

**REPORT OF THE
1998
GAME TAKE HUNTER SURVEY**



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 Wildlife Programs Branch
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REPORT OF THE 1998 GAME TAKE HUNTER SURVEY

Hunter game take questionnaires were mailed to 19,000 randomly selected hunting licensees on January 11, 1999. These individuals represented approximately 6.1 percent of the total number of licenses sold (309,275) in 1998. Two follow-up mailings consisted of the entire hunter game take questionnaire were sent to nonrespondents on May 23, 1999 and June 17, 1999. There were 658 questionnaires returned undeliverable, which left a total of 18,342 possible respondents. A total of 9,275 persons returned the questionnaire, representing approximately 3.0 percent of the total number of licenses sold. It was determined through the analysis of the survey that there was a hunting effort of approximately 309,275 hunting licensees who spent 4,806,337 days in the field.

For the past several years, follow-up mailings to nonrespondents have significantly increased response to the questionnaires. The increase 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 principle causes of inflated bag and hunter-use figures in surveys of this type. However, statistical analysis of survey data indicated high validity for species pursued by large number of hunters. For more information concerning this survey please contact D. Sam Blankenship (916-653-1759). Since 1992, this survey has been a cooperative effort between the Wildlife Programs Branch and the License Revenue Branch.

Hunters from License Sales	1997	1998	Percent Change from 1997
Hunting Licenses	*319,014	**309,275	-3
Deer Hunters (applications)	155,487	147,947	-5
Deer Tags Issued (including 2nd deer tags)	199,783	195,626	-2
Bear Tags	15,000	18,681	+25
Federal Duck Stamps	77,536	66,757	-13
State Duck Stamps	77,612	76,426	-1
Waterfowl Applications	353,804	418,784	+18
Upland Game Bird Stamps	192,935	190,806	-1

* Total number of licenses sold by April 30, 1997.

** Total number of licenses sold by May 30, 1998.

HUNTING REGULATION CHANGES FOR 1998

Upland Game

- Regulation format was changed to a table similar to the waterfowl regulations to help hunters more easily understand these regulations.
- Shooting hours for all resident and migratory upland game birds, excluding pheasants and spring wild turkey, are one-half hour before sunrise to sunset.

Chukar

- The season in Lassen and Modoc counties has been extended from the end of December to the end of January.

Wild Turkey

- Bag limits have changed to one per day, one per season either sex turkeys in the fall, and one per day, three per season bearded turkeys in the spring. Previous bag limits were one per day, one in possession in the fall and one bearded turkey per day, two per season in the spring. The fall season was changed to the second Saturday in November extending for 16 days. This change shortened the fall season to half of what it had been.

Falconry

- The falconry season for pheasants, quail, chukar, blue and ruffed grouse and white-tailed ptarmigan has changed to October 1 through the end of February.

Sage Grouse

- Permit Distribution: East Lassen Area, 300 permits; Central Lassen Area, 125 permits; North Mono Area, 20 permits; South Mono and Inyo Area, 20 permits.
- Season bag limits: East and Central Lassen areas-2; North and South Mono areas-1.

Waterfowl

- Pintail daily bag limit decreased to 1 and the possession limit to 2.
- Season length in northeastern California zone increased to 107 days.
- Goose hunting allowed on youth waterfowl hunting day.
- Boundary for Morro Bay closure area changed.

Deer

- New maximum party size for all deer zones and hunts is six persons (the four-person limit for zones or hunts with less than 100 tags was eliminated).
- B zone general seasons close seven days earlier (zones B1, B2, B3, B5 and B6 only; no change to zone B4 season).
- Minor boundary changes for zones D5 and D16.
- D11, D13 and D15 deer tags valid in all of these zones during archery and general seasons.
- Zone X5c eliminated (area incorporated into zone X4).
- A10 Area-specific Archery Hunt in X5c also incorporated into A7 hunt.

- Reduced season for Additional Hunt G1 (late season buck hunt in zone C4) opens seven days later.
- Later opening at Fort Hunter Liggett (Additional Hunt G8) to provide new junior deer hunt.
- New junior deer hunts at Little Dry Creek (J9), Fort Hunter Liggett (J10), San Bernardino (J11), and Round Valley (J12).
- Four Additional Deer Hunts dropped for 1998: Shasta-Trinity Buck Hunt(G2), Shasta Lake Buck Hunt (G4), Tehama Wildlife Area Buck Hunt (G5), and the Almanor Antlerless Hunt(G23).
- Santa Barbara Muzzleloading Rifle Hunt (M2) replaced by a new muzzleloading/archery hunt (MA3) in the same area.
- Ventura muzzleloading Rifle Hunt (M7) expanded to include all Ventura County.
- New Los Angeles Archery Either-sex Hunt (A31) in southern portions of the existing Los Angeles Archery Antlerless Hunt (A23).

TABLE 1: ESTIMATED BAG AND HUNTER EFFORT BY SPECIES

	1996	1997	1998	Percent Change 1997-1998
PHEASANTS (Excluding LGBCs)				
Statewide Bag	220413	159209	115670	-27
Hunters Reported	57409	51511	33176	-36
Average Seasonal Bag	3.8	3.09	3	-3
Total Days Hunted	311614	222077	178996	-19
Average Days Hunted	5.4	4.3	5	16
PHEASANTS (LGBCs)				
Statewide Bag	320004	303339	274161	-10
Hunters Reported	35547	35597	27042	-24
Average Seasonal Bag	9	8.5	10	18
Total Days Hunted	201165	198444	164123	-17
Average Days Hunted	5.7	5.6	6	7
QUAIL (All Species)				
Statewide Bag	797507	627316	679102	8
Hunters Reported	85469	79394	71949	-9
Average Seasonal Bag	9.3	7.9	9	14
Total Days Hunted	497318	443479	443154	0
Average Days Hunted	5.8	5.6	6	7
CALIFORNIA QUAIL				
Statewide Bag	587864	473782	500374	6
Hunters Reported	54802	49555	43376	-12
Average Seasonal Bag	10.7	9.6	11	15
Total Days Hunted	321464	284186	263892	-7
Average Days Hunted	5.9	5.7	6	5
MOUNTAIN QUAIL				
Statewide Bag	171202	128339	130478	2
Hunters Reported	25627	25279	23806	-6
Average Seasonal Bag	6.7	5.1	5	-2
Total Days Hunted	144995	137776	151856	10
Average Days Hunted	5.7	5.45	6	10
GAMBEL'S QUAIL				
Statewide Bag	38441	25195	48250	92
Hunters Reported	5040	4560	4767	5
Average Seasonal Bag	7.6	5.525	10	81
Total Days Hunted	30859	21517	22807	6
Average Days Hunted	6.12	4.7	4	-15

TABLE 1: ESTIMATED BAG AND HUNTER EFFORT BY SPECIES

DOVES (All Species)	1996	1997	1998	Percent Change 1997-1998
Statewide Bag	1749027	1530484	1172272	-23
Hunters Reported	118854	106345	81689	-23
Average Seasonal Bag	14.7	14.4	14	-3
Total Days Hunted	478429	434591	326514	-25
Average Days Hunted	4	4.1	3	-27
WHITE-WINGED DOVES				
Statewide Bag	60183	105819	39280	-63
Hunters Reported	9889	13198	6034	-54
Average Seasonal Bag	6.086	8	6	-25
Total Days Hunted	35480	52589	20440	-61
Average Days Hunted	3.59	3.98	3	-25
MOURNING DOVES				
Statewide Bag	1688844	1424665	1132992	-20
Hunters Reported	108965	93147	75655	-19
Average Seasonal Bag	15.5	15.3	14	-8
Total Days Hunted	442949	382002	306074	-20
Average Days Hunted	4.1	4.1	4	-2
BAND-TAILED PIGEONS				
Statewide Bag	22857	9680	15536	60
Hunters Reported	6533	5000	4297	-14
Average Seasonal Bag	3.5	1.9	4	90
Total Days Hunted	21814	14240	17238	21
Average Days Hunted	3.3	2.85	4	41
CHUKAR PARTRIDGE				
Statewide Bag	46060	34597	51917	50
Hunters Reported	10880	10200	8531	-16
Average Seasonal Bag	4.2	3.4	6	76
Total Days Hunted	57908	51191	63952	25
Average Days Hunted	5.3	5.02	7	39
BLUE/RUFFED GROUSE				
Statewide Bag	8961	4040	11033	173
Hunters Reported	4798	3080	5560	81
Average Seasonal Bag	1.9	1.3	2	54
Total Days Hunted	34665	12280	32375	164
Average Days Hunted	7.2	3.98	5	26

