

California Department of Fish and Game
722 Capitol Avenue
Sacramento 14, California

REPORT OF THE 1960 GAME TAKE HUNTER SURVEY

Hunter questionnaires for the 1960 season were mailed shortly after the waterfowl season which closed on January 8, 1961. This was the last regular hunting season of the year.

An approximate 2 percent random sample of hunting license purchasers was drawn statewide in the same manner which has been in effect since 1948.

A total of 10,676 questionnaires was mailed and 5,314 useable questionnaires were completed and returned. The response was a record 49.8 percent in 1960 compared with the previous high of 48.1 percent which was recorded in both 1958 and 1959.

Of the 5,314 useable questionnaires returned 65 percent reported some hunting success, 28 percent had been unsuccessful and 7 percent had not hunted. These percentages were almost identical with those reported for 1959.

The total hunting license sale figure divided by the number of questionnaires returned provides the projection factor in calculating total kill figures. The projection factor used for the 1960 season was 117.6:
 $625,000 \div 5314 = 117.6$.

It is of importance to bear in mind that, due to the statistical bias inherent in surveys of this type, the principal value of the total bag figures included in this report is in their indications of game bag trends.

HUNTING LICENSE SALES

An estimated 625,000 hunting licenses were sold in 1960. This represented an increase of about 2 percent over the estimated 613,300 hunting license sales reported for 1959.

HUNTING REGULATION CHANGES

1. A closed season on sage grouse was in effect for the 1960 hunting season.
2. Changes in waterfowl hunting regulations.
 - A. A split season was introduced in most of California. Season dates were: first part - Oct. 15, 1960 to Nov. 20, 1960; second part - Dec. 10, 1960 to Jan. 8, 1961.
 - B. Exceptions to the split season were the Tule Lake-Lower Klamath Basin and parts of San Bernardino, Riverside and Imperial Counties adjacent to the Colorado River. The hunting season for these areas was from Oct. 11, 1960 to Jan. 8, 1961.
 - C. A closed season on canvasback and redhead ducks.
 - D. Shooting hours were changed to begin one-half hour before sunrise until sunset excepting on season opening days.

3. Changes in deer hunting regulations.

- A. The opening date for the early season was Aug. 6, 1960, whereas in 1959 it was July 25.
- B. The early season closing date of Sept. 25, 1960 was an extension of two weeks past the 1959 closing date of Sept. 13.
- C. The late deer season opening of Sept. 24, 1960 overlapped the closing of the early season by 2 days. The late season closing date of Nov. 6, 1960, was one week later than the 1959 closing date of Nov. 1.

BAG BY SPECIES

UPLAND GAME

Pheasants - 1960 Bag - 579,500

The 1960 pheasant season bag showed a decline of 10 percent below the 641,200 reported in 1959.

Reported pheasant tag sales in 1960 of 199,100 were 9 percent below the 219,700 sold in 1959.

It is felt that the extremely stormy weather during the opening weekend of the 1960 pheasant season reduced the heavy hunting pressure which is normally experienced on the first two days and contributed to a drop in kill.

Actual pheasant hunting effort, reported by survey respondents, showed about 12 percent less than in 1959.

Quail - 1960 Bag - 1,747,800

An increase in the bag of 18 percent was reported by survey respondents over the 1,483,400 in 1959. Approximately an equal number of quail hunters was reported afield in each of these years. The traditionally high quail producing areas in the state again dominated the statewide kill.

Doves - 1960 Bag - 4,033,200

The dove bag reported in 1960 showed an increase of 13 percent over the 3,577,900 reported in 1959.

Field surveys in 1960 had indicated an increased breeding population over 1959.

The increased dove harvest was attended by a rise of about 8 percent in the number of dove hunters in the field over 1959.

Chukar Partridge - 1960 Bag - 27,000

A decrease in the 1960 chukar bag of 46 percent below the 1959 record take of 50,100 was reported.

A decline in reproduction was indicated by department field personnel in the major chukar producing areas.

A drop in hunter participation of about 13 percent from 1959 was reported.

Sicrra and Ruffed Grouse - 1960 Bag - 2,900

In 1960 there was a reported 61 percent increase over the 1,800 Sierra and Ruffed grouse kill of 1959.

The extremely small sample of grouse hunters in this survey tends to distort the validity of the returns received, but it indicates that these two species received little attention from hunters.

Band-tailed Pigeons - 1960 Bag - 310,300

The 1960 band-tailed pigeon bag showed an increase of 98 percent over the 156,700 reported in 1959. Hunter participation in 1960 was higher than 1959 by about 38 percent.

Traditional areas of past abundance again produced a high percentage of the bag.

The less important areas in the band-tailed pigeon kill experienced a change from 1959. Northeastern California areas, which were represented in the statewide kill of 1959, were replaced by areas of the north coast and the central Sierras.

Jackrabbits - 1960 Bag - 1,103,900

A drop of 3 percent below the 1959 kill of 1,132,500 was reported. In spite of this decline hunter pressure increased about 4 percent over 1959.

Field reports have indicated that jackrabbit populations have declined each year since 1958. This is a normal cyclic occurrence in rabbit populations.

