

STATE OF CALIFORNIA  
DEPARTMENT OF FISH AND GAME  
926 "J" Street  
Sacramento, 14, California

April 28, 1954

TO: Chief, Game Management Branch  
FROM: C. M. Ferrel, Game Biologist  
SUBJECT: Report of the 1953 Game Take Hunter Questionnaire Survey.

The standard procedure for the Department's hunter questionnaire survey that has been followed since 1948 was again used in 1953. An approximate two percent random sample of the license buyers were mailed a questionnaire. A total of 10,163 questionnaires were mailed shortly after the close of the last regular hunting season. Some 3,888 (38.3%) of the total were returned. Table 1 gives the questionnaire mailing and return for each county.

Previous to 1953, a post card system was used. However, this past season a printed questionnaire form was prepared and sent out by letter. A business reply envelope (return postage guaranteed) was inclosed with the printed form. Advantages of using a printed form were that it allowed for securing more information from the hunters and the forms were easier to fill out. It was thought that the use of this type of form would increase the response, but this failed to materialize. In fact, the last post card questionnaire had a return of 40.1%.

HUNTING LICENSE SALES

The hunting license sales for the 1953-54 license year compared to the 1952-53 series are given below:

<u>License</u>	<u>1953-54</u>	<u>1952-53</u>
Deer tags	370,934	369,150
Pheasant tags	214,736	205,041
Federal duck stamps	193,104	215,383
Hunting licenses	594,051	588,170

The hunting license figures for the 1953-54 series are not yet compiled, so the figure of 594,051 is based on an estimated 1% increase in sales over the 1952-53 license year, as indicated by present returns.

Results

The total hunting license sale figure divided by the number of returned questionnaires provides the factor in calculating the total kill figures for each game species. The factor for this year was 152.79. In other words, the reported bag for each species of game is multiplied by this figure to get the Statewide totals.

Table 2 gives the Statewide game kill figures since 1948. A county breakdown of the kill for all game species except deer, bear and jack snipe is given

in Tables 3, 4, 5 and 6. Accurate county figures for the deer kill are available from the deer tag report. Table 7 gives the ten leading counties of kill for quail, pheasants, doves, pigeons, ducks, geese, rabbits, jack rabbits and tree squirrels, the region number and the position compared to 1952. Tables 8 to 15 give information on where hunters from the main population centers travel to do their hunting.

It was found that 5.7% of the hunting license buyers did not hunt and that 20.8% of the hunters that did hunt were unsuccessful. In other words, 26.5% of the license buyers did not figure in the Statewide game kill.

### DEER

Deer kill figures are based on the deer tag returns because a more accurate county breakdown is possible than can be obtained from the questionnaires.

The 1953 deer kill was 59,004, 16.2% better than in 1952. This is the second best deer kill on record; the record kill of 64,619 was made in 1951.

A number of questions were asked on deer in order to get information not possible to secure from the tag returns.

It was found that 18.3% of the successful deer hunters took two deer and 81.7% took one deer. 4.9% of the deer tag buyers did not hunt and 71.2% of the deer hunters that did hunt were unsuccessful.

### Antlerless Deer Hunting Poll

Table 16 gives a county breakdown of hunter opinion on hunting antlerless deer, 68% of the hunters favored some form of antlerless deer hunting (see attached hunting questionnaire for type of questions asked) and 32% were opposed to all antlerless deer hunting. Generally, hunters from the large population centers were more favorable to antlerless deer hunting and the small population or rural counties were less favorable although there were some exceptions to this.

### Deer Hunting in Relation to Land Ownership

Table 17 gives the county breakdown on deer hunting on national forest, other government and private lands. 49.8% of the days spent deer hunting was on the national forests, 12.2% on other government property, and 38.0% on private lands. The total amount of deer hunting on government lands was 62%.

Hunters reported spending an average of 7.1 days in the field hunting deer.

### QUAIL

A record quail harvest was made in 1953 and showed a 24.1% increase in the kill over 1952. Field reports had indicated a better harvest was expected. The second best quail year was 1948 when 1,714,400 were bagged.

### PHEASANTS

1953 proved to be the top pheasant year and the bag increased 25.9% over 1952, which was the previous high year. The figures given in Table 2 includes the take on the licensed game bird clubs. In Table 3, where the county breakdown is given, only those birds killed in the regular season are tallied.

Previous to this year, it had been impossible to segregate the regular season from the Licensed Game Bird Club kill.

Field reports on pheasant hunting had indicated a general increase in the kill was to be anticipated. 55,200 hunters hunted on the State Co-op areas. This represented about 21.0% of the pheasant tag buyers.

#### DOVES

The 1953 dove harvest was the top year for this species and showed a 12.1% raise over 1952, which was the previous high year.

#### PIGEONS

The pigeon kill was the second highest on record and showed a 65.8% raise over 1952. The best pigeon harvest was made in 1948 when 314,800 were taken.

Field reports during the season had not indicated that an increased kill was to be expected, so the questionnaire results were surprising. The county kill records showed marked changes with only three counties which were in the first ten in 1952 appearing in that group in 1953. Kern and Monterey counties, which are usually in the first ten in kill, were not in that group in 1953. Pigeons show an erratic distribution pattern from year to year which shows up in the kill records.