TABLE 1: ESTIMATED BAG AND HUNTER EFFORT BY SPECIES

SAGE GROUSE (Permit Returns Extrapolated)	1996	1997	1998	Percent Change 1997-1998
Statewide Bag	444	342	378	11
Hunters Reported	512	472	412	-13
Average Seasonal Bag	0.9	0.7	0.9	29
Total Hours Hunted	3738	3582	3234	-10
Average Hours Hunted	7.3	7.6	8	3
JACK RABBITS				
Statewide Bag	101779	123458	76024	-38
Hunters Reported	12076	11480	9165	-20
Average Seasonal Bag	8.43	10.8	8	-26
Total Days Hunted	109015	168886	94664	-44
Average Days Hunted	9	14.7	10	-32
COTTONTAIL RABBITS				
Statewide Bag	99202	79945	68425	-14
Hunters Reported	15650	14640	9798	-33
Average Seasonal Bag	6.34	5.46	6	10
Total Days Hunted	104896	98704	78861	-20
Average Days Hunted	6.7	6.7	8	19
TREE SQUIRRELS				
Statewide Bag	60605	42795	56686	32
Hunters Reported	13345	11840	12403	5
Average Seasonal Bag	4.5	3.61	4	11
Total Days Hunted	97892	77948	91899	18
Average Days Hunted	7.3	6.58	7	6
WILD TURKEY (SPRING)				
Statewide Bag	6958	10600	5798	-45
Hunters Reported	12230	15680	11270	-28
Average Seasonal Bag	0.6	0.676	0.5	-26
Total Days Hunted	54638	67349	44150	-34
Average Days Hunted	4.5	4.295	3	-30
WILD TURKEY (FALL)				
Statewide Bag	9962	5840	5165	-12
Hunters Reported	9730	11400	7637	-33
Average Seasonal Bag	1	0.5	0.7	40
Total Days Hunted	39481	43836	22940	-48
Average Days Hunted	4.1	3.8	3	-21

TABLE 1: ESTIMATED BAG AND HUNTER EFFORT BY SPECIES

DUCKS	1996	1997	1998	Percent Change 1997-1998
Statewide Bag	1640395	2233778	1217761	-45
Hunters Reported	72724	82147	45918	-44
Average Seasonal Bag	22.6	27.2	27	-1
Total Days Hunted	824215	1036907	548726	-47
Average Days Hunted	11.33	12.6	12.0	-5
GEESE				
Statewide Bag	146683	159214	84360	-47
Hunters Reported	42932	43957	23470	-47
Average Seasonal Bag	3.44	3.6	3.59	0
Total Days Hunted	204563	491946	229944	-53
Average Days Hunted	10.4	11.2	10	-13
DEER (Hunter Survey)				
Statewide Bag	46291	38718	52312	35
Hunters Reported	136565	134616	166254	24
Total Days Hunted	1310309	1243943	1646145	32
Average Days Hunted	9.6	9.2	10	8
DEER (Tag Returns Extrapolated)				
Statewide Bag	44439	39612	34755	-12
Deer Tag Sales	201335	199783	191197	-4
Deer Hunters	157394	155487	147947	-5
BEAR (Hunter Survey)				
Statewide Bag	2033	2280	2965	30
Hunters Reported	11345	12200	15173	24
Total Days Hunted	126756	128615	166028	29
Average Days Hunted	11.2	10.5	10	-5
BEAR (Tag Returns)				
Statewide Bag	1714	1677	1676	0
Bear Tag Sales	15000	15000	18681	25
WILD PIGS				
Statewide Bag	24392	17479	52516	200
Hunters Reported	22505	24398	27607	13
Average Seasonal Bag	1.1	0.72	2	178
Total Days Hunted	164965	164928	239717	45
Average Days Hunted	7.3	6.76	8	18

TABLE 2: SUMMARY OF ESTIMATED STATEWIDE BAG

Species	Average				Percent Change 1997-1998
	1994-1998	1996	1997	1998	
Band-tailed Pigeons	19684	22857	9680	15536	60
Bear (Hunter Survey)	2515	2033	2280	2965	30
Bear (Tag Returns)	1652	1714	1677	1676	0
Blue/Ruffed Grouse	7547	8961	4040	11033	173
Chukar Partridge	50175	46060	34597	51917	50
Coots/Moorhen	22822	19238	24359	24874	2
Cottontail Rabbits	123638	99202	79945	68425	-14
Deer (Hunter Survey)	12385	46291	38718	52312	35
Deer (Tag Returns Extrapolated)	40326	44439	39612	34755	-12
Dove	1537933	1749027	1530484	1172272	-23
Ducks	1290205	1640385	2233778	1217761	-45
Geese	117890	146683	159214	84360	-47
Jack Rabbits	144948	101779	123458	76024	-38
Common Snipe	13601	15314	17918	10603	-41
Pheasant (Excluding LGBCs)	164188	220413	159209	115670	-27
Quail	862861	797507	627316	679102	8
* Sage Grouse (Extrapolated)	417	444	342	378	11
Tree Squirrels	63962	60605	42795	56686	32
Wild Pigs	30660	24392	17479	52516	200
Wild Turkeys	16052	16920	16440	10963	-33
*Sage Grouse 1994-1998 taken from permit returns.					

TABLE 3: REPORTED HUNTING LICENSE AND TAG SALES, HUNTER HARVEST AND EFFORT

LICENSE & TAG SALES	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Hunting License	384096	376935	371878	385943	361684	352944	342920	318351	319014	309275
Deer Hunters	213300	249129	174426	227388	226009	259886	150971	136585	134616	147947
Deer Tags	258686	267668	253308	251065	224664	217485	220165	201335	199783	195626
Bear Tags	CLOSED	8615	11468	11970	11176	12123	12166	15000	15000	18000
Duck Stamps (Federal)	71082	59784	68837	65619	64606	74711	62406	69297	77536	66757
Duck Stamps (State)	70898	66994	68380	67554	66890	70939	78298	74581	77612	76426
Upland Game Bird Stamps	N/A	N/A	N/A	N/A	223005	219549	214344	203573	192935	190806
STATE-WIDE BAG										
Deer (Tag Returns)	28795	26740	26340	30059	44371	48086	34736	44439	39612	34755
Deer (Hunter Survey)	39600	64017	39102	51045	66013	92524	41723	46291	38718	52312
Bear (Tag Returns)	CLOSED	1187	1493	1266	1426	1607	1585	1714	1677	1676
Bear (Hunter Survey)	CLOSED	1755	1218	2164	2361	3584	1715	2033	2280	2965
Wild Pig	32000	43011	22386	23989	30086	34644	24269	24392	17479	52516
*Pheasant	215500	242136	255024	265037	220373	195525	130124	220413	159209	115670
Quail	876300	865728	821688	1349440	1490991	1198343	985997	797507	627316	679102
Doves	2533000	1165590	1922340	2341008	1586884	1826721	1411163	1749027	1530484	1172272
Chukar Partridge	38700	43794	58128	111231	88018	57155	61148	46060	34597	51917
Blue and Ruffed Grouse	8800	7776	10920	7537	13178	9686	4015	8961	4040	11033
**Sage Grouse (Permit Returns)	200	1944	462	415	472	597	324	444	342	378
Band-tailed Pigeon	76800	28674	26964	21157	12803	31793	10819	22857	9680	15536
Jack Rabbits	173200	286875	220668	288769	268611	295258	128219	101779	123458	76024
Cottontail Rabbits	138600	170964	116886	251754	237571	250723	119897	99202	79945	68425
Tree Squirrels	148100	123228	111720	176194	100655	114879	44844	60605	42795	56686
Ducks	1044800	1027647	1297254	1265821	1223332	1324743	1510347	1640395	2233778	1217761
Geese	102200	109674	122976	142239	115823	118344	80850	146683	159214	53082
Coots/Moorhens	19700	11691	13524	23582	16162	6514	39123	19238	24359	24874
Common Snipe	18100	22842	31458	15485	10734	14901	9271	15314	17918	10603
Wild Turkeys	6300	10611	8022	18693	23615	18204	17731	16920	16440	10963
NUMBER HUNTER DAYS	5028700	6035715	4951716	7397715	6589548	7459056	4890744	5340857	5417277	4806337

*1989-1991 hunter surveys did not separate wild pheasant bag totals from LGBC bag totals. Therefore the bag totals for these years are a combination of wild pheasant and LGBC bag totals.
 1992-1998 are exclusively wild pheasant bag.
 **1988-1991 Sage Grouse bag totals are taken directly from hunter survey results. Whereas 1992-1998 are extrapolated bag totals.