Cottontail/Brush Rabbits - 1960 Bag - 436,300

The 1960 reported kill for cottontail/brush rabbits was 14 percent below the 510,600 taken in 1959. However, an increase of approximately 7 percent in hunter pressure was reported. Since 1958, cottontail/brush rabbit populations have followed the same cyclic pattern as that experienced by jackrabbits.

Tree Squirrels - 1960 Bag - 113,800

An increased bag of 71 percent was reported in 1960 over the 66,600 in 1959.

Hunter pressure showed an increase of 34 percent over 1959.

UPLAND GAME SUMMARY

A successful hunting season was reported for some of the major upland game species, with bag increases over 1959 reported for quail (up 18%), doves (up 13%), and band-tailed pigeons (up 98%).

Major upland game species which showed a decline in bag from 1959 were: pheasants (down 10%), jackrabbits (down 3%), and cottontail/brush rabbits (down 14%).

WATERFOWL

Ducks - 1960 Bag - 2,717,600

A greatly improved duck season was experienced in 1960 with an increase in kill of 42 percent over the 1,912,300 reported in 1959. It is felt that generally more favorable waterfowl hunting weather and return to an opening shooting time of one-half hour before sunrise contributed appreciably to the increased kill.

Hunting effort increased by 10 percent over 1959.

Geese - 1960 Bag - 363,600

The same conditions which contributed to the improved duck season in 1960 were instrumental in the 41 percent increase in goose kill over the 257,400 reported in 1959.

Jacksnipes - 1960 Bag - 34,200

A 30 percent decrease from the 1959 figure of 49,000 was reported in 1960.

Coots - 1960 Bag - 200,500

The 1960 coot bag dropped 34 percent below the 1959 reported kill of 301,900.

WATERFOWL SUMMARY

The reported 1960 bag of both ducks and geese was 40 percent greater than the reported take in 1959.

The reported hunter effort of about 938,000 days exceeded the 872,000 reported for 1959. This represented an increase of 8 percent.

BIG GAME

Deer - 1960 Bag - 133,400 (Deer Tag Count - 75,584)

Questionnaire respondents reported a deer kill of 133,400, which is an increase of 4 percent over the 128,400 reported for 1959.

Hunter submitted deer kill report tags showed a deer kill of 75,584. This exceeded by 3 percent the deer kill of 73,483 similarly reported for 1959.

The 133,400 kill reported by hunter survey respondents is 77 percent greater than the 75,584 deer kill report tags received.

Bears - 1960 Bag - 1,500 (Bear Tag Count - 925)

The 1960 bear kill, as reported by survey respondents, is 25 percent lower than the 2,000 reported in 1959.

A total of 925 bear kill report tags were received in 1960 compared to 1,016 in 1959. This represents a 9 percent drop.

The 1,500 bear kill reported by survey respondents exceeds the 925 report tags by 62 percent.

BIG GAME SUMMARY

An exceedingly good deer season was experienced by California deer hunters in 1960.

The 1960 bear season showed a decline from 1959 totals.

It was reported that approximately 2-3/4 million hunter days were expended in big game hunting, compared with about 2-1/2 million in 1959.

Questionnaire respondents indicated that 21,600 were archery deer hunters. Of this number 5,600 were members of organized archery clubs.

The following tables are appended:

1. Summary of Statewide Game Bag - 1960
2. Ten leading counties in the bag of pheasants, quail, doves, sand-tailed pigeons, jackrabbits, cottontail/brush rabbits, geese and ducks - 1960
3. Major Game Species Bag, by Administrative Region - 1960
4. Reported Total Tags and Stamps Purchased - 1960
5. Hunting Preferences as Indicated by Questionnaire Respondents - 1960
6. Mailing and Return by County of 1960 Hunter Questionnaires

TABLE I
SUMMARY OF STATEWIDE GAME BAG - 1960

<u>Species</u>	<u>1959</u>	<u>1960</u>	<u>% Change from 1959</u>
Pheasants	641,200	579,500	- 10
Quail	1,483,400	1,747,800	+ 18
Doves	3,577,900	4,033,200	+ 13
Chukar Partridges	50,100	27,000	- 46
Sage Grouse	7,800	No season	--
Sierra and Ruffed Grouse	1,800	2,900	+ 61
Band-tailed Pigeons	156,700	310,300	+ 98
Jackrabbits	1,132,500	1,103,900	- 3
Cottontail & Brush Rabbits	510,600	438,300	- 14
Tree Squirrels	66,600	113,800	+ 71
Geese	257,400	363,600	+ 41
Ducks	1,912,300	2,717,600	+ 42
Jack Snipes	49,000	34,200	- 30
Coots	301,900	200,500	- 34
Buck Deer (Tag Count)	73,483	75,584	+ 3
Bears (Tag Count)	1,016	925	- 9
European Wild Pig	400	3,600	+ 800

TABLE II
GAME BAG - 1960
(TEN LEADING COUNTIES)