#### DUCKS

The 1953 duck harvest was about the same as in 1952, being less than one percent lower than 1952's record kill. Increased bag limit and a slightly longer season were in effect in 1953. Although the Department's winter inventory showed duck numbers to be on a par with 1952, late migrations and dry unfavorable hunting weather during the first half of the split season acted to keep the kill slightly below 1952.

Additional data on waterfowl hunting are as follows:

Banded ducks bagged	22,300
(a ratio of one banded duck to 206 unbanded taken)	
Average number of days hunting per hunter	8
Hunters using the Tule Lake-Lower Klamath Federal area	16,200
Ducks bagged on the area	139,200
Geese bagged on the area	79,800
Hunters using State waterfowl management areas	30,300
(approximately 12% of the duck stamp buyers)	
Ducks bagged on State waterfowl management areas	236,700

Ducks bagged on private and commercial clubs amounted to a little over 42% of the total ducks taken. This is a maximum figure as the small groups which go in together and lease hunting privileges on small tracts of land are included as well as the large more highly organized clubs.

#### GEESE

Goose hunting showed a 18.4% improvement over 1952, which had been the previous high year. Field reports had indicated some unusually good goose hunting in 1953.

## RABBITS (Brush and Cottontail)

The rabbit bag was the best on record and an 88.1% increase was recorded over 1952. 1948 was the highest previous year with 597,300 taken.

## JACK RABBITS

A 20.4% increase in the harvest over 1952, the previous high year, was recorded.

## TREE SQUIRRELS

The squirrel bag increased 148.7% over 1952, and was the second highest recorded kill. The best year was 1948 when 74,200 were bagged.

It can be noted in Table 6 that there are tree squirrels reported from counties where there is no open season for the species. This indicates that a number of the squirrels reported taken actually may be ground squirrels.

## BEAR

The bear kill increased 38.5% over 1952 and showed the highest kill on record. The second best year was 1950 when 5,700 were bagged. The leading bear hunting counties were Placer, Humboldt, Mendocino, Shasta and Siskiyou.

## JACK SNIPE

The first open season on Jack snipe since 1940 was held in 1953, with a reported bag of 44,200.

## CHECKS ON THE VALIDITY OF THE HUNTER QUESTIONNAIRE RESULTS

There are two Department hunting operations that give accurate kill figures on known areas, the waterfowl management and the pheasant cooperative hunting areas. By comparing the questionnaire results with the known figures for these areas, an index of the accuracy of the questionnaire results was obtained.

### Waterfowl Management Areas

Actual duck bag on waterfowl management areas	100,000
Questionnaire results	236,700
Exaggeration = 2.4 times actual kill or 136.7%	
Correction factor to be applied to questionnaire figure to arrive at estimated duck kill would be 0.42.	

### Pheasant Cooperative Areas

Actual co-op bag	34,903
Questionnaire results	69,400
Exaggeration = 2.0 times actual kill or 100%	
Correction factor to be applied to questionnaire figure to get estimated pheasant kill would be 0.5	

The number of hunters reported using the pheasant and duck areas showed good correlation with actual numbers.

### Other Validity Checks

Kill on licensed game bird clubs by questionnaire	85,100
Actual kill	28,375
Hunters using L. G. B. C. from questionnaire	13,600
Actual number	5,400

The above figures show poor correlation both as to kill and to number of hunters. Because the number of hunters reported using these areas is so far off, it is felt that there must have been some confusion in the minds of the hunters as to just what constitutes a licensed game bird club. Perhaps some hunters thought that some of the community and organization pheasant hunting areas were licensed game bird clubs.

Deer - reported kill from questionnaire	143,900
Deer tag count	59,003
Exaggeration - 2.4 times the tag count	

The exaggeration in this case is probably less than 2.4 because it is known that a considerable number of hunters fail to turn in the deer tags. Unfortunately, no deer check areas were available to derive a correction factor.

### Special Tag Sales Check

Deer tag sales by questionnaire	406,900
Actual sales	370,934
Exaggeration	9.7%
Pheasant tag sales by questionnaire	261,100
Actual sales	214,736
Exaggeration	21.6%
Federal duck stamp sales by questionnaire	243,700
Actual sales	193,104
Exaggeration	26.2%

The above figures indicate fair correlation between reported license sales and actual sales, although some exaggeration is apparent. A source of error may be from a family member receiving the questionnaire and reporting a license purchase by some other member. Also, there is a possibility that hunting license buyers that do not purchase special tags or do not hunt, fail to return the questionnaires in a slightly greater proportion than the successful tag buyers.

### CONCLUSION

It is apparent that game kill figures derived from hunter questionnaires are unreliable as to actual numbers of game bagged. Their chief value is in establishing trends in the kill from year to year.

By comparing questionnaire results for ducks and pheasants with the known kill on waterfowl management areas and pheasant co-ops, a correction factor was derived which applies to these species. These factors were 0.4 for ducks and 0.5 for pheasants. Similar opportunities to derive factors for other game species were not available.