TABLE 4: NUMBER OF STATEWIDE HUNTERS 1989-1998

GAME HUNTED	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Deer (Applications Sold)	191479	267668	253308	251065	224664	223062	212696	201335	201335	147947
Deer (Hunter Survey)	213300	304803	174426	227386	226009	223062	150971	136565	134616	166254
Bear (Applications Sold)	CLOSED	8615	11488	11970	11176	12123	12166	15000	15000	18681
Bear (Hunter Survey)	CLOSED	12150	8232	15560	13921	18037	13185	11345	12200	15173
Wild Pig	36500	54729	31206	39253	35387	46531	31962	22505	24398	27607
* Pheasant	76000	76059	87150	80037	59791	54754	37974	57409	51511	33176
Quail	107400	100683	87024	136642	113292	104423	78780	85469	79394	71949
Doves	164900	111807	124782	151455	98959	99175	82294	118854	106345	81689
Chukar Partridge	10000	12312	9618	17313	17851	15146	12627	10880	10200	8531
Blue and Ruffed Grouse	5300	6183	5628	6903	6129	5907	2734	4721	3080	5560
Sage Grouse (Tag Returns)	500	1755	420	539	323	410	490	512	472	412
Band-tailed Pigeon	15100	10152	8442	7500	5630	7369	5100	6533	5000	4297
Jack Rabbits	26400	31482	25242	32799	27223	26544	12726	12076	11480	9165
Cottontail Rabbits	26900	32103	20706	32799	30001	31671	18448	15650	14640	9798
Tree Squirrels	34600	29214	23436	30037	20759	18768	10820	13345	11840	12403
Ducks	75300	73710	87360	86306	62699	63306	55336	72724	82147	45918
Geese	32300	35833	33474	52276	36953	39700	29533	42932	43957	23470
Coots/Moorhens	2400	2052	1806	3246	2895	1468	1843	2262	3080	1663
Common Snipe	2700	2727	2436	2090	1819	2323	1746	2570	1600	1364
**Wild Turkeys (Spring)	17900	25839	21210	18769	15285	18404	13286	12230	15680	11270
Wild Turkeys (Fall)				10372	11933	12583	10167	9730	11400	7637

*1989-1991 hunter surveys did not separate wild pheasant hunters from LGBC hunters. Therefore hunter numbers for these years are a combination of wild pheasant and LGBC hunters.
 1992-1998 hunter numbers are exclusively wild pheasant hunters.
 **1989-1991 hunter surveys did not separate spring from fall wild turkey hunters. Therefore, hunters reported for these years are a combination of spring and fall hunters.

TABLE 5: TOP TEN COUNTIES FOR TAKE OF SELECTED SPECIES - 1998

PHEASANTS (Excluding LGBCs	% OF STATE	DEER	% OF STATE TOTAL
1> Colusa	12	1> Humboldt	12
2> Butte	10	2> Trinity	10
3> Glenn	9	3> Siskiyou	7
4> Solano	7	4> Mendocino	7
5> Sutter	6	5> Lassen	7
6> Yolo	5	6> Tehama	4
7> Imperial	4	7> Shasta	3
8> San Joaquin	4	8> Lake	3
9> Sacramento	4	9> Sonoma	2
10> Siskiyou	3	10> El Dorado	2
QUAIL		JACK RABBITS	
1> Kern	12	1> Stanislaus	13
2> San Bernardino	7	2> San Luis Obispo	8
3> San Luis Obispo	7	3> Kern	8
4> Riverside	7	4> San Bernardino	8
5> Santa Barbara	4	5> Riverside	7
6> Los Angeles	4	6> Kings	6
7> Monterey	3	7> Tehama	5
8> Ventura	3	8> San Joaquin	3
9> San Diego	3	9> Tulare	3
10> Tehama	3	10> Merced	3
DOVES		COTTONTAIL RABBITS	
1> Imperial	19	1> Kern	16
2> Riverside	10	2> Riverside	12
3> Kern	9	3> Fresno	11
4> Fresno	6	4> Stanislaus	11
5> Tulare	5	5> San Bernardino	7
6> Merced	4	6> Monterey	6
7> San Bernardino	4	7> Kings	4
8> Sutter	3	8> Merced	4
9> San Diego	3	9> Los Angeles	3
10> Stanislaus	3	10> San Joaquin	3
WILD TURKEYS-FALL		DUCKS	
1> El Dorado	6	1> Colusa	13
2> Santa Clara	6	2> Merced	12
3> Mendocino	6	3> Butte	8
4> Kern	6	4> Solano	7
5> Tehama	6	5> Sutter	6
6> Yuba	5	6> Glenn	6
7> Colusa	5	7> Imperial	5
8> Placer	4	8> Kern	4
9> San Joaquin	4	9> San Joaquin	3
10> San Luis Obispo	4	10> Siskiyou	3
WILD TURKEYS-SPRING		GEESE	
1> Mendocino	10	1> Colusa	16
2> El Dorado	8	2> Glenn	13
3> Yuba	7	3> Butte	10
4> Placer	7	4> Imperial	9
5> Tehama	6	5> Modoc	7
6> Lake	5	6> Sacramento	7
7> Shasta	5	7> Siskiyou	4
8> Monterey	4	8> Merced	4
9> Napa	4	9> Riverside	3
10> Amador	3	10> Sutter	3

TABLE 6: DISTRIBUTION OF HUNTER EFFORT BY GAME SPECIES - 1998

Species	Number of Hunters		Percent of Hunters Per Species		Total	Percent of All Hunters	
	Successful	Unsuccessful	Successful	Unsuccessful		Successful	Per Species
Deer	37747	128345	23	77	166092	54	54
Bear	2534	12638	17	83	15172	5	5
Wild Pig	11904	15706	43	57	27610	9	9
Ducks	42048	3835	92	8	45883	15	15
Geese: Dark	8436	3468	71	29	11904	4	4
Geese: White	8770	2734	76	24	11504	4	4
Common Snipe	1267	100	93	7	1367	0.4	0.4
Coot/Moorhen	1434	233	86	14	1667	0.5	0.5
Pheasant: excluding LGBC'S	22341	10804	67	33	33145	11	11
Pheasant: LGBC'S	25142	1867	93	7	27009	9	9
California Quail	33979	8636	80	20	42615	14	14
Mountain Quail	16673	7803	68	32	24476	8	8
Gambel's Quail	4335	1134	79	21	5469	2	2
Mourning Dove (first half of season)	53752	4335	93	7	58087	19	19
Mourning Dove (second half of season)	14438	1901	88	12	16339	5	5
Cottontail Rabbit	8203	1601	84	16	9804	3	3
Jack Rabbit	7769	1367	85	15	9136	3	3
White-winged Dove	6269	900	87	13	7169	2	2
Band-tailed Pigeon (northern zone)	2067	767	73	27	2834	0.9	0.9
Band-tailed Pigeon (southern zone)	1534	667	70	30	2201	0.7	0.7
Blue Grouse	1534	1334	53	47	2868	0.9	0.9
Ruffed Grouse	1567	734	68	32	2301	0.7	0.7
*Sage Grouse	667	500	57	43	1167	0.4	0.4
White-tailed Ptarmigan	400	200	67	33	600	0.2	0.2
Wild Turkey - Spring	5102	6135	45	55	11237	4	4
Wild Turkey - Fall	3635	4001	48	52	7636	2	2
American Crow	1867	400	82	18	2267	0.7	0.7
Tree Squirrel	9837	2501	80	20	12338	4	4
Ground Squirrel	10070	734	93	7	10804	3	3
Gray Fox	500	133	79	21	633	0.2	0.2
Raccoon	1034	200	84	16	1234	0.4	0.4
Badger	133	33	80	20	166	0.1	0.1
Coyote	5669	2734	67	33	8303	3	3
Bobcat	800	433	65	35	1233	0.4	0.4
Marmot	233	0	100	0	233	0.1	0.1
			Total=582503				

Due to one hunter often hunting more than one species, the percent of all hunters per species totals more than 100%, and the number of hunters per species exceeds the total number of hunters (309275).

*Sage Grouse data is generated from extrapolated permit returns.

TABLE 7: PERCENT HUNTER SUCCESS 1961-1998

Year	% DID NOT HUNT	% UNSUCCESSFUL	% SUCCESSFUL
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
1984	14	27	59
1985	13	28	59
1986	13	30	57
1987	17	26	57
1988	10	29	61
1989	11	27	62
1990	11	31	58
1991	12	25	63
1992	9	26	65
1993	9	30	61
1994	9	30	61
*1995	36	19	46
1996	10	24	66
1997	14	22	64
1998	8	45	47

*Note: The inflated value in the "did not hunt" category may be due to using 1993, 1994, and 1995 license sales data. The three successive years of data were used because an inadequate number of 1995 sales data available on data base at the time of the survey.