PHEASANTS	% OF STATE TOTAL	POSITION 1959	JACKRABBITS	% OF STATE TOTAL	POSITION 1959
1. YOLO	8.4	6	1. KERN	10.7	1
2. COLUSA	7.4	3	2. MERCED	7.5	10
3. SUTTER	7.2	1	3. FRESNO	7.5	3
4. BUTTE	6.7	2	4. SAN BERNARDINO	7.3	6
5. FRESNO	6.5	5	5. MODOC	6.8	21
6. SACRAMENTO	6.3	4	6. RIVERSIDE	5.1	2
7. MERCED	6.1	9	7. LOS ANGELES	4.5	9
8. SAN JOAQUIN	5.0	8	8. SUTTER	4.5	12
9. GLENN	4.7	11	9. SAN JOAQUIN	4.2	5
10. STANISLAUS	4.3	10	10. LASSEN	2.9	13
ALL OTHERS	<u>37.4</u>		ALL OTHERS	<u>39.0</u>	
TOTAL	<u>100.0</u>		TOTAL	<u>100.0</u>	
 <u>QUAIL</u>			 <u>RABBITS (COTTONTAIL AND BRUSH)</u>		
1. KERN	8.5	3	1. SAN DIEGO	18.1	2
2. SAN BERNARDINO	7.0	7	2. SAN BERNARDINO	16.0	3
3. IMPERIAL	6.1	5	3. RIVERSIDE	14.2	1
4. SAN DIEGO	6.0	1	4. LOS ANGELES	6.2	4
5. RIVERSIDE	5.2	2	5. KERN	5.4	5
6. FRESNO	4.0	4	6. MONTEREY	4.7	9
7. SONOMA	3.6	11	7. IMPERIAL	4.4	12
8. HUMBOLDT	3.4	19	8. VENTURA	3.5	10
9. LOS ANGELES	3.1	10	9. FRESNO	2.4	8
10. MONTEREY	2.9	24	10. MERCED	1.9	21
ALL OTHERS	<u>50.2</u>		ALL OTHERS	<u>23.2</u>	
TOTAL	<u>100.0</u>		TOTAL	<u>100.0</u>	
 <u>DOVES</u>			 <u>GEASE</u>		
1. IMPERIAL	14.4	1	1. COLUSA	20.4	2
2. FRESNO	8.5	2	2. SISKIYOU	13.1	1
3. TULARE	7.0	3	3. MODOC	8.4	3
4. RIVERSIDE	5.7	4	4. GLENN	7.7	6
5. KERN	4.9	5	5. BUTTE	7.2	4
6. SAN DIEGO	3.7	8	6. SAN JOAQUIN	6.9	13
7. STANISLAUS	3.4	9	7. MERCED	6.3	9
8. MERCED	3.4	7	8. YOLO	4.1	10
9. SAN BERNARDINO	2.8	10	9. SUTTER	3.6	7
10. SAN JOAQUIN	2.8	6	10. LASSEN	3.1	5
ALL OTHERS	<u>43.4</u>		ALL OTHERS	<u>19.2</u>	
TOTAL	<u>100.0</u>		TOTAL	<u>100.0</u>	
 <u>BAND-TAILED PIGEONS</u>			 <u>DUCKS</u>		
1. SAN LUIS OBISPO	25.4	1	1. MERCED	17.9	1
2. SAN DIEGO	13.2	5	2. COLUSA	8.5	4
3. MONTEREY	13.0	2	3. SOLANO	7.9	2
4. SONOMA	9.0	9	4. BUTTE	4.7	8
5. CALAVERAS	4.4	12	5. SAN JOAQUIN	4.4	13
6. SANTA CRUZ	3.8	7	6. SUTTER	3.9	3
7. SANTA BARBARA	2.8	3	7. YOLO	3.8	18
8. ORANGE	1.8	34	8. SISKIYOU	3.8	5
9. NAPA	1.8	-	9. KERN	3.7	12
10. PLACER	1.8	16	10. FRESNO	3.6	10
ALL OTHERS	<u>23.0</u>		ALL OTHERS	<u>37.8</u>	
TOTAL	<u>100.0</u>		TOTAL	<u>100.0</u>	

TABLE III

MAJOR GAME SPECIES BAG - 1960
BY ADMINISTRATIVE REGION

<u>Species</u>	<u>Percentage of State Bag</u>				
	<u>Region I</u>	<u>Region II</u>	<u>Region III</u>	<u>Region IV</u>	<u>Region V</u>
Pheasants	6	53	6	22	13
Quail	15	12	19	22	32
Doves	6	15	13	32	34
Jackrabbits	12	19	12	33	24
Cottontail/Brush Rabbits	4	3	12	15	66
Ducks	11	40	12	28	9

TABLE IV

REPORTED TOTAL TAGS AND STAMPS PURCHASED - 1960

	<u>Questionnaire Respondents</u>	<u>Actual Sales</u>	<u>Difference</u>	<u>Percent Difference from Actual Sales</u>
	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Percent</u>
Deer Tags	456,300	419,700 (est)	+ 36,600	9
Pheasant Tags	199,100	172,850 (est)	+ 26,250	15
Federal Duck Stamps	183,700	Figures not available		—
Bear Tags	38,300	28,700 (est)	+ 9,600	33