C. M. Ferrel  
Game Biologist  
Game Management Branch

TABLE 1  
MAILING AND RETURN BY COUNTY OF 1953 HUNTER QUESTIONNAIRES

County	Questionnaires Mailed	Percent of Total Mailed	Questionnaires Returned	Percent Returned
Alameda	536	5.3	228	42.5
Alpine	1	trace	0	0.0
Amador	25	0.2	10	40.0
Butte	246	2.4	108	43.9
Calaveras	35	0.3	8	22.9
Colusa	52	0.5	20	38.5
Contra Costa	356	3.5	142	39.9
Del Norte	37	0.4	11	29.7
El Dorado	52	0.5	19	36.5
Fresno	425	4.2	158	37.2
Glenn	75	0.7	24	32.0
Humboldt	238	2.3	82	34.5
Imperial	76	0.7	25	32.9
Inyo	47	0.5	17	36.2
Kern	381	3.7	132	34.6
Kings	71	0.7	29	40.8
Lake	52	0.5	21	40.4
Lassen	95	0.9	28	29.5
Los Angeles	1514	15.0	627	41.4
Madera	62	0.6	33	53.2
Marin	110	1.1	49	44.5
Mariposa	11	0.1	4	36.4
Mendocino	164	1.6	53	32.3
Merced	181	1.8	64	35.4
Modoc	59	0.6	22	37.3
Mono	6	0.1	0	0.0
Monterey	171	1.7	51	29.8
Napa	84	0.8	37	44.0
Nevada	62	0.6	19	30.6
Orange	120	1.2	50	41.7
Placer	100	1.0	46	46.0
Plumas	57	0.6	24	42.1
Riverside	133	1.3	45	33.8
Sacramento	526	5.3	207	39.4
San Benito	32	0.3	12	37.5
San Bernardino	179	1.8	60	33.5
San Diego	358	3.5	141	39.4
San Francisco	314	3.1	121	38.5
San Joaquin	344	3.4	128	37.2
San Luis Obispo	129	1.3	51	39.5
San Mateo	227	2.2	103	45.4
Santa Barbara	118	1.2	35	29.7
Santa Clara	309	3.0	123	39.8
Santa Cruz	89	0.9	31	34.8
Shasta	207	2.0	74	35.7
Sierra	8	0.1	2	25.0
Siskiyou	204	2.0	83	40.7
Solano	182	1.8	79	43.4
Sonoma	198	1.9	89	44.9
Stanislaus	268	2.6	96	35.8
Sutter	105	1.0	33	31.4
Tehama	82	0.8	21	25.6
Trinity	21	0.2	12	57.1
Tulare	242	2.4	68	28.1
Tuolumne	40	0.4	12	30.0
Ventura	109	1.1	31	28.4
Yolo	135	1.3	53	39.3
Yuba	86	0.8	27	31.4
Out of State	17	0.2	10	58.8
	10,162	100.0	4,888	48.1

TABLE 2

STATEWIDE GAME KILL - 1948 - 1953

Species	Yearly Ave. Bag 1948-1951	Bag 1952	Bag 1953	% Change from 1952
DEER (Figures from deer tag reports)	52,904	50,783	59,004	+ 16.2
QUAIL	1,352,100	1,644,700	2,041,400	+ 24.1
PHEASANTS	476,700	581,800	732,400	+ 25.9
DOVES	2,146,200	2,595,200	2,909,100	+ 12.1
PIGEONS	167,000	177,400	294,200	+ 65.8
DUCKS	2,549,000	4,642,800	4,599,600	- 0.9
GEESE	310,200	490,300	580,500	+ 18.4
RABBITS (Brush, Cottontail)	443,900	504,800	949,400	+ 88.1
JACK RABBITS	719,000	986,700	1,188,100	+ 20.4
TREE SQUIRRELS	48,000	26,700	66,400	+ 148.7
BEARS	3,300	5,200	7,200	+ 38.5
JACK SNIPES (First open season since 1940)	--	--	44,200	

TABLE 3  
1953 HUNTER QUESTIONNAIRE - CALCULATED BAG BY COUNTY

<u>County</u>	<u>Quail</u>	<u>Pheasants</u>
Alameda	27,700	4,000
Alpine	800	0
Amador	18,500	600
Butte	35,900	57,900
Calaveras	37,300	300
Colusa	4,900	55,800
Contra Costa	6,700	6,100
Del Norte	None reported	None reported
El Dorado	39,600	None reported
Fresno	135,400	21,800
Glenn	10,200	41,900
Humboldt	37,400	None reported
Imperial	33,300	6,700
Inyo	34,800	4,400
Kern	182,100	8,600
Kings	17,300	2,300
Lake	41,900	None reported
Lassen	17,400	4,100
Los Angeles	57,900	4,300
Madera	55,900	8,400
Marin	16,800	None reported
Mariposa	34,500	1,500
Mendocino	75,600	None reported
Merced	22,900	30,400
Modoc	22,600	13,300
Mono	3,100	300
Monterey	60,000	1,700
Napa	33,300	2,100
Nevada	6,600	None reported
Orange	16,800	800
Placer	47,500	8,300
Plumas	4,400	300
Riverside	122,800	5,500
Sacramento	18,300	48,000
San Benito	35,900	1,200
San Bernardino	54,400	4,600
San Diego	84,000	1,200
San Francisco	None reported	None reported
San Joaquin	64,600	45,200
San Luis Obispo	75,100	None reported
San Mateo	14,800	500
Santa Barbara	52,900	500
Santa Clara	52,700	3,100
Santa Cruz	14,400	200
Shasta	34,400	6,000
Sierra	1,100	900
Siskiyou	19,600	13,900
Solano	3,400	22,500
Sonoma	47,100	9,600
Stanislaus	28,600	39,300
Sutter	1,500	51,200
Tehama	13,000	8,300
Trinity	2,400	None reported
Tulare	71,000	8,300
Tuolumne	24,600	None reported
Ventura	31,200	300
Yolo	6,600	65,900
Yuba	22,900	17,900
Not given	5,000	5,300
TOTALS	2,017,100	415,300



