	
ARKANSAS	3266	184	276	44	46	6714	92	1242	1380	322	1058	690	1328	920	432	3818	184	138	5796	
CALIFORNIA	644	506	92	44	46	6714	92	1242	1380	322	1058	690	1328	920	432	3818	184	138	5796	
CONNECTICUT	12466	506	2234	1104	184	5842	46	3956	8578	506	46	1748	3036	276	184	46	506	46	28982	
DELAWARE	12466	506	2234	1104	184	5842	46	3956	8578	506	46	1748	3036	276	184	46	506	46	28982	
FLORIDA	15502	1058	726	506	552	5842	46	3956	8578	506	46	1748	3036	276	184	46	506	46	28982	
GEORGIA	8280	1104	726	46	552	5842	46	3956	8578	506	46	1748	3036	276	184	46	506	46	28982	
IDAHO	14132	726	46	506	552	5842	46	3956	8578	506	46	1748	3036	276	184	46	506	46	28982	
ILLINOIS	3772	276	276	552	46	46	46	3818	1446	138	46	1196	1324	446	138	46	46	46	3282	
INDIANA	2254	46	46	322	46	2346	92	1109	446	138	184	1568	1324	446	138	46	46	46	3282	
IOWA	1978	46	138	92	230	2346	92	1109	446	138	184	1568	1324	446	138	46	46	46	3282	
KANSAS	18170	920	690	590	322	2944	276	1058	3220	230	184	1126	828	1104	574	1840	460	92	2222	
KENTUCKY	18170	920	690	590	322	2944	276	1058	3220	230	184	1126	828	1104	574	1840	460	92	2222	
LAKES	361330	13846	29376	29624	11314	137218	10228	145714	17532	28346	5198	64830	38936	67850	13110	113068	54510	4002	12880	1359518

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TABLE 10  
1983 HUNTER SURVEY  
DAYS HUNTED TOTALS

COUNTY	DEER	BEAR	BOAR	COYOTE	BOBCAT	CROW	PHENIX PARTRIDGE	CHURUP	OVAIL	DOVES	PIGEON	RUFFED GROUSE	JACK RABBIT	TREE SQUIRREL	TAIL	TURKEY	DUCKS	GREASE	JACK SNIPES	COO.	
ALAMEDA																					
ALPINE	10350			736					2944		138	414	4048	276	1472	184	5750	506			
AMADOR	23644	184		2070				1288	7314	4462	1426	322	46	5290	1380	1586	1640	782			
BUTTE	33258	1012		1334				7866	12006	26726	1656	6762	4876	7360	1556	506	77464	46184	1196		
CALAVERAS	43930	2300		14628				7728	7866	37276	46	322	366	2990	1794	3266	1640	322			
COLUSA	33764	322		690				3036	7728	10166	52		20516	782	1288	77464	46184	1196			
CUNTRIA COSTA	15686							1794	3036	10166	46		20516	782	1288	77464	46184	1196			
DEL NORTE	4508							13892	1794	3036	46		20516	782	1288	77464	46184	1196			
EL DORADO	5200	3726		1288	736			13892	1794	3036	46		20516	782	1288	77464	46184	1196			
FRESNO	81926	1012		3496	2576			2448	1794	3036	46		20516	782	1288	77464	46184	1196			
GLENN	64492	4370		782				2448	1794	3036	46		20516	782	1288	77464	46184	1196			
HUMBOLDT	28198	1748		3496	2576			2448	1794	3036	46		20516	782	1288	77464	46184	1196			
IMPERIAL	70334	1932		2898				46	3450	10442	276		138	9200	320	184	11178	552	2346		
INYO	19228			2806				46	3450	10442	276		138	9200	320	184	11178	552	2346		
KERN	61824	3220		782				14858	60720	60720	92		3730	3466	6118	27048	7038	414	1518		
KINGS	2714			92				8694	25530	60720	92		3730	3466	6118	27048	7038	414	1518		
LAKES	14260			3634				8694	25530	60720	92		3730	3466	6118	27048	7038	414	1518		
LARSEN	36334	138		598				230	4416	19320	3128	276	10532	6118	2668	46	38456	24932	552	874	
LOS ANGELES	41354	2668		25698	598			230	4416	19320	3128	276	10532	6118	2668	46	38456	24932	552	874	
MADERA	38686	1104		1426				230	4416	19320	3128	276	10532	6118	2668	46	38456	24932	552	874	
MARIPOSA	20102	1840		46				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
MENDOCINO	109848	2438		6946	322			8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
MERCED	9246	230		6946	322			8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
MONTECALA	107364	276		10396	322			8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
MONTECALA	56350	322		46				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
MONTECALA	50830			46				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
MONTECALA	33120			46				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
NEVADA	39238	46		1104				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
ORANGE	5152			5520				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
PLACER	33712	2070		8924	138			8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
PLUMAS	80822	4370		2070				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
RIVERSIDE	20242	370		2530				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SACRAMENTO	44002	322		9016				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SAN BENITO	13940			874				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SAN BERNARDINO	47380	1932		20424	782			8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SAN DIEGO	37904			644				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SAN JOAQUIN	56166			644				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SAN LUIS OBISPO	5198			2024				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SANTA BARBARA	60812	322		1242				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SANTA CLARA	12282			138				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SANTA CRUZ	118496	2852		3772				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SIERRA	27692	1104		6026				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SISKIYOU	120796	4646		46				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SONOMA	68954			46				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
STANISLAUS	35156	368		17158				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
SUTTER	18952	828		3012				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
TEHAMA	7140			5060				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
TRINITY	7324	2024		11178				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
TULARE	5128	4646		782				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
TUOLUMNE	5342	4508		3864				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
VENTURA	25102	3542		92				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
YOLO	12560	920		19864				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
YUBA	14036	460		1288				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
YUBA	14036	460		1288				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
YUBA	14036	460		1288				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
YUBA	14036	460		1288				8280	2990	5060	46		13984	51566	7406	31970	21756	3450	3036		
TOTAL	2320102	70556	224342	285108	22184	72266		78108	718520	757804	84226	16124	563132	199068	428594	46092	902244	394618	16146	75922	7833340