TABLE V

PREFERRED GAME SPECIES AS INDICATED BY
QUESTIONNAIRE RESPONDENTS - 1960

SPECIES	PERCENT			NUMBERS		
	SUCCESSFUL HUNTERS	UNSUCCESSFUL HUNTERS	TOTAL HUNTERS	SUCCESSFUL HUNTERS	UNSUCCESSFUL HUNTERS	TOTAL HUNTERS
DEER	18	48	66	113,000	298,900	411,900
DOVES	30	2	32	189,500	10,200	199,700
PHEASANTS	21	9	30	131,900	53,900	185,800
DUCKS	23	3	26	143,600	16,900	160,500
QUAIL	21	5	26	130,800	29,000	159,800
JACKRABBITS	15	1	16	96,800	5,300	102,100
GEESE	11	2	13	66,700	15,000	81,700
COTTONTAIL/BRUSH RABBITS	12	1	13	71,000	8,500	79,500
BAND-TAILED PIGEONS	5	1	6	28,600	8,300	36,900
TREE SQUIRRELS	4	1	5	25,700	4,500	30,200
BEARS	T	4	4	1,300	24,100	25,400
COOTS	3	T	3	16,700	400	17,100
CHUKAR PARTRIDGE	1	2	3	6,500	9,000	15,500
JACKSNIPES	1	T	1	4,900	1,100	6,000
EUROPEAN WILD PIGS	T	1	1	1,700	4,100	5,800
SIERRA AND RUFFED GROUSE	T	T	T	1,300	1,100	2,400

HUNTING EFFORT FOR SEVERAL GAME SPECIES IS REPORTED BY MANY SURVEY RESPONDENTS, CONSEQUENTLY THE PERCENTAGES CALCULATED EXCEED 100 PERCENT.

THE NUMBERS OF RESPONDENTS HAVE BEEN EXPANDED FOR EACH SPECIES TO ARRIVE AT TOTAL ESTIMATED NUMBER OF HUNTERS.

TABLE VI

MAILING AND RETURN BY COUNTY OF RESIDENCE - 1960 HUNTER QUESTIONNAIRE

COUNTY	QUESTIONNAIRES MAILED	PERCENT OF TOTAL MAILED	NUMBER RETURNED	PERCENT RETURNED
ALAMEDA	624	4.9	272	51.9
ALPINE	-	-	-	-
AMADOR	14	0.1	6	42.9
BUTTE	199	1.8	107	53.8
CALAVERAS	29	0.3	12	41.4
COLUSA	26	0.2	10	38.5
CONTRA COSTA	398	3.7	193	48.5
DEL NORTE	54	0.5	22	40.7
ELDORADO	70	0.7	34	48.6
FRESNO	510	4.8	242	47.5
GLENN	52	0.5	24	46.2
HUMBOLDT	296	2.8	146	49.3
IMPERIAL	93	0.9	39	41.9
INYO	52	0.5	25	48.1
KERN	354	3.3	186	52.5
KINGS	69	0.6	29	42.0
LAKE	41	0.4	24	58.5
LASSEN	62	0.6	31	50.0
LOS ANGELES	1,770	16.6	893	50.5
MADERA	91	0.9	42	46.2
MARIN	120	1.1	63	52.5
MARIPOSA	19	0.2	9	47.4
MENDOCINO	120	1.1	58	48.3
MERCED	126	1.2	61	48.4
MODOC	37	0.3	23	62.2
MONO	9	0.1	4	44.4
MONTEREY	162	1.5	92	56.8
NAPA	95	0.9	51	53.7
NEVADA	62	0.6	36	58.1
ORANGE	236	2.2	116	49.2
PLACER	90	0.8	38	42.2
PLUMAS	35	0.3	14	40.0
RIVERSIDE	160	1.5	79	49.4
SACRAMENTO	585	5.5	307	52.5
SAN BENITO	32	0.3	17	53.1
SAN BERNARDINO	267	2.5	123	46.1
SAN DIEGO	411	3.8	226	55.0
SAN FRANCISCO	264	2.5	117	44.3
SAN JOAQUIN	266	2.5	141	53.0
SAN LUIS OBISPO	129	1.2	64	49.6
SAN MATEO	263	2.5	140	53.2
SANTA BARBARA	143	1.3	70	49.0
SANTA CLARA	393	3.7	189	48.1
SANTA CRUZ	95	0.9	52	54.7
SHASTA	249	2.3	118	47.4
SIERRA	11	0.1	2	18.2
SISKIYOU	175	1.6	75	42.9
SOLANO	145	1.4	67	46.2
SONOMA	200	1.9	104	52.0
STANISLAUS	211	2.0	100	47.4
SUTTER	82	0.8	48	58.5
TEHAMA	101	0.9	40	39.6
TRINITY	56	0.5	25	44.6
TULARE	253	2.4	122	48.2
TUOLUMNE	52	0.5	17	32.7
VENTURA	138	1.3	77	55.8
YOLO	86	0.8	48	55.8
YUBA	62	0.8	33	40.2
OUT OF STATE	12	0.1	11	91.7
TOTAL	10,676	100.0	5,314	49.8