TABLE 4  
1953 HUNTER QUESTIONNAIRE - CALCULATED BAG BY COUNTY

<u>County</u>	<u>Doves</u>	<u>Pigeons</u>
Alameda	15,700	None reported
Alpine	None reported	None reported
Amador	10,100	9,300
Butte	54,200	9,300
Calaveras	6,900	12,800
Colusa	48,100	None reported
Contra Costa	26,000	None reported
Del Norte	None reported	500
El Dorado	10,500	9,000
Fresno	243,700	9,200
Glenn	34,800	300
Humboldt	None reported	1,800
Imperial	349,300	None reported
Inyo	15,400	None reported
Kern	189,200	5,300
Kings	53,600	None reported
Lake	36,400	500
Lassen	30,700	900
Los Angeles	105,300	5,800
Madera	49,700	600
Marin	3,200	None reported
Mariposa	12,400	300
Mendocino	12,700	18,300
Merced	107,900	1,100
Modoc	12,100	None reported
Mono	None reported	None reported
Monterey	32,700	8,400
Napa	27,200	500
Nevada	3,100	600
Orange	53,600	1,800
Placer	50,400	3,200
Plumas	4,000	None reported
Riverside	185,900	2,900
Sacramento	44,000	800
San Benito	15,700	2,800
San Bernardino	75,000	1,700
San Diego	96,900	500
San Francisco	None reported	None reported
San Joaquin	105,300	500
San Luis Obispo	99,600	94,400
San Mateo	5,500	7,600
Santa Barbara	23,100	19,100
Santa Clara	36,500	13,100
Santa Cruz	22,500	10,200
Shasta	18,900	3,200
Sierra	None reported	None reported
Siskiyou	35,800	4,700
Solano	35,400	None reported
Sonoma	31,900	7,200
Stanislaus	72,300	900
Sutter	15,300	None reported
Tehama	37,700	600
Trinity	2,400	300
Tulare	221,400	12,400
Tuolumne	5,500	5,800
Ventura	48,600	3,200
Yolo	45,700	None reported
Yuba	19,100	2,800
Not given	10,200	None reported
TOTALS	2,000,000	200,000

TABLE 5  
1953 HUNTER QUESTIONNAIRE - CALCULATED BAG BY COUNTY

<u>County</u>	<u>Ducks</u>	<u>Geese</u>
Alameda	193,700	500
Alpine	900	900
Amador	2,400	2,000
Butte	169,600	28,900
Calaveras	4,700	1,200
Colusa	399,200	75,900
Contra Costa	82,400	1,700
Del Norte	15,400	600
El Dorado	4,100	None reported
Fresno	81,300	5,300
Glenn	144,400	27,700
Humboldt	68,300	7,600
Imperial	162,300	35,300
Inyo	13,000	2,300
Kern	93,800	4,600
Kings	36,800	4,600
Lake	18,200	900
Lassen	56,100	21,400
Los Angeles	12,200	200
Madera	43,500	11,300
Marin	56,400	5,700
Mariposa	1,100	None reported
Mendocino	11,800	600
Merced	638,100	44,500
Modoc	105,300	46,000
Mono	10,100	1,200
Monterey	33,300	900
Napa	26,700	200
Nevada	2,400	None reported
Orange	22,600	300
Placer	10,400	200
Plumas	8,300	3,700
Riverside	27,000	1,100
Sacramento	124,500	15,400
San Benito	2,900	None reported
San Bernardino	41,400	600
San Diego	78,500	500
San Francisco	1,500	None reported
San Joaquin	154,800	11,500
San Luis Obispo	25,200	6,900
San Mateo	49,000	500
Santa Barbara	13,100	200
Santa Clara	81,300	200
Santa Cruz	None reported	None reported
Shasta	18,100	7,800
Sierra	4,100	300
Siskiyou	219,700	106,000
Solano	563,200	10,500
Sonoma	95,800	200
Stanislaus	54,500	7,000
Sutter	156,200	22,200
Tehama	9,900	1,800
Trinity	None reported	None reported
Tulare	9,500	900
Tuolumne	None reported	200
Ventura	24,900	None reported
Yolo	187,500	29,600
Yuba	118,600	8,100
Not given	9,600	12,800