TABLE 8: STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Deer			Bear			Wild Pig			Bobcat		
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS
ALAMEDA	767	1100	11504	534	767	400	4201	0	33	67	0	0
ALPINE	233	1367	8069	1634	0	67	367	0	0	0	0	0
AMADOR	300	2034	16408	1734	0	0	0	0	0	0	0	0
BUTTE	467	1901	17873	2934	67	100	634	0	0	0	0	0
CALAVERAS	600	3268	30277	2701	0	167	2701	0	0	0	0	0
COLUSA	100	567	5769	1901	0	333	1000	0	0	0	0	0
CONTRA COSTA	133	233	2101	2701	0	67	67	0	0	0	0	0
DEL NORTE	287	1934	26943	33	367	0	4702	0	0	0	0	0
EL DORADO	1167	68191	72689	4168	0	0	0	0	0	0	0	0
FRESNO	1034	6802	63122	1134	433	1400	12671	0	0	0	0	0
GLENN	467	1834	20374	66	167	100	2601	0	0	0	0	0
HUMBOLDT	6035	10937	122410	12638	100	233	867	0	0	0	0	0
IMPERIAL	267	500	3868	0	0	33	267	0	0	0	0	0
INYO	233	800	5602	1434	0	33	67	0	0	0	0	0
KERN	1100	4768	40281	5168	567	534	5369	33	100	834	0	0
KINGS	67	133	1234	200	0	400	1801	0	0	0	0	0
LAKE	1367	3401	35548	1901	267	534	5335	0	0	0	0	0
LASSEN	3468	3368	27876	634	67	67	1200	0	0	0	0	0
LOS ANGELES	800	3501	42782	9969	100	100	267	33	67	400	0	0
MADERA	433	2401	20941	7203	167	200	5502	67	67	367	0	0
MARIN	600	867	9403	0	0	0	0	0	0	0	0	0
MARIPOSA	400	1801	19874	4802	567	467	7269	67	33	2001	0	0
MENDOCINO	3566	10104	98266	11771	1134	1834	11304	167	33	500	0	0
MERCED	100	300	2901	0	667	467	10004	0	0	0	0	0
MODOC	967	2101	17606	0	0	33	100	33	0	100	0	0
MONO	300	1567	11271	1167	0	0	0	0	0	0	0	0
MONTEREY	1034	2801	26976	167	5135	4268	33712	233	133	2234	0	0
NAPA	300	1167	12004	0	233	233	1367	0	0	0	0	0
NEVADA	467	2401	22475	1734	0	0	0	0	0	0	0	0
ORANGE	100	500	3568	0	0	0	0	0	0	0	0	0
PLACER	433	2601	21474	4802	0	67	500	0	0	0	0	0
PLUMAS	1034	3935	38047	1767	0	0	0	0	0	0	0	0
RIVERSIDE	400	1267	9003	433	67	33	33	33	33	667	0	0
SACRAMENTO	33	267	1334	367	1667	100	634	0	0	0	0	0
SAN BENITO	233	900	10137	133	3668	1934	22141	67	67	167	0	0
SAN BERNARDINO	1034	3535	28142	2834	0	33	100	0	0	433	0	0
SAN DIEGO	734	2601	30444	33	0	0	0	0	0	0	0	0
SAN FRANCISCO	0	0	0	233	0	0	0	0	0	0	0	0
SAN JOAQUIN	66	233	2534	0	467	333	1934	0	0	0	0	0
SAN LUIS OBISPO	934	200	2200	934	23241	2901	14136	0	0	0	0	0
SAN MATEO	100	300	2067	0	100	67	433	0	0	0	0	0
SANTA BARBARA	867	2534	27943	1334	1300	1134	11704	0	0	0	0	0
SANTA CLARA	734	1567	13905	0	3268	1967	20741	0	0	0	0	0
SANTA CRUZ	67	400	4168	0	433	534	4802	0	0	0	0	0
SHASTA	1767	7769	76227	13538	67	333	2401	33	33	33	0	0
SIERRA	367	1934	17373	667	100	33	1000	0	0	0	0	0
SISKIYOU	3701	9970	106104	10037	167	100	1501	33	33	33	0	0
SOLANO	133	433	5002	0	300	333	3168	0	0	0	0	0
SONOMA	1200	3468	37947	0	2134	2267	15706	0	0	0	0	0
STANISLAUS	400	1834	18373	0	1100	800	6469	0	0	0	0	0
SUTTER	100	167	3668	200	100	100	433	0	0	0	0	0
TEHAMA	1967	6902	55186	5002	1434	1467	17439	0	0	0	0	0
TRINITY	5068	13338	161790	19707	33	67	300	0	0	0	0	0
TULARE	967	4001	35713	3501	333	534	4068	1034	67	1701	0	0
TUOLUMNE	600	6869	77158	3735	467	33	33	33	33	33	0	0
VENTURA	600	1967	22441	4001	1134	167	1767	0	0	0	0	0
YOLO	200	600	6135	0	0	67	167	0	0	0	0	0
YUBA	267	1067	9903	0	0	33	333	0	0	0	0	0
UNKNOWN	167	1300	10237	1234	300	467	1567	200	67	3201	0	0
TOTAL	52312	166254	1646145	29665	15173	166028	52516	27607	2299	1230	19606	19606

Table 8

TABLE 8: STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Coville			Geese Dark			Geese White			Ducks			
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	
ALAMEDA	734	200	3901	33	33	33	67	67	33	33	4068	267	2001
ALPINE	67	33	67	0	0	0	0	0	0	0	800	0	233
AMADOR	400	133	1434	100	33	300	300	300	0	0	1034	100	367
BUTTE	67	100	2501	4635	667	13805	3701	3701	767	14772	97067	3034	44982
CALAVERAS	100	67	267	333	67	2401	333	333	33	2334	2734	167	3335
COLUSA	0	0	0	4535	1134	16339	9270	9270	2568	24175	153187	5002	82862
CONTRA COSTA	567	100	2801	200	133	1701	1701	0	0	14738	700	700	7636
DEL NORTE	0	0	0	67	33	600	600	0	0	33	33	300	4335
EL DORADO	0	0	0	133	33	133	133	0	0	0	1601	0	167
FRESNO	834	333	3501	400	233	1400	367	367	167	1267	34812	1567	15305
GLENN	0	934	0	2668	734	10504	8536	8536	1334	12871	67457	1734	35746
HUMBOLDT	400	333	3401	467	333	1100	0	0	0	10804	834	834	8370
IMPERIAL	200	167	433	634	667	2801	6802	6802	1734	9470	63189	3234	27710
INYO	67	67	267	400	33	767	33	33	33	567	7703	433	6802
KERN	1734	267	4602	67	100	967	1034	1034	100	3501	51918	1701	13005
KINGS	67	133	267	0	33	2634	133	133	33	867	9337	367	3901
LAKE	0	67	267	67	67	2634	67	67	33	33	500	167	967
LASSEN	2134	300	4335	1300	433	2668	67	67	100	1434	11537	634	5135
LOS ANGELES	300	300	3401	100	67	300	0	0	67	233	4468	233	2167
MADERA	333	133	1200	0	0	0	67	67	33	133	5168	367	2401
MARIN	167	100	400	200	33	133	133	0	0	0	2001	33	1134
MARIPOSA	1667	1300	6869	33	33	33	0	0	0	0	1501	67	700
MENDOCINO	100	233	1667	0	0	0	0	0	0	0	100	67	100
MERCED	100	133	534	667	400	4535	2367	2367	1067	11171	146918	4435	57020
MODOC	1200	167	834	5535	1067	5635	567	567	100	333	21407	1200	8536
MONO	0	33	67	300	200	534	33	33	33	67	8170	400	2601
MONTEREY	700	300	1334	300	33	133	133	0	0	0	4502	200	1467
NAPA	33	33	33	100	67	834	0	0	0	0	3268	167	2101
NEVADA	33	67	200	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	167	67	200
PLACER	133	33	600	734	167	1400	0	0	67	667	3168	300	3201
PLUMAS	33	100	100	333	300	333	33	33	33	600	3635	200	2134
RIVERSIDE	467	233	1467	2601	233	2167	167	167	167	534	33812	1701	17473
SACRAMENTO	267	67	734	3901	500	5469	1934	1934	567	7303	32111	1234	17039
SAN BENITO	33	100	1367	0	0	0	0	0	0	0	3301	167	1300
SAN BERNARDINO	433	667	2167	33	100	500	0	0	33	133	6536	600	3501
SAN DIEGO	500	333	1834	0	0	0	33	33	33	33	11237	667	5302
SAN FRANCISCO	0	0	0	0	0	0	0	0	0	0	2501	67	1667
SAN JOAQUIN	267	233	967	834	267	2801	1134	1134	300	2234	41114	1400	12938
SAN LUIS OBISPO	1200	200	19207	0	0	0	0	0	0	0	2034	133	534
SAN MATEO	0	0	0	0	0	0	0	0	0	0	834	100	867
SANTA BARBARA	967	100	500	0	0	0	0	0	0	0	4835	200	1701
SANTA CLARA	33	33	734	33	33	100	0	0	0	0	2201	133	1067
SANTA CRUZ	0	0	0	0	0	0	0	0	0	0	0	0	0
SHASTA	3001	100	1601	1300	400	2568	200	200	167	1967	10304	567	7536
SIERRA	0	0	0	333	33	167	167	167	0	167	867	67	300
SISKIYOU	600	233	967	2301	934	5635	867	867	367	1934	40681	1534	16072
SOLANO	67	67	67	900	400	3101	233	233	200	1234	85597	2534	31078
SONOMA	167	200	14005	534	133	934	0	0	0	0	12104	534	5569
STANISLAUS	1667	200	8303	600	367	4402	67	67	67	1167	10637	700	8703
SUTTER	200	100	3535	700	400	1667	1667	1667	567	4568	72159	1734	29177
TEHAMA	4668	267	3134	767	367	1967	100	100	133	667	5269	500	4768
TRINITY	67	100	534	0	0	0	0	0	0	0	100	33	400
TULARE	634	200	1367	634	33	500	0	0	0	0	2267	167	1434
TUOLUMNE	100	100	1300	0	0	0	0	0	0	0	0	0	0
VENTURA	567	200	1067	0	100	534	0	0	67	433	13138	734	5068
YOLO	567	100	834	100	167	1701	834	834	133	3134	31378	867	10004
YUBA	567	200	4001	1534	167	1167	667	667	67	500	38347	934	12071
UNKNOWN	433	200	2167	133	167	500	600	600	300	8103	8836	634	6536
TOTAL	30675	8296	118176	41546	11934	111272	42814	42814	11536	118672	1217761	48916	548726