1960 Season		Pheasants	Hunters	Avg.	Quail	Hunters	Avg.
				Bag			Bag
1	ALAMEDA	4,700	2,200	2.1	9,400	1,800	5.2
2	ALPINE				2,500	200	12.5
3	AMADOR				9,100	1,200	7.6
4	BUTTE	38,800	11,400	3.4	11,100	2,700	4.1
5	CALAVERAS		100	-	19,600	1,800	10.9
6	COLUSA	42,800	13,700	3.1	2,200	400	5.5
7	CONTRA COSTA	11,100	5,400	2.1	10,700	1,100	9.7
8	DEL NORTE		100	-	500	100	5.0
9	ELDORADO				36,300	4,000	9.1
10	FRESNO	37,500	16,800	2.2	70,200	7,600	9.2
11	GLENN	27,300	8,600	3.2	14,400	1,900	7.6
12	HUMBOLDT	200	100	2.0	59,000	4,700	12.6
13	IMPERIAL	10,900	6,500	1.7	106,300	10,200	10.4
14	INYO	2,700	1,800	1.5	11,200	2,300	4.9
15	KERN	7,400	5,100	1.5	149,400	16,000	9.3
16	KINGS	3,400	2,600	1.3	4,800	700	6.9
17	LAKE				28,000	2,500	11.2
18	LASSEN	5,800	2,300	2.5	38,100	2,900	13.1
19	LOS ANGELES	3,800	1,800	2.1	54,300	6,800	8.0
20	MADERA	9,100	3,300	2.8	43,400	3,800	11.4
21	MARIN	200	100	2.0	24,300	2,000	12.2
22	MARIPOSA				38,100	2,100	18.1
23	MENDOCINO				27,200	2,500	10.9
24	MERCED	35,500	12,200	2.9	5,500	1,100	5.0
25	MODOC	10,600	3,500	3.0	43,700	2,900	15.1
26	MONO		100	-	200	300	0.7
27	MONTEREY	3,500	2,300	1.5	51,400	5,000	10.3
28	NAPA	2,200	1,200	1.8	15,300	2,100	7.3
29	NEVADA	200	100	2.0	22,800	2,300	9.9
30	ORANGE	4,900	800	6.1	6,900	900	7.7
31	PLACER	3,500	1,800	1.9	23,300	2,400	9.7
32	PLUMAS				2,500	1,100	2.3
33	RIVERSIDE	13,300	4,200	3.2	91,100	13,800	6.6
34	SACRAMENTO	36,600	16,500	2.2	14,700	2,800	5.2
35	San BENITO	1,100	700	1.6	23,100	2,000	11.6
36	San BERNARDINO	23,100	5,800	4.0	122,500	10,600	11.6
37	San DIEGO	12,900	3,300	3.9	104,900	9,100	11.5
38	San FRANCISCO						
39	San JOAQUIN	28,900	12,700	2.3	24,700	3,000	8.2
40	San LUIS OBISPO		100	-	39,000	3,900	10.0
41	San MATEO	4,700	100	4.7	11,600	700	16.6
42	Santa BARBARA				33,500	3,700	9.1
43	Santa CLARA	3,800	1,100	3.5	21,300	1,800	11.8
44	Santa CRUZ	100	200	0.5	15,800	2,200	7.2
45	SHASTA	4,100	1,700	2.4	42,200	4,600	9.2
46	SIERRA				400	100	4.0
47	SISKIYOU	6,700	4,600	1.5	21,200	2,400	8.8
48	SOLANO	17,500	7,100	2.5	3,700	400	9.2
49	SONOMA	3,900	3,100	1.3	62,200	5,200	12.0
50	STANISLAUS	25,100	10,300	2.4	23,800	2,100	11.3
51	SUTTER	41,900	12,600	3.3	11,300	1,400	8.1
52	TEHAMA	8,500	3,700	2.3	32,000	2,800	11.4
53	TRINITY				17,500	1,600	10.9
54	TULARE	6,900	3,900	1.8	44,400	5,500	8.1
55	TUOLUMNE	200	100	2.0	4,500	800	5.6
56	VENTURA	2,500	600	4.2	27,900	4,400	6.3
57	YOLO	48,900	13,900	3.5	5,200	1,300	4.0
58	YUBA	18,700	5,800	3.2	5,400	1,700	3.2
NG		4,000	3,000	1.3	2,200	1,500	1.5
		579,500	219,000	2.6	1,747,800	186,800	9.4
			16,800	3.1		159,800	10.9