TABLE 6  
1953 HUNTER QUESTIONNAIRE - CALCULATED BAG BY COUNTY

County	<u>Rabbits</u>		<u>Tree Squirrels</u>
	<u>(Brush and Cottontail)</u>	<u>Jack Rabbits</u>	
Alameda	5,800	20,500	500
Alpine	None reported	200	800
Amador	600	None reported	2,600
Butte	2,600	15,600	6,300
Calaveras	2,000	1,400	4,600
Colusa	600	16,500	None reported
Contra Costa	200	6,900	None reported
Del Norte	None reported	None reported	None reported
El Dorado	2,000	3,200	8,600
Fresno	15,000	34,700	None reported
Glenn	1,200	15,300	None reported
Humboldt	3,200	2,300	None reported
Imperial	27,800	12,100	None reported
Inyo	8,700	4,900	None reported
Kern	106,300	156,600	300
Kings	3,700	15,700	None reported
Lake	800	15,000	900
Lassen	1,100	4,100	None reported
Los Angeles	127,900	201,700	2,000
Madera	2,300	17,300	500
Marin	600	1,500	1,500
Mariposa	1,100	None reported	800
Mendocino	6,300	10,100	None reported
Merced	11,600	62,000	None reported
Modoc	800	20,000	None reported
Mono	None reported	None reported	600
Monterey	14,200	4,700	4,000
Napa	200	2,600	None reported
Nevada	1,100	4,900	1,800
Orange	42,000	28,300	None reported
Placer	6,100	14,700	2,100
Plumas	None reported	800	1,200
Riverside	178,000	59,300	3,800
Sacramento	3,800	21,700	200
San Benito	5,800	9,600	None reported
San Bernardino	70,300	70,300	None reported
San Diego	127,000	25,400	300
San Francisco	300	None reported	None reported
San Joaquin	6,900	66,300	1,500
San Luis Obispo	15,700	8,300	None reported
San Mateo	15,900	3,100	1,700
Santa Barbara	46,000	34,500	800
Santa Clara	3,500	8,700	5,200
Santa Cruz	8,600	500	200
Shasta	9,200	1,800	5,700
Sierra	None reported	None reported	None reported
Siskiyou	3,500	2,300	2,300
Solano	900	18,900	None reported
Sonoma	9,800	22,600	None reported
Stanislaus	3,700	21,200	200
Sutter	1,200	15,600	None reported
Tehama	1,100	28,700	1,200
Trinity	200	None reported	1,700
Tulare	6,700	33,800	200
Tuolumne	1,200	1,100	1,400
Ventura	33,300	8,100	None reported
Yolo	500	18,600	None reported
Yuba	200	6,900	300
Not given	300	7,200	600

TOTALS

410,100

1,100,100

77,100

TABLE 7  
 GAME BAG - 1953  
 (TEN LEADING COUNTIES)

	<u>% OF STATE</u>	<u>POSITION</u>	<u>REGION</u>		<u>% OF STATE</u>	<u>POSITION</u>	<u>REGION</u>
	<u>TOTAL</u>	<u>1952</u>	<u>NO.</u>		<u>TOTAL</u>	<u>1952</u>	<u>NO.</u>
<u>QUAIL</u>				<u>PHEASANTS</u>			
1. KERN	8.9	1	4	1. YOLO	10.2	2	2
2. FRESNO	6.6	5	4	2. BUTTE	9.0	3	2
3. RIVERSIDE	6.0	4	5	3. COLUSA	8.6	1	2
4. SAN DIEGO	4.1	3	5	4. SUTTER	7.9	5	2
5. MENDOCINO	3.7	13	3	5. SACRAMENTO	7.4	6	2
6. SAN LUIS OBISPO	3.6	10	3	6. SAN JOAQUIN	7.0	7	2
7. TULARE	3.5	2	4	7. GLENN	6.5	4	2
8. SAN JOAQUIN	3.2	21	2	8. STANISLAUS	6.1	10	4
9. MONTEREY	2.9	12	3	9. MERCED	4.7	8	4
10. LOS ANGELES	2.8	7	5	10. SOLANO	3.5	11	2
11. ALL OTHERS	54.7			11. ALL OTHERS	29.1		
<u>DOVES</u>				<u>PIGEONS</u>			
1. IMPERIAL	12.0	2	5	1. SAN LUIS OBISPO	32.1	3	3
2. FRESNO	8.4	3	4	2. SANTA BARBARA	6.5	26	5
3. TULARE	7.6	1	4	3. MENDOCINO	6.2	15	3
4. KERN	6.5	4	4	4. SANTA CLARA	4.5	36	3
5. RIVERSIDE	6.4	5	5	5. CALAVERAS	4.4	23	2
6. MERCED	3.7	7	4	6. TULARE	4.2	8	4
7. LOS ANGELES	3.6	8	5	7. SANTA CRUZ	3.5	12	3
8. SAN JOAQUIN	3.6	9	2	8. AMADOR	3.2	34	2
9. SAN LUIS OBISPO	3.4	14	3	9. BUTTE	3.2	9	2
10. SAN DIEGO	3.3	6	5	10. FRESNO	3.1	20	4
11. ALL OTHERS	41.5			11. ALL OTHERS	29.1		
<u>DUCKS</u>				<u>GEESE</u>			
1. MERCED	13.9	1	4	1. SISKIYOU	18.3	1	1
2. SOLANO	12.2	2	2	2. COLUSA	13.1	2	2
3. COLUSA	8.7	4	2	3. MODOC	7.9	3	1
4. SISKIYOU	4.8	3	1	4. MERCED	7.7	6	4
5. ALAMEDA	4.2	11	3	5. IMPERIAL	6.1	15	5
6. YOLO	4.1	8	2	6. YOLO	5.1	9	2
7. BUTTE	3.7	14	2	7. BUTTE	5.0	5	2
8. IMPERIAL	3.5	5	5	8. GLENN	4.8	4	2
9. SUTTER	3.4	6	2	9. SUTTER	3.8	8	2
10. SAN JOAQUIN	3.3	12	2	10. LASSEN	3.7	10	1
11. ALL OTHERS	38.2			11. ALL OTHERS	24.5		
<u>RABBITS (BRUSH, COTTONTAIL)</u>				<u>JACK RABBITS</u>			
1. RIVERSIDE	18.7	1	5	1. LOS ANGELES	17.0	1	5
2. LOS ANGELES	13.5	3	5	2. KERN	13.2	2	4
3. SAN DIEGO	13.4	2	5	3. SAN BERNARDINO	5.9	13	5
4. KERN	11.2	4	4	4. SAN JOAQUIN	5.6	6	2
5. SAN BERNARDINO	7.4	6	5	5. MERCED	5.2	4	4
6. SANTA BARBARA	4.8	20	5	6. RIVERSIDE	5.0	7	5
7. ORANGE	4.4	10	5	7. FRESNO	2.9	10	4
8. VENTURA	3.5	8	5	8. SANTA BARBARA	2.8	37	5
9. IMPERIAL	2.9	18	5	9. TULARE	2.8	5	4
10. SAN MATEO	1.7	16	3	10. TEHAMA	2.4	29	1
11. ALL OTHERS	18.5			11. ALL OTHERS	37.2		