TABLE 8. STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Pheasant, excluding licensed game bird clubs			Pheasant, licensed game bird clubs			Wild Turkey (Spring 1998 season)			Wild Turkey (Fall season 1998)		
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS
ALAMEDA	133	100	1667	900	167	233	33	200	400	33	67	133
ALPINE	0	33	1067	0	0	0	0	0	0	0	0	0
AMADOR	0	0	100	6135	467	2968	200	300	1434	167	333	1200
BUTTE	11337	2434	12571	1673	1701	14538	167	433	1434	133	100	200
CALAVERAS	1534	200	687	1167	267	734	100	287	967	167	200	1000
COLUSA	13872	2801	15906	6202	967	6636	33	67	167	200	100	300
CONTRA COSTA	2801	534	4768	3701	367	2067	33	33	133	0	0	0
DEL NORTE	200	100	133	0	0	0	0	0	0	0	0	0
EL DORADO	333	0	133	0	0	0	467	934	3268	333	534	1100
FRESNO	1300	767	2568	734	267	634	133	267	1134	33	100	367
GLENN	10537	2001	13671	10337	667	6236	33	200	567	0	300	300
HUMBOLDT	233	67	300	200	67	167	167	200	834	0	33	100
IMPERIAL	5102	2568	10670	1234	367	1534	0	0	0	0	233	233
INYO	1534	133	167	700	100	567	167	33	33	0	67	100
KERN	1400	967	5335	5235	900	2834	133	167	267	267	300	700
KINGS	867	433	1167	67	33	67	0	0	0	0	0	0
LAKE	133	133	167	33	33	67	267	467	2201	100	267	867
LASSEN	1267	400	1467	900	200	1367	33	33	33	33	67	67
LOS ANGELES	567	300	1134	8170	867	5835	67	33	67	0	33	33
MADERA	100	200	400	0	2634	967	67	167	867	0	67	67
MARIN	0	0	0	0	0	0	0	0	0	0	0	0
MARIPOSA	333	67	233	0	33	167	33	33	33	33	67	100
MENDOCINO	600	100	734	0	0	0	600	1100	4302	300	634	1334
MERCED	2701	1334	5469	1267	367	1234	33	33	133	33	67	67
MODOC	233	100	267	33	267	33	33	33	133	33	67	67
MONO	0	0	67	0	33	133	0	0	0	0	0	0
MONTEREY	200	133	967	1901	333	1200	233	567	1701	100	267	534
NAPA	167	167	167	667	100	534	233	367	767	133	300	634
NEVADA	0	67	433	33	33	33	167	233	634	100	233	567
ORANGE	133	33	133	0	0	0	0	0	0	0	0	0
PLACER	1400	433	2201	11938	900	7569	433	634	2001	200	333	1000
PLUMAS	0	33	67	100	67	6168	0	0	67	0	0	0
RIVERSIDE	1467	433	967	16472	1734	9369	0	67	233	33	100	133
SACRAMENTO	4335	1667	8303	13605	1501	267	0	67	400	0	67	167
SAN BENITO	667	400	167	167	100	1200	67	300	700	67	167	400
SAN BERNARDINO	967	167	500	3401	367	1734	67	367	1467	0	33	100
SAN DIEGO	1167	267	934	4968	634	1734	0	0	0	0	0	0
SAN FRANCISCO	0	0	0	0	0	0	0	0	0	0	0	0
SAN JOAQUIN	4502	1134	5068	14038	1467	8770	0	33	33	200	67	267
SAN LUIS OBISPO	1567	100	1667	167	67	100	100	367	1334	200	267	433
SAN MATEO	0	0	0	267	33	33	0	0	0	0	0	0
SANTA BARBARA	1067	100	367	534	67	233	67	100	534	67	100	233
SANTA CLARA	900	200	1334	0	0	100	100	133	667	300	133	567
SANTA CRUZ	0	33	0	0	0	0	0	0	0	0	0	0
SHASTA	634	300	1567	734	100	600	267	734	3835	100	400	2501
SIERRA	233	67	233	0	0	0	0	0	0	0	0	0
SISKIYOU	4001	634	3701	4201	433	3001	33	100	867	0	33	67
SOLANO	8636	2167	81462	66946	5235	36946	67	67	233	0	33	33
SONOMA	1100	300	1267	8069	767	4268	200	267	1000	200	333	1100
STANISLAUS	2434	1334	8602	9303	767	6669	33	67	567	67	67	67
SUTTER	7336	1767	11437	13805	1200	11471	0	33	67	0	0	0
TEHAMA	2301	500	4235	700	67	333	367	467	1967	267	367	900
TRINITY	0	33	4402	1434	133	133	33	333	1367	0	100	800
TULARE	1501	867	4235	1167	500	900	133	233	867	200	333	2034
TUOLUMNE	0	33	467	0	0	0	0	100	267	100	67	133
VENTURA	300	67	634	0	0	0	0	0	0	0	0	0
YOLO	5735	1767	9537	5335	967	4502	0	0	0	100	67	300
YUBA	3835	800	3601	4768	467	6202	433	534	3568	233	300	1501
UNKNOWN	1901	1701	11171	7769	767	6202	33	100	600	666	67	67
TOTAL	115670	33176	178996	274161	27042	164123	5798	11270	44150	5165	7637	22940