	Doves	Hunters	Bag	Avg.	Chukar	Sierra Ruffed Grouse
1	ALAMEDA	44,300	3,000	14.8		
2	ALPINE					
3	AMADOR	4,400	600	7.3		
4	BUTTE	74,700	4,200	17.8		
5	CALAVERAS	15,600	900	17.3		
6	COLUSA	46,000	3,100	14.8		
7	CONTRA COSTA	88,000	4,300	20.5		
8	DEL NORTE					
9	ELDORADO	23,900	1,500	15.9		
10	FRESNO	341,500	15,700	21.8	200	700
11	GLENN	42,000	2,500	16.8		
12	HUMBOLDT	2,700	600	4.5		1,000
13	IMPERIAL	581,000	24,300	23.9	200	
14	INYO	31,900	1,900	16.8	2,200	
15	KERN	199,200	14,200	14.0	16,400	
16	KINGS	69,600	3,100	22.5		
17	LAKE	44,700	2,400	18.6		
18	LASSEN	25,500	1,600	15.9	200	
19	LOS ANGELES	95,700	7,100	13.5	400	
20	MADERA	97,700	4,000	24.4		500
21	MARIN	9,500	1,100	8.6		
22	MARIPOSA	11,000	1,100	10.0		
23	MENDOCINO	2,200	500	4.4		
24	MERCED	136,300	5,700	23.9		
25	MODOC	10,400	700	14.9		
26	MONO	1,300	400	3.3		
27	MONTEREY	62,200	4,400	14.1		
28	NAPA	35,800	2,200	16.3		
29	NEVADA	1,200	100	12.0		
30	ORANGE	47,600	2,600	18.3	700	
31	PLACER	34,800	2,600	13.4		
32	PLUMAS	2,600	400	6.5		100
33	RIVERSIDE	228,100	15,300	14.9		
34	SACRAMENTO	91,700	6,800	13.5		
35	San BENITO	24,500	1,300	18.8	700	
36	San BERNARDINO	114,700	7,800	14.7	5,700	
37	San DIEGO	149,300	8,400	17.8		200
38	San FRANCISCO					
39	San JOAQUIN	111,500	7,300	15.3		
40	San LUIS OBISPO	90,300	4,100	22.0	100	
41	San MATEO	5,900	200	29.5		
42	Santa BARBARA	51,600	3,600	14.3		
43	Santa CLARA	35,800	3,000	11.9		
44	Santa CRUZ	16,500	1,500	11.0		
45	SHASTA	70,200	4,200	16.7		
46	SIERRA					
47	SISKIYOU	20,300	1,800	11.3	200	no season
48	SOLANO	30,500	2,600	11.7		
49	SONOMA	63,600	4,000	15.9		
50	STANISLAUS	136,500	5,800	23.5		
51	SUTTER	54,700	3,200	17.1		
52	TEHAMA	94,700	3,400	27.9		
53	TRINITY					200
54	TULARE	284,000	10,400	27.3		
55	TUOLUMNE	8,400	600	14.0		200
56	VENTURA	65,400	3,900	16.8		
57	YOLO	46,400	3,500	13.3		
58	YUBA	29,300	2,200	13.3		
		26,000	900	28.9		
	4033,200	222,600	18.1	27,000		2,900
		199,700	20.2			

	Pigeons	Hunters	Avg.	Jackrabbits	Hunters	Avg.
			Bag			Bag
1	ALAMEDA	3,200	.200	16.0	11,300	1,500
2	ALPINE				200	0.5
3	AMADOR	4,600	800	5.8	100	
4	BUTTE				5,900	1,300
5	CALAVERAS	13,500	800	16.9	1,500	300
6	COLUSA				6,600	1,500
7	CONTRA COSTA	500	200	2.5	6,000	1,500
8	DEL NORTE	100	100	1.0		
9	ELDORADO	1,200	700	1.7	4,200	1,000
10	FRESNO	2,500	500	5.0	82,300	7,100
11	GLENN	1,600	200	8.0	7,100	800
12	HUMBOLDT	800	300	2.7	4,500	1,100
13	IMPERIAL		100	-	10,200	2,300
14	INYO				6,800	1,300
15	KERN	3,200	900	3.6	118,400	10,000
16	KINGS	1,600	100	16.0	16,200	1,300
17	LAKE		100	-	9,400	1,600
18	LASSEN				32,500	2,000
19	LOS ANGELES	1,700	600	2.8	49,200	6,300
20	MADERA	600	200	3.0	13,500	1,000
21	MARIN	1,600	200	8.0	9,600	800
22	MARIPOSA					
23	MENDOCINO	5,200	400	13.0	3,200	800
24	MERCED	700	100	7.0	82,900	3,800
25	MODOC				75,400	2,100
26	MONO				4,900	500
27	MONTEREY	40,200	5,000	8.0	30,600	2,800
28	NAPA	5,600	200	28.0	10,000	1,200
29	NEVADA	3,200	1,000	3.2	600	200
30	ORANGE	5,600	200	28.0	6,900	800
31	PLACER	5,500	700	7.9	3,900	700
32	PLUMAS	100	100	1.0	5,200	600
33	RIVERSIDE	2,800	700	4.0	56,800	8,700
34	SACRAMENTO	1,400	200	7.0	30,600	4,100
35	San BENITO	3,500	100	35.0	2,200	400
36	San BERNARDINO	1,500	700	2.1	81,000	8,000
37	San DIEGO	41,000	5,200	7.9	27,500	5,200
38	San FRANCISCO					
39	San JOAQUIN	4,700	500	9.4	46,700	3,900
40	San LUIS OBISPO	78,900	6,500	12.1	13,200	1,500
41	San MATEO				2,200	500
42	Santa BARBARA	8,600	1,300	6.6	5,100	600
43	Santa CLARA	3,300	100	33.0	9,100	1,700
44	Santa CRUZ	11,900	1,300	15.4	200	100
45	SHASTA	1,200	400	3.0	11,500	1,500
46	SIERRA					
47	SISKIYOU	1,400	400	3.5	6,600	1,000
48	SOLANO				12,800	1,900
49	SONOMA	28,000	2,700	10.4	19,200	3,500
50	STANISLAUS	2,200	400	5.5	24,700	3,500
51	SUTTER	1,100	400	2.8	50,000	2,400
52	TEHAMA		100	-	6,300	1,400
53	TRINITY	4,500	600	7.5	100	100
54	TULARE	2,400	1,200	2.0	21,200	2,200
55	TUOLUMNE				1,400	200
56	VENTURA	4,000	800	5.0	17,400	2,600
57	YOLO	400	100	4.0	14,100	2,000
58	YUBA	4,600	400	11.5	20,500	1,300
		100	600	0.2	4,600	1,200
						3.8
		310,300	37,600	8.3	1,103,900	115,900
						9.5
			36,900	8.4		102,100
						10.8