TABLE 8  
 WHERE BAY AREA (S.F., ALAMEDA, CONTRA COSTA COUNTIES) HUNTERS BAG THEIR  
 GAME. EXPRESSED IN PERCENT OF BAG IN THE COUNTIES HUNTED. 1953 SEASON.

<u>County</u>	<u>Deer</u>	<u>Pheasants</u>	<u>Ducks</u>	<u>Doves</u>	<u>Quail</u>
Alameda	11	5	12	8	28
Alpine	5				
Amador	2				
Butte		6	2		
Colusa		18	16	7	
Contra Costa		5	6	14	7
El Dorado	2				2
Fresno			3	7	
Glenn		11		6	4
Kings					2
Lake	5			7	7
Lassen	3				
Marin	3				
Mariposa					2
Mendocino	19			5	7
Merced		3	5	9	
Modoc	4				
Monterey	3				6
Napa	3			6	10
Placer	2	2		2	5
Plumas	3				
Sacramento		7	5	2	
San Francisco			2		
San Joaquin		8	3	3	2
San Mateo					3
Santa Clara	3				4
Shasta	3			2	
Sierra	6				
Siskiyou	5			2	
Solano		5	20	3	
Sonoma	2				
Stanislaus		4		5	
Sutter		5	2		
Tehama	4				
Tuolumne	4				
Yolo		15	2	4	3
All Others	8	6	20	6	8
TOTALS	100	100	100	100	100

TABLE 9  
 WHERE LOS ANGELES AREA (L.A., ORANGE COUNTIES) HUNTERS BAG THEIR  
 GAME. EXPRESSED IN PERCENT OF BAG IN THE COUNTIES HUNTED.  
 1953 SEASON

<u>County</u>	<u>Deer</u>	<u>Pheasants</u>	<u>Ducks</u>	<u>Doves</u>	<u>Quail</u>
Alpine	2				
Colusa		16	2		
Fresno	5	5	3		
Glenn		2			
Imperial		6	31	26	4
Inyo	8	7	2		6
Kern	6	4	13	6	22
Lake	2				
Lassen	2				
Los Angeles	12	14	4	20	20
Madera	2				
Mendocino	2				
Modoc	2	3			
Mono	12		2		
Orange	6	3	7	11	6
Plumas	2				
Riverside		7	4	22	28
Sacramento		6			
San Benito	4				
San Bernardino		2	7	4	3
San Diego				4	3
San Joaquin		3			
Santa Barbara	6				3
Shasta	2				
Siskiyou			7		
Stanislaus		7			
Sutter		5			
Tehama	2				
Tulare	7				
Tuolumne	4				
Ventura	4		7	3	
Yolo		4			
All others	8	6	11	4	5
TOTAL	100	100	100	100	100

TABLE 10  
 WHERE SAN DIEGO AREA (SAN DIEGO COUNTY) HUNTERS BAG THEIR GAME.  
 EXPRESSED IN PERCENT OF BAG OF THE COUNTIES HUNTED.  
 1953 SEASON

<u>County</u>	<u>Deer</u>	<u>Pheasants</u>	<u>Ducks</u>	<u>Doves</u>	<u>Quail</u>
Imperial		33	29	39	8
Riverside					3
San Diego	90	38	70	60	86
Sutter		24			
Tulare	9				
All Others	1	5	1	1	3
TOTAL	100	100	100	100	100

TABLE 11  
 WHERE BAKERSFIELD AREA (KERN COUNTY) HUNTERS BAG THEIR GAME.  
 EXPRESSED IN PERCENT OF BAG IN THE COUNTIES HUNTED, 1953 SEASON.

County	Deer	Pheasants	Ducks	Doves	Quail
Colusa			4		
Fresno		10	4		
Imperial				5	
Kern	46	74	82	79	75
Kings		6			
Monterey	7				
San Bernardino				3	
San Luis Obispo	7				5
Santa Barbara	11				5
Santa Clara	7				
Tulare	14			8	6
All Others	8	10	10	5	9
TOTALS	100	100	100	100	100

TABLE 12  
 WHERE FRESNO AREA (FRESNO COUNTY) HUNTERS BAG THEIR GAME.  
 EXPRESSED IN PERCENT OF BAG IN THE COUNTIES HUNTED, 1953 SEASON.