Table 8

TABLE 8: STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Mountain Quail			Gambel's Quail (Desert Quail)			California Quail (Valley Quail)			Red-legged (Chukar) Partridge		
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS
ALAMEDA	0	0	0	0	0	0	0	3835	400	2434	0	0
ALPINE	300	67	133	0	0	0	0	500	133	400	0	0
AMADOR	0	0	0	0	0	0	0	1887	200	1100	700	367
BUTTE	4268	433	5569	0	0	0	0	5135	567	2534	0	0
CALAVERAS	1901	433	2401	0	33	0	67	2634	300	1567	500	167
COLUSA	1067	100	1134	0	0	0	167	1267	133	567	0	0
CONTRA COSTA	0	0	0	0	33	0	0	500	133	767	0	0
DEL NORTE	1667	167	2534	0	0	0	0	1034	133	734	0	0
EL DORADO	6236	1034	6002	0	0	0	0	2301	433	2501	0	33
FRESNO	7203	1400	5869	0	33	0	100	12238	1400	7136	433	200
GLENN	567	267	1300	0	0	0	0	3368	400	1667	67	33
HUMBOLDT	7669	1400	10870	0	0	0	0	5068	967	4568	0	0
IMPERIAL	33	67	534	10537	1067	5735	9203	7002	300	7002	300	24042
INYO	3568	433	2001	1034	33	567	567	13872	967	5769	8603	1034
KERN	9403	1867	10470	1967	367	1367	1367	72792	9635	32878	7869	2167
KINGS	0	0	0	0	0	0	0	4835	466	3701	67	33
LAKE	1367	367	4668	0	0	0	0	6802	467	4235	0	0
LASSEN	9737	634	3901	0	0	0	0	8470	634	4368	3068	700
LOS ANGELES	2568	534	2668	0	0	0	0	22808	2267	10770	2568	400
MADERA	2167	333	1801	0	0	0	0	6402	567	2334	0	0
MARIN	0	0	0	0	0	0	0	0	0	0	0	0
MARIPOSA	567	367	1601	0	0	0	0	5735	567	2601	0	0
MENDOCINO	4635	1000	7489	0	0	0	0	12171	1567	12204	133	33
MERCED	0	0	0	0	0	0	0	6869	667	9970	300	67
MONO	1134	167	734	0	0	0	0	834	100	333	0	0
MODOC	867	133	534	0	0	0	0	700	100	333	1034	167
MONTEREY	1067	133	1034	0	0	0	0	21441	1984	8803	600	133
NAPA	333	100	467	0	0	0	0	1300	200	800	0	0
NEVADA	0	100	267	0	0	0	0	1367	200	800	0	0
ORANGE	167	33	133	0	0	0	0	433	67	567	0	0
PLACER	1200	267	1400	0	0	0	0	2367	300	2234	1534	133
PLUMAS	3635	600	3968	0	0	0	0	0	0	0	0	0
RIVERSIDE	2901	300	1667	7403	1034	5168	37413	2234	15005	667	200	500
SACRAMENTO	0	0	0	0	0	0	0	1534	300	1601	1534	167
SAN JOAQUIN	0	0	0	0	0	0	0	5569	634	2401	867	100
SAN LUIS OBISPO	287	67	100	0	0	0	0	2342	2934	15272	3901	7002
SAN MATEO	0	0	0	22608	1734	7603	7603	1000	6002	6002	767	200
SANTA BARBARA	734	300	800	4468	167	1200	15739	0	0	0	0	0
SANTA CLARA	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CRUZ	0	0	0	0	0	0	0	467	133	300	67	33
SHASTA	5335	1167	7836	0	0	0	0	13638	1267	10971	0	0
SIERRA	1267	300	1234	0	0	0	0	600	67	100	333	200
SISKIYOU	8636	1300	9137	0	0	0	0	4868	734	3768	67	33
SOLANO	0	0	0	0	0	0	0	67	67	534	67	100
SONOMA	467	100	667	0	0	0	0	2201	267	1234	13338	6035
STANISLAUS	0	0	0	0	0	0	0	3568	700	5836	300	33
SUTTER	0	0	0	0	0	0	0	2201	233	800	33	233
TEHAMA	4602	700	3301	100	0	0	0	15205	967	5202	0	0
TRINITY	14205	2267	22375	0	67	500	3101	600	6636	0	0	0
TULARE	2334	800	2668	0	0	0	0	700	2868	33	33	33
TUOLUMNE	5202	934	8170	0	0	0	0	6002	500	6502	100	67
VENTURA	1667	567	1667	0	0	0	0	19674	1067	8403	0	33
YOLO	433	67	433	0	0	0	0	1200	167	700	767	200
YUBA	400	167	567	0	0	0	0	2668	400	1601	0	0
UNKNOWN	2167	500	3601	233	133	233	6369	867	3068	567	100	233
TOTAL	130478	23806	151856	48250	4767	22807	500374	43376	263992	51917	8631	63952

TABLE 8: STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Cottontail Rabbit			Jack Rabbit			Tree Squirrel			Ground Squirrel			
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	
ALAMEDA	0	0	0	0	100	67	367	0	0	0	33545	233	4302
ALPINE	0	0	0	0	0	0	0	0	0	0	33	0	0
AMADOR	100	33	133	67	67	33	67	233	133	734	500	33	200
BUTTE	0	33	33	600	233	233	2367	3501	700	3966	167	5335	700
CALAVERAS	67	33	133	233	233	33	233	67	367	2701	1100	200	700
COLUSA	200	67	167	33	33	33	167	0	0	33	934	33	33
CONTRA COSTA	0	33	33	0	0	0	0	0	0	0	5202	67	1034
DEL NORTE	0	33	33	0	0	0	0	0	0	0	734	0	0
EL DORADO	0	33	33	133	133	67	100	2868	900	4735	467	67	367
FRESNO	7736	500	5769	1767	1067	200	2468	4368	867	6569	49784	667	19874
GLENN	0	0	0	1667	900	167	1667	900	167	934	5635	100	1167
HUMBOLDT	0	0	0	1967	2968	367	1967	2968	367	3134	934	200	1200
IMPERIAL	1834	534	2434	1067	233	1634	0	0	0	0	0	0	0
INYO	967	300	1034	867	100	133	734	100	33	100	800	67	367
KERN	10871	1300	7236	6035	600	5102	3401	834	834	4235	60154	700	8736
KINGS	2501	200	4368	4902	4168	734	4168	700	67	433	3901	167	3435
LAKE	0	33	167	667	167	167	734	500	100	534	1167	100	600
LASSEN	1434	300	1467	1200	200	1334	1334	67	33	67	1867	133	1200
LOS ANGELES	2334	400	5002	1601	400	5202	0	0	0	0	2267	100	1034
MADERA	1100	167	700	500	100	700	367	200	200	1534	5235	133	1100
MARIN	0	0	0	0	0	0	167	133	33	100	0	0	0
MARIPOSA	333	100	534	0	0	0	0	2201	467	4602	9003	200	2367
MENDOCINO	300	100	1467	1467	300	2367	2367	8570	767	5902	5402	333	5402
MERCED	2501	300	3768	1934	200	2934	200	200	67	200	10604	400	5669
MODOC	0	0	0	33	33	333	333	467	67	367	65323	500	3001
MONO	0	0	0	667	333	0	0	0	0	0	0	0	0
MONTEREY	3835	534	3201	567	100	1367	1367	934	333	2067	57654	734	24242
NAPA	0	0	0	300	67	300	300	67	67	100	3501	100	1734
NEVADA	0	33	133	0	33	333	333	267	167	734	0	33	33
ORANGE	33	33	167	0	0	0	0	0	0	0	33	33	33
PLACER	167	67	167	834	67	600	600	2768	233	3101	667	100	700
PLUMAS	67	33	67	467	233	3001	3001	467	467	3801	67	33	233
RIVERSIDE	8370	867	7336	5168	467	4935	4935	0	0	0	4135	133	2334
SACRAMENTO	333	133	1000	667	200	1100	1100	1734	133	1200	1534	67	500
SAN BENITO	900	100	5135	1034	67	5369	333	333	33	333	24842	133	7736
SAN BERNARDINO	5002	1000	6402	5969	11171	0	11171	0	67	67	367	200	1501
SAN DIEGO	1667	333	3535	667	200	2534	2534	0	0	0	4201	200	1434
SAN FRANCISCO	0	0	0	33	33	33	33	0	0	0	0	0	0
SAN JOAQUIN	1901	200	1034	2334	233	1634	1634	1000	33	834	19740	300	3301
SAN LUIS OBISPO	467	133	1367	6168	233	3835	3835	333	100	500	65223	567	31244
SAN MATEO	400	33	333	0	0	0	0	0	0	0	0	0	0
SANTA BARBARA	800	200	934	200	33	33	33	200	0	0	6602	167	1501
SANTA CLARA	200	67	67	100	100	100	100	33	33	33	40561	233	2234
SANTA CRUZ	367	100	233	433	67	467	467	0	0	0	0	33	33
SHASTA	33	67	300	1134	300	2401	2401	3134	1000	6602	24208	467	8936
SIERRA	0	0	0	0	0	0	0	667	33	467	400	33	133
SISKIYOU	67	33	33	800	100	233	233	467	367	2334	105137	433	4001
SOLANO	33	33	67	734	67	534	534	0	0	0	1034	67	700
SONOMA	0	0	0	800	133	1300	1300	467	100	500	0	0	0
STANISLAUS	7236	333	3635	9903	300	4835	4835	200	100	567	83363	634	20274
SUTTER	100	100	400	667	67	2701	2701	233	67	1134	400	67	33
TEHAMA	0	0	0	3768	233	5102	5102	1801	200	15572	333	333	8370
TRINITY	0	33	167	467	834	834	834	2668	734	5969	1000	100	1367
TULARE	934	267	2534	1967	233	1567	1567	3736	534	50851	467	7336	7336
TUOLUMNE	0	0	0	67	33	33	33	4235	900	6602	35012	200	2768
VENTURA	967	200	934	1234	167	900	900	0	0	0	0	0	0
YOLO	467	133	867	1434	167	1734	1734	400	0	0	8036	167	3501
YUBA	0	0	0	1267	33	2534	2534	400	67	433	200	100	534
UNKNOWN	1701	267	5068	700	267	600	600	1834	300	4768	6602	133	834
TOTAL	68425	9798	78851	76024	9165	94664	94664	58686	12403	91899	832922	10867	204903