	Ducks	Hunters	Ave. Bag	Geese			Snipes	Coots
1 ALAMEDA	61,700	2,300	26.8					1,200
2 ALPINE	--							
3 AMADOR	200	100	2.0					
4 BUTTE	127,100	9,900	12.8	26,500	6,700	4.0		300
5 CALAVERAS	100	100	1.0					
6 COLUSA	230,600	16,700	13.8	74,100	12,100	6.1	1,300	5,800
7 CONTRA COSTA	62,900	3,500	18.0	6,800	1,000	6.8	100	700
8 DEL NORTE	10,400	1,100	9.5	500	300	1.7		3,200
9 ELDORADO	--			400	100	4.0		
10 FRESNO	99,100	8,400	11.8	4,300	1,900	2.1	700	2,100
11 GLENN	86,900	5,400	16.1	28,000	4,800	5.8		3,700
12 HUMBOLDT	58,700	4,100	14.3	1,900	900	2.1	4,100	10,500
13 IMPERIAL	85,700	12,900	6.6	1,900	4,700	1.0	100	5,500
14 INYO	3,100	1,200	2.6	800	700	1.1		
15 KERN	102,200	7,500	13.6	500	1,200	0.4	800	15,800
16 KINGS	2,500	800	3.1	100	200	0.5		
17 LAKE	7,200	700	10.3	200	100	2.0		7,100
18 LASSEN	35,600	4,300	8.3	11,300	2,900	3.9		600
19 LOS ANGELES	15,300	900	17.0					2,300
20 MADERA	24,500	1,700	14.4	3,400	1,300	2.6		
21 MARIN	33,400	2,300	14.5	4,200	600	7.0		4,200
22 MARIPOSA	--	--		600	100	6.0		
23 MENDOCINO	4,900	400	12.3	100	100	1.0		1,400
24 MERCED	486,900	17,000	28.6	23,100	6,800	3.4	12,600	22,000
25 MODOC	50,900	5,800	8.8	30,500	5,900	5.2		1,600
26 MONO	6,800	1,700	4.0	100	900	0.1	500	
27 MONTEREY	20,000	1,300	15.4	200	200	1.0		8,200
28 NAPA	23,500	1,500	15.7	600	300	2.0	500	4,700
29 NEVADA	--							
30 ORANGE	16,800	1,200	14.0		100			300
31 PLACER	16,100	1,300	12.4	400	100	4.0	1,200	2,100
32 PLUMAS	7,900	600	13.2	500	600	0.8	400	400
33 RIVERSIDE	48,500	3,600	13.5	5,100	1,100	4.6		34,000
34 SACRAMENTO	51,300	5,500	9.3	5,600	3,400	1.6	800	6,700
35 San BENITO	700	100	7.0					
36 San BERNARDINO	20,600	2,600	7.9	1,600	700	2.3		1,900
37 San DIEGO	24,100	2,800	8.6	200	100	2.0		600
38 San FRANCISCO	--	--		--				
39 San JOAQUIN	119,000	6,900	17.2	25,000	3,900	6.4	4,000	2,100
40 San LUIS OBISPO	10,400	600	17.3	500	100	5.0		2,600
41 San MATEO	14,000	1,300	10.8				100	500
42 Santa BARBARA	6,800	800	8.5					3,600
43 Santa CLARA	28,900	1,800	16.1				200	11,800
44 Santa CRUZ	4,100	200	20.5	400	100	4.0		
45 SHASTA	21,200	2,700	7.9	2,200	1,100	2.0		700
46 SIERRA	--	--						2,900
47 SISKIYOU	102,300	11,100	9.2	47,600	8,400	5.7		700
48 SOLANO	213,800	11,600	18.4	9,200	4,100	2.2		8,800
49 SONOMA	43,000	2,700	15.9	800	600	1.3	2,000	
50 STANISLAUS	26,800	2,700	9.9	900	700	1.3		3,500
51 SUTTER	106,300	9,500	11.2	13,200	6,100	2.2	100	2,600
52 TEHAMA	12,800	1,300	9.8	4,500	1,100	4.1		200
53 TRINITY	--	--		--	--			
54 TULARE	7,400	1,000	7.4	2,500	200	12.5	100	2,400
55 TUOLUMNE	5,200	200	26.0	--				
56 VENTURA	24,100	1,800	13.4	200	300	0.7	900	5,200
57 YOLO	103,700	5,700	18.2	14,800	3,700	4.0	3,700	2,400
58 YUBA	33,200	3,000	11.1	3,100	1,500	2.1		
	8,400	3,700	2.3	2,200	800	2.8		600
	2,717,600	197,900	13.7	363,600	92,600	3.9	34,200	200,500
		160,500	16.9		81,700	4.5		