Butte		8			
Colusa		4			
Fresno	54	65	40	85	79
Kings				2	
Madera	12	7	16	3	13
Merced		8	40		
Sacramento		3			
San Benito					2
Shasta	12				
Tulare	8			7	2
All Others	14	5	14	3	4
TOTALS	100	100	100	100	100

TABLE 13  
 WHERE SACRAMENTO AREA HUNTERS (SACRAMENTO COUNTY) BAG THEIR GAME.  
 EXPRESSED IN PERCENT OF BAG IN THE COUNTIES HUNTED, 1953 SEASON.

Alpine	11				
Amador	8			3	5
Butte		4			
Colusa		2	8		
El Dorado	13			4	20
Glenn				5	
Lake	11				
Mendocino	5				
Modoc			2		
Nevada	8				
Placer	5			16	5
Plumas	8				
Sacramento		43	25	46	12
San Joaquin		2		5	52
Sierra	8				
Siskiyou			2		
Solano		4	4		
Sutter		19	12		
Yolo		18	43	17	
Yuba		3			2
All Others	23	5	4	4	4
TOTALS	100	100	100	100	100

TABLE 14  
 WHERE CHICO AREA (BUTTE COUNTY) HUNTERS BAG THEIR GAME  
 EXPRESSED IN PERCENT OF BAG IN THE COUNTIES HUNTED, 1953 SEASON

<u>County</u>	<u>Deer</u>	<u>Pheasants</u>	<u>Ducks</u>	<u>Doves</u>	<u>Quail</u>
Butte	45	81	67	81	84
Colusa		6			
Glenn		10	21	11	7
Lassen	7				
Mendocino	7				
Plumas					8
Shasta	5				
Tehama	21				
Trinity	5				
All Others	<u>10</u>	<u>3</u>	<u>4</u>	<u>8</u>	<u>1</u>
TOTALS	100	100	100	100	100

TABLE 15  
 WHERE STOCKTON AREA (SAN JOAQUIN COUNTY) HUNTERS BAG THEIR GAME.  
 EXPRESSED IN PERCENT OF BAG IN THE COUNTIES HUNTED, 1953 SEASON

Alpine	26				
Amador					5
Calaveras	13		3		33
Colusa			7		
El Dorado	9				6
Fresno				5	
Lake	9				
Merced			9		
Sacramento		4	3		
San Joaquin		82	70	82	47
Santa Clara	9				8
Stanislaus		11	5		
Tulare				9	
All Others	<u>34</u>	<u>3</u>	<u>3</u>	<u>4</u>	<u>1</u>
TOTALS	100	100	100	100	100



TABLE 16

## HUNTER OPINION POLL ON ANTLERLESS DEER HUNTING BY COUNTY OF RESIDENCE

County	Hunter			(Favorable opinion breakdown)							
	Opinions	Opposed	%	Favor	%	Option 1	%	Option 2	%	Option 3	%
Alameda	174	39	22	135	78	97	40	89	36	58	24
Alpine	0										
Amador	9	5	56	4	44	2	29	4	57	1	14
Butte	83	29	35	54	65	33	35	35	36	28	29
Calaveras	6	5	83	1	17	1	50	1	50	0	0
Colusa	16	14	88	2	12	0	0	0	0	2	100
Contra Costa	118	36	31	82	69	49	39	47	37	30	24
Del Norte	7	2	29	5	71	1	20	1	20	3	60
El Dorado	13	4	31	9	69	4	33	3	25	5	42
Fresno	117	28	24	89	76	52	38	61	45	24	17
Glenn	16	8	50	8	50	5	38	4	31	4	31
Humboldt	65	27	42	38	58	23	39	21	36	15	25
Imperial	13	3	23	10	77	7	44	7	44	2	12
Inyo	14	3	21	11	79	6	35	7	41	4	24
Kern	103	26	25	77	75	41	35	49	42	26	23
Kings	25	11	44	14	56	10	36	12	43	6	21
Lake	19	7	37	12	63	9	43	7	33	5	24
Lassen	25	11	44	14	56	7	33	9	43	5	24
Los Angeles	473	89	19	384	81	256	39	244	37	158	24
Madera	28	12	43	16	57	10	42	10	42	4	16
Marin	42	11	26	31	74	18	38	23	49	6	13
Mariposa	3	2	67	1	33	0	0	1	100	0	0
Mendocino	43	19	44	24	56	18	45	14	35	8	20
Merced	48	18	38	30	62	18	43	14	33	10	24
Modoc	20	7	35	13	65	5	24	6	29	10	47
Mono	0										
Monterey	44	14	32	30	68	23	43	21	39	10	18
Napa	32	20	63	12	37	9	45	6	30	5	25
Nevada	18	2	11	16	89	10	40	10	40	5	20
Orange	40	14	35	26	65	18	39	18	39	10	22
Placer	38	16	42	22	58	13	38	12	35	9	27
Plumas	21	9	43	12	57	6	30	9	45	5	25
Riverside	31	4	13	27	87	19	40	20	43	8	17
Sacramento	154	45	29	109	71	75	42	59	33	44	25
San Benito	9	5	56	4	44	3	60	2	40	0	0
San Bernardino	44	18	41	26	59	12	30	15	37	13	33
San Diego	117	22	19	95	81	62	38	56	34	47	28
San Francisco	95	24	25	71	75	42	37	47	41	26	22
San Joaquin	100	37	37	63	63	37	38	39	40	21	22
San Luis Obispo	44	21	48	23	52	18	49	16	43	3	8
San Mateo	82	24	29	58	71	40	40	38	38	21	22
Santa Barbara	28	7	25	21	75	17	46	13	35	7	19
Santa Clara	94	33	35	61	65	42	42	37	37	22	21
Santa Cruz	27	14	52	13	48	7	32	9	41	6	27
Shasta	56	25	45	31	55	17	35	16	33	15	32
Sierra	1	0	0	1	100	1	33	1	33	1	34
Siskiyou	70	34	49	36	51	14	30	17	35	17	35
Solano	66	29	44	37	56	22	39	21	37	14	24
Sonoma	74	35	47	39	53	24	41	21	36	14	23
Stanislaus	66	24	36	42	64	32	44	25	35	15	21
Sutter	24	7	29	17	71	11	41	12	44	4	15
Tehama	16	6	38	10	62	7	44	6	38	3	18
Trinity	11	5	45	6	55	4	44	3	33	2	23
Tulare	44	14	32	30	68	19	41	20	43	7	16
Tuolumne	10	4	40	6	60	4	50	4	50	0	0
Ventura	25	10	40	15	60	11	42	10	38	5	20
Yolo	44	22	50	22	50	20	45	14	32	10	23
Yuba	17	9	53	8	47	6	43	5	36	3	21
TOTALS	3,022	969	32	2,053	68	1,317	39	1,271	38	786	23