Table 8

TABLE 8: STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Mourning Dove, first half of season			Mourning Dove, second half of season			White Winged Dove			Band-tailed Pigeon (northern zone)		
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS
ALAMEDA	12004	567	2367	2534	100	667	0	0	0	0	0	0
ALPINE	533	100	601	0	0	0	0	0	0	0	0	0
AMADOR	2367	267	700	0	33	67	0	0	0	0	0	0
BUTTE	19340	1400	5702	2401	200	767	0	0	0	734	233	1167
CALAVERAS	2067	200	734	333	33	67	0	0	0	0	0	0
COLUSA	7036	700	2234	1534	167	734	0	0	0	0	0	0
CONTRA COSTA	6769	400	1934	7469	167	1501	0	0	0	0	0	0
DEL NORTE	267	67	100	0	0	0	0	0	0	0	0	0
EL DORADO	2867	200	400	67	33	0	0	0	0	0	0	0
FRESNO	61621	3902	14338	8503	834	3068	0	0	0	0	0	0
GLENN	13304	901	3835	5769	534	1734	0	0	0	900	134	734
HUMBOLDT	0	0	0	33	33	33	0	0	0	0	533	334
IMPERIAL	152420	9237	27510	48116	3134	12871	20474	3234	10270	0	0	0
INYO	11204	733	3601	1834	133	634	0	0	0	0	0	0
KERN	79427	5369	18039	23041	1400	7169	0	0	0	0	0	0
KINGS	13405	1100	2934	3701	367	1667	0	0	0	0	0	0
LAKE	2367	200	867	300	100	233	0	0	0	0	0	0
LASSEN	4235	567	1501	200	33	33	0	0	0	0	0	0
LOS ANGELES	15005	1267	4535	7536	500	1667	33	33	33	0	0	0
MADERA	16206	967	3201	2234	300	634	0	0	0	0	0	0
MARIN	267	33	33	0	0	0	0	0	0	0	0	0
MARIPOSA	4668	333	1400	867	67	200	0	0	0	0	0	0
MENDOCINO	733	200	4101	0	0	0	0	0	0	567	233	534
MERCED	32945	2001	8503	17139	600	6569	0	0	0	0	0	0
MODOC	2801	133	0	333	0	0	0	0	0	0	0	0
MONO	333	33	100	67	33	67	0	0	0	0	0	0
MONTEREY	17339	1234	5802	1701	400	800	0	0	0	0	0	0
NAPA	4235	366	2234	0	0	0	0	0	0	0	0	0
NEVADA	534	67	200	0	0	0	0	0	0	0	0	0
ORANGE	367	33	500	300	67	934	0	0	0	0	0	0
PLACER	400	400	1767	3134	233	1234	0	0	0	0	0	0
PLUMAS	333	33	67	0	0	0	0	0	0	0	0	0
RIVERSIDE	78661	4302	18073	22741	1434	7369	12404	1467	6769	0	0	0
SACRAMENTO	10404	834	2868	3968	367	967	0	0	0	0	0	0
SAN BENITO	2734	400	767	67	133	0	0	0	0	0	0	0
SAN BERNARDINO	38113	2534	10070	6169	700	2401	5535	967	2468	0	0	0
SAN DIEGO	25509	1400	5102	6336	567	1534	333	67	133	0	0	0
SAN FRANCISCO	0	0	0	0	0	0	0	0	0	0	0	0
SAN JOAQUIN	24975	1801	6436	3568	267	1534	0	0	0	0	0	0
SAN LUIS OBISPO	16673	1334	7469	7469	500	1801	0	0	0	0	0	0
SAN MATEO	667	0	67	667	67	3768	0	0	0	0	0	0
SANTA BARBARA	5435	333	1300	2101	167	734	0	0	0	0	0	0
SANTA CLARA	1901	233	700	634	67	967	0	0	0	0	0	0
SANTA CRUZ	12271	1100	3067	967	133	900	0	0	0	0	0	0
SHASTA	333	33	100	333	33	67	0	0	0	1667	333	1167
SIERRA	2934	366	4288	800	167	167	0	0	0	0	0	0
SISKIYOU	12338	867	3335	800	167	233	0	0	0	667	300	1167
SOLANO	4188	133	667	400	100	167	0	0	0	0	0	0
SONOMA	22108	1934	8569	9437	734	4368	0	0	0	0	0	0
STANISLAUS	12005	901	5402	26743	133	167	0	0	0	0	0	0
SLUTTER	19607	1067	4302	1067	100	534	0	0	0	0	0	0
TEHAMA	0	0	0	0	0	0	0	0	0	0	0	0
TRINITY	47417	2868	10804	10404	534	2734	0	0	0	0	0	0
TULARE	4668	366	2100	1667	100	1200	0	0	0	0	0	0
TUOLUMNE	12038	734	2768	2367	233	800	0	0	0	0	0	0
VENTURA	10437	1000	3368	1767	167	534	0	0	0	0	0	0
YOLO	9403	700	2766	0	0	0	0	0	0	0	0	0
YUBA	9403	967	4035	2001	133	634	534	266	767	133	100	300
UNKNOWN	16539	0	0	0	0	0	0	0	0	0	0	0
TOTAL	884573	59317	228976	248419	16336	77095	39280	6034	20440	7802	2099	8437

TABLE 8. STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Band-tailed Pigeon (southern zone)		Common Snipe		Coot/Moorhen		American Crow		
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS
ALAMEDA	0	0	0	0	33	0	0	0	0
ALPINE	0	0	0	0	0	0	0	0	0
AMADOR	167	33	100	0	0	0	0	0	0
BUTTE	0	0	300	133	100	500	1100	0	67
CALAVERAS	100	33	67	67	33	0	0	0	0
COLUSA	0	0	133	400	33	1187	1034	0	0
CONTRA COSTA	0	0	0	0	0	0	0	4802	0
DEL NORTE	0	0	767	400	67	100	67	0	0
EL DORADO	133	67	187	100	33	0	0	0	0
FRESNO	666	200	767	33	33	0	0	1167	600
GLENN	0	0	0	0	0	100	333	1100	267
HUMBOLDT	0	0	1567	800	200	0	867	67	67
IMPERIAL	33	67	100	0	0	4201	2734	0	33
INYO	0	0	0	0	0	2334	734	0	0
KERN	1834	367	1100	0	0	67	167	667	100
KINGS	0	0	0	0	0	1501	500	834	900
LAKE	0	0	0	0	0	0	0	167	33
LASSEN	0	0	33	333	33	167	667	0	33
LOS ANGELES	233	166	667	333	33	0	0	333	67
MADERA	100	100	100	0	0	0	0	2134	267
MARIN	0	0	0	0	0	0	0	0	0
MARIPOSA	0	0	0	0	0	0	0	0	0
MENDOCINO	0	0	0	0	0	0	0	267	30668
MERCED	0	0	900	1467	200	2134	700	867	100
MODOC	0	0	0	0	0	33	300	1134	167
MONO	0	0	0	0	0	0	33	14005	33
MONTEREY	801	366	767	100	33	0	0	0	0
NAPA	0	0	33	33	33	0	0	0	0
NEVADA	133	66	100	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0
PLACER	367	100	233	67	33	167	0	67	33
PLUMAS	0	0	0	0	0	0	0	0	33
RIVERSIDE	133	67	100	200	67	333	67	0	0
SACRAMENTO	0	0	0	133	67	3335	167	3401	433
SAN BENITO	0	0	0	0	0	0	0	0	0
SAN BERNARDINO	0	100	133	0	0	0	0	3201	934
SAN DIEGO	400	233	800	0	0	2534	1000	167	33
SAN FRANCISCO	0	0	0	0	0	0	0	0	0
SAN JOAQUIN	200	67	100	0	0	0	0	3601	133
SAN LUIS OBISPO	533	133	434	0	0	0	0	0	2034
SAN MATEO	0	0	0	0	0	0	0	0	0
SANTA BARBARA	366	133	267	0	0	167	67	0	400
SANTA CLARA	0	0	0	0	0	0	0	0	0
SANTA CRUZ	0	33	333	0	0	0	0	0	0
SHASTA	0	0	0	233	67	867	33	634	100
SIERRA	0	0	0	0	0	0	167	0	4302
SISKIYOU	0	0	0	167	67	267	0	0	0
SOLANO	67	33	333	0	0	0	167	0	200
SONOMA	0	33	167	1834	100	433	0	0	0
STANISLAUS	167	66	400	200	33	333	167	667	100
SUTTER	0	0	0	0	0	800	734	900	100
TEHAMA	0	0	0	200	33	233	300	3335	2001
TRINITY	0	0	0	0	0	0	0	0	0
TULARE	67	100	433	0	0	500	834	133	67
TUOLUMNE	167	66	366	2601	33	167	600	0	534
VENTURA	0	33	33	0	0	1067	734	0	0
YOLO	0	33	67	0	0	0	67	734	67
YUBA	0	33	167	0	0	500	333	0	700
UNKNOWN	1067	133	500	267	0	100	0	667	0
TOTAL	7734	2198	8801	10603	1364	24874	14473	45051	2264