	Deer	Hunters	Avg.	Bear	Wild Boars
			Bag		
1	ALAMEDA	1,700	2,900		
2	ALPINE	3,700	18,700		
3	AMADOR	300	5,200		
4	BUTTE	2,400	9,500		
5	CALAVERAS	1,700	7,400		
6	COLUSA	300	1,500		
7	CONTRA COSTA	1,100	2,700		
8	DEL NORTE	100	1,600		
9	ELDORADO	3,900	14,200		
10	FRESNO	3,900	19,700	100	
11	GLENN	900	2,400		
12	HUMBOLDT	8,000	13,500	400	
13	IMPERIAL	100	700		
14	INYO	700	8,800		
15	KERN	2,000	18,200		
16	KINGS	-	900		
17	LAKE	2,800	14,600		
18	LASSEN	6,000	28,300		100
19	LOS ANGELES	1,200	14,300		
20	MADERA	2,500	9,300		
21	MARIN	700	1,800		
22	MARIPOSA	1,300	5,700		
23	MENDOCINO	6,400	16,400		
24	MERCED	800	900		
25	MODOC	5,600	35,000		
26	MONO	3,200	22,300		
27	MONTEREY	6,700	11,600		1,600
28	NAPA	1,700	4,100		
29	NEVADA	2,200	12,700		
30	ORANGE	500	1,800		
31	PLACER	1,900	8,400	200	
32	PLUMAS	3,300	18,600	100	
33	RIVERSIDE	1,200	4,700		
34	SACRAMENTO	-	200		
35	San BENITO	2,800	4,500		
36	San BERNARDINO	1,900	12,000		
37	San DIEGO	1,400	13,300		
38	San FRANCISCO				
39	San JOAQUIN	-	100		
40	San LUIS OBISPO	4,000	9,100		
41	San MATEO	600	1,700		
42	Santa BARBARA	2,200	7,300		800
43	Santa CLARA	2,700	4,500		
44	Santa CRUZ	500	2,900		
45	SHASTA	5,200	16,800	200	
46	SIERRA	1,400	9,600		
47	SISKIYOU	6,800	16,800		
48	SOLANO	100	1,000		
49	SONOMA	4,000	7,000		1,100
50	STANISLAUS	1,100	2,800		
51	SUTTER	-	-		
52	TEHAMA	6,000	16,300		
53	TRINITY	2,900	9,300	200	
54	TULARE	2,700	13,500	100	
55	TUOLUMNE	2,200	10,700	200	
56	VENTURA	3,900	13,400		
57	YOLO	600	1,200		
58	YUBA	800	2,300		
		800	62,900		
		133,400	577,600	1,600	3,600
			411,900		

	Cottontails	Hunters	Avg.	Squirrels
		Bag		
1	ALAMEDA 2,100	500	4.2	200 no season
2	ALPINE 400	200	2.0	100
3	AMADOR 100	200	0.5	2,200
4	BUTTE 200	100	2.0	8,000
5	CALAVERAS 400	200	2.0	4,100
6	COLUSA 200	100	2.0	
7	CONTRA COSTA 2,100	500	4.2	100 no season
8	DEL NORTE			
9	ELDORADO 900	400	2.3	5,400
10	FRESNO 10,500	4,100	2.6	13,400
11	GLENN 100	100	1.0	
12	HUMBOLDT 2,500	800	3.1	4,800
13	IMPERIAL 19,400	4,600	4.2	
14	INYO 2,300	1,600	1.4	
15	KERN 23,500	7,500	3.1	
16	KINGS 2,600	900	2.9	
17	LAKE 1,300	400	3.3	3,900
18	LASSEN 5,300	2,000	2.7	1,300
19	LOS ANGELES 27,200	5,400	5.0	
20	MADERA 8,000	1,700	4.7	6,900
21	MARIN 1,100	200	5.5	
22	MARIPOSA 2,300	300	9.3	1,700
23	MENDOCINO 100	100	1.0	
24	MERCED 8,400	2,400	3.5	
25	MODOC 6,800	1,800	3.8	200 no season
26	MONO 2,100	400	5.3	
27	MONTEREY 20,700	2,600	8.0	200 no season
28	NAPA			
29	NEVADA 400	200	2.0	4,600
30	ORANGE 5,400	1,500	3.6	
31	PLACER 1,900	500	3.8	2,900
32	PLUMAS 1,800	300	6.0	500
33	RIVERSIDE 62,200	11,100	5.6	
34	SACRAMENTO 3,200	1,700	1.9	1,200
35	San BENITO 4,400	900	4.9	
36	San BERNARDINO 79,000	7,100	9.9	
37	San DIEGO 79,400	9,300	8.5	
38	San FRANCISCO			
39	San JOAQUIN 1,300	800	1.6	
40	San LUIS OBISPO 3,400	900	3.8	
41	San MATEO 5,400	600	9.0	
42	Santa BARBARA 4,900	900	5.4	
43	Santa CLARA 2,000	700	2.9	800
44	Santa CRUZ 6,500	1,600	4.1	1,100
45	SHASTA 700	300	2.3	16,500
46	SIERRA 200	100	2.0	100
47	SISKIYOU 1,300	600	2.2	2,800
48	SOLANO			
49	SONOMA 2,200	500	4.4	500 no season
50	STANISLAUS 2,900	800	3.6	500 no season
51	SUTTER 1,300	900	1.4	2,400
52	TEHAMA -	200	-	7,200
53	TRINITY			6,800
54	TULARE 4,800	1,100	4.4	
55	TUOLUMNE 1,200	400	3.0	10,600
56	VENTURA 15,300	2,400	6.4	
57	YOLO -	100	-	100 no season
58	YUBA 900	300	3.0	1,900
	4,200	1,800	2.3	800
	438,300	86,700	5.1	113,800
		79,500	5.5	