TABLE 17  
AMOUNT OF TIME SPENT HUNTING DEER ON GOVERNMENT AND PRIVATE  
LANDS BY COUNTY OF HUNTER RESIDENCE

County	Reported Hunters	On Nat. Forest Lands	On other Govt. Lands	On Private Lands	Total Ave. days Hunting per Hunter	Reported		On	
						Days Hunted	%	%	%
Alameda	150	441	43	100	10	478	47	6.8	
Amador	9	33	21	64	3	11	33	3.7	
Butte	70	553	324	59	72	157	28	7.9	
Calaveras	7	36	8	22	0	28	78	5.1	
Colusa	6	34	9	26	4	21	62	5.7	
Contra Costa	94	658	339	52	82	237	36	7.0	
Del Norte	6	48	27	56	12	9	19	8.0	
El Dorado	14	108	67	62	5	36	33	7.7	
Fresno	92	550	399	73	47	104	19	6.0	
Glenn	14	106	69	65	0	37	35	7.6	
Humboldt	58	444	152	34	16	276	62	7.7	
Imperial	3	22	13	59	7	2	9	7.3	
Inyo	13	121	116	96	0	5	4	9.3	
Kern	71	411	247	60	46	118	29	5.8	
Kings	20	164	84	51	29	51	31	8.2	
Lake	18	184	58	32	11	115	63	10.2	
Lassen	19	182	100	55	44	38	21	9.6	
Los Angeles	325	2085	1308	63	314	463	22	6.4	
Madera	21	133	59	44	31	43	32	6.3	
Marin	37	268	72	27	17	179	67	7.2	
Mariposa	2	15	2	13	1	12	80	7.5	
Mendocino	43	382	73	19	31	278	73	8.9	
Merced	32	169	57	34	29	83	49	5.3	
Modoc	19	157	123	78	22	12	8	8.3	
Monterey	44	372	108	29	18	246	66	8.5	
Napa	34	225	58	26	31	136	60	6.6	
Nevada	16	150	65	43	24	61	41	9.4	
Orange	24	181	103	57	15	63	35	7.5	
Placer	35	257	99	39	18	140	54	7.3	
Plumas	18	241	148	61	25	68	28	13.4	
Riverside	23	174	109	63	21	44	25	7.6	
Sacramento	125	842	514	61	186	142	17	6.7	
San Benito	10	151	31	21	6	114	75	15.1	
San Bernardino	32	293	257	88	27	9	3	9.2	
San Diego	89	550	254	46	109	187	34	6.2	
San Francisco	79	542	235	43	51	256	47	6.9	
San Joaquin	78	498	291	58	78	129	26	6.4	
San Luis Obispo	41	387	138	36	15	234	60	9.4	
San Mateo	66	403	191	47	62	150	37	6.1	
Santa Barbara	27	240	26	10	4	210	88	8.9	
Santa Clara	78	535	245	46	60	230	43	6.9	
Santa Cruz	20	153	22	14	3	128	84	7.7	
Shasta	62	469	249	53	91	129	28	7.6	
Sierra	1	2	2	100	0	0	0	2.0	
Siskiyou	67	582	298	51	92	192	33	8.7	
Solano	54	421	168	40	73	180	43	7.8	
Sonoma	69	563	110	20	46	407	72	8.2	
Stanislaus	62	313	175	56	30	108	35	5.0	
Sutter	16	106	74	70	19	13	12	6.6	
Tehama	14	56	35	63	10	11	19	4.0	
Trinity	12	72	48	67	10	14	19	6.0	
Tulare	41	207	146	71	23	38	18	5.0	
Tuolumne	9	92	39	42	5	48	52	10.2	
Ventura	24	190	112	59	6	72	38	7.9	
Yolo	37	298	161	54	65	72	24	8.1	
Yuba	14	96	60	63	0	36	37	6.9	
TOTAL	2,464	17,543	8,739	49.8	2,144	12.2	6,660	38.0	7.1