TABLE 11  
MAILING AND RETURN OF QUESTIONNAIRES BY COUNTY OF RESIDENCE  
1983 HUNTER SURVEY

County	Questionnaires Mailed And Deliverable	Percent of Total Mailed	Number Returned	Percent Returned
ALAMEDA	519			
ALPINE	2	3.5		
AMADOR	54	<1	391	72.4
BUTTE	446	0.4	2	100.0
CALAVERAS	37	3.0	43	75.4
COLUSA	42	0.3	344	72.0
CONTRA COSTA	505	0.3	29	72.5
DEL NORTE	60	3.4	30	71.4
EL DORADO	103	0.4	387	72.7
FRESNO	545	0.7	50	80.6
GLENN	176	3.6	80	72.1
HUMBOLDT	356	1.2	386	66.9
IMPERIAL	84	2.4	127	69.4
INYO	43	0.6	271	73.4
KERN	566	0.3	63	70.8
KINGS	142	3.8	33	75.0
LAKE	58	1.0	402	66.9
LASSEN	86	0.4	98	64.5
LOS ANGELES	1,567	0.6	48	72.7
MADERA	129	10.4	75	84.3
MARIN	110	0.9	1,139	69.2
MARIPOSA	19	0.7	98	73.1
MENDOCINO	154	0.1	94	81.0
MERCED	182	1.0	15	75.0
MODOC	110	1.2	109	66.9
MONO	30	0.7	144	75.4
MONTEREY	175	0.2	83	70.9
NAPA	127	1.2	26	81.3
NEVADA	96	0.9	136	76.4
ORANGE	629	0.6	94	71.8
PLACER	246	4.2	74	71.8
PLUMAS	71	1.6	440	65.8
RIVERSIDE	343	0.5	183	72.9
SACRAMENTO	875	2.3	56	76.7
SAN BENITO	36	5.8	245	68.2
SAN BERNARDINO	521	0.2	659	69.9
SAN DIEGO	561	3.5	25	65.8
SAN FRANCISCO	78	3.7	351	64.2
SAN JOAQUIN	453	0.5	420	71.4
SAN LUIS OBISPO	193	3.0	63	76.8
SAN MATEO	335	1.3	338	70.7
SANTA BARBARA	186	2.2	138	67.6
SANTA CLARA	713	1.2	272	79.1
SANTA CRUZ	120	4.7	149	77.2
SHASTA	537	0.8	372	50.5
SIERRA	27	3.6	95	71.4
SISKIYOU	246	0.2	403	71.5
SOLANO	253	1.6	20	74.1
SONOMA	379	1.7	197	77.6
STANISLAUS	402	2.5	189	71.1
SUTTER	159	2.7	288	72.5
TEHAMA	132	1.1	298	71.5
TRINITY	56	0.9	128	77.1
TULARE	302	0.4	102	75.6
TUOLUMNE	160	2.0	47	82.5
VENTURA	217	1.1	205	63.5
YOLO	192	1.4	117	65.7
YUBA	92	1.3	160	69.9
NONRESIDENT	44	0.6	151	73.7
TOTAL	15,081	0.3	65	59.1
		100.0	38	86.4
			11,085	73.5