Table 8

TABLE 8: STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Blue Grouse			Ruffed Grouse			Sage Grouse			White-tailed Ptarmigan		
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS
ALAMEDA	0	0	0	0	0	0	0	0	0	0	0	0
ALPINE	0	67	187	0	0	0	0	0	0	0	33	33
AMADOR	0	0	0	0	0	0	0	0	0	0	0	0
BUTTE	167	66	133	0	0	0	0	0	0	0	0	0
CALAVERAS	67	67	433	0	0	0	0	0	0	0	0	0
COLUSA	234	100	300	0	0	0	0	0	0	0	0	0
CONTRA COSTA	0	0	0	0	0	0	0	0	0	0	0	0
DEL NORTE	167	66	400	333	167	1067	0	0	0	0	0	0
EL DORADO	0	133	433	0	0	0	0	0	0	0	0	0
FRESNO	566	167	1200	0	0	0	0	0	0	0	0	0
GLENN	33	33	133	0	67	567	167	167	0	667	0	0
HUMBOLDT	767	400	3268	867	333	2334	100	167	1034	0	0	0
IMPERIAL	0	0	0	0	0	0	0	0	0	233	0	0
INYO	33	100	100	0	0	0	0	0	0	0	0	0
KERN	1867	333	1434	33	333	333	0	0	0	0	0	0
KINGS	0	0	0	0	0	0	0	0	0	0	0	0
LAKE	0	33	67	0	0	0	0	0	0	0	0	0
LASSEN	467	100	1300	0	0	0	167	200	367	0	0	0
LOS ANGELES	0	0	0	0	0	0	0	0	0	0	0	0
MADERA	0	0	0	0	0	0	0	0	0	0	0	0
MARIN	33	33	100	0	33	100	0	0	0	0	0	0
MARIPOSA	0	33	67	0	33	67	0	0	0	0	0	0
MENDOCINO	200	166	534	67	67	367	0	0	0	0	0	0
MERCED	266	33	500	0	0	0	0	0	0	0	0	0
MODOC	467	200	667	0	0	0	0	0	0	0	0	0
MONO	0	0	0	0	0	0	0	0	0	33	33	33
MONTEREY	434	133	367	0	0	0	0	0	0	0	0	0
NAPA	100	33	133	0	0	0	0	0	0	0	0	0
NEVADA	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0
PLACER	0	0	0	0	33	0	0	0	0	0	0	0
PLUMAS	733	333	1300	0	0	0	0	0	0	0	0	0
RIVERSIDE	200	33	33	0	0	0	0	0	0	0	0	0
SACRAMENTO	0	0	0	0	0	0	0	0	0	0	0	0
SAN BENITO	0	0	0	0	0	0	0	0	0	0	0	0
SAN BERNARDINO	0	0	0	0	0	0	0	0	0	0	0	0
SAN DIEGO	0	0	0	0	0	0	0	0	0	0	0	0
SAN FRANCISCO	0	0	0	0	0	0	0	0	0	0	0	0
SAN FRANCISCO	0	0	0	0	0	0	0	0	0	0	0	0
SAN JOAQUIN	0	0	0	0	0	0	0	0	0	0	0	0
SAN LUIS OBISPO	0	0	0	0	0	0	0	0	0	0	0	0
SAN MATEO	0	0	0	0	0	0	0	0	0	0	0	0
SAN MATEO	0	0	0	0	0	0	0	0	0	0	0	0
SANTA BARBARA	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CLARA	0	0	0	0	33	133	0	0	0	0	0	0
SANTA CLARA	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CRUZ	0	0	0	0	0	0	0	0	0	0	0	0
SHASTA	500	100	1267	0	0	0	0	0	0	0	0	0
SIERRA	0	33	67	0	0	0	0	0	0	0	0	0
SISKIYOU	466	367	2701	0	0	0	0	0	33	300	0	0
SOLANO	0	0	0	0	0	0	0	0	0	0	0	0
SONOMA	0	0	0	0	0	0	0	0	0	0	0	0
STANISLAUS	133	33	400	0	0	0	0	0	0	0	0	0
SUTTER	0	67	133	0	33	33	0	0	0	33	33	33
TEHAMA	200	33	567	0	0	0	0	0	0	0	0	0
TRINITY	1267	1000	6736	0	0	0	0	0	0	0	0	0
TULARE	100	134	300	0	0	0	0	0	0	0	0	0
TUOLUMNE	0	33	67	0	33	200	0	0	0	133	67	100
VENTURA	33	33	233	0	0	0	0	0	0	0	0	0
YOLO	0	0	0	0	0	0	0	0	0	0	0	0
YUBA	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	0	167	1434	0	0	0	0	0	0	0	0	634
TOTAL	9,766	4695	27,474	1267	865	4,901	667	466	2,634	166	232	800

Table 8

TABLE 8: STATEWIDE BAG, HUNTER NUMBERS, AND DAYS HUNTED 1998

	Badger			Raccoon			Marmot			Gray Fox		
	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS	BAG	HUNTERS	DAYS
ALAMEDA	0	0	0	0	0	0	0	0	0	0	0	0
ALPINE	0	0	0	0	0	0	0	0	0	0	0	0
AMADOR	0	0	0	0	0	0	0	0	0	0	0	0
BUTTE	0	0	0	0	0	0	0	0	0	0	0	0
CALAVERAS	0	0	0	0	0	0	0	0	0	0	0	0
COLUSA	0	133	33	233	0	0	0	0	0	0	0	0
CONTRA COSTA	0	0	0	0	0	0	0	0	0	0	0	0
DEL NORTE	0	0	0	0	0	0	0	0	0	0	0	0
EL DORADO	0	0	0	0	0	0	0	0	0	0	0	0
FRESNO	0	0	67	567	0	0	0	0	0	0	0	0
GLENN	0	133	33	100	0	0	0	0	0	0	0	0
HUMBOLDT	0	767	133	3001	0	0	0	0	0	834	133	3168
IMPERIAL	0	0	67	1000	0	0	0	0	0	0	0	0
INYO	0	0	0	0	0	0	0	233	67	167	0	0
KERN	33	167	33	0	0	0	167	0	0	0	33	33
KINGS	0	0	0	0	0	0	0	0	0	0	0	0
LAKE	0	0	0	0	0	0	0	0	0	0	0	0
LASSEN	33	33	33	0	0	0	0	567	33	167	0	0
LOS ANGELES	0	0	0	67	0	0	67	0	0	0	0	0
MADERA	0	133	33	467	0	0	0	0	0	0	167	33
MARIN	0	0	0	0	0	0	0	0	0	0	0	0
MARIPOSA	0	0	0	0	0	0	0	0	0	0	0	0
MENDOCINO	0	33	33	3001	0	0	0	0	0	0	0	0
MERCED	0	300	100	900	0	0	0	0	0	1200	100	7002
MERCED	33	2067	133	2367	0	0	0	0	0	67	67	534
MODOC	0	0	0	0	0	0	0	700	33	100	0	0
MONO	0	0	0	0	0	0	0	0	0	0	0	0
MONTEREY	0	100	67	133	0	0	0	0	0	0	500	33
NAPA	0	0	0	0	0	0	0	0	0	0	0	0
NEVADA	0	0	0	0	0	0	0	0	0	0	0	0
ORANGE	0	0	0	0	0	0	0	0	0	0	0	0
PLACER	0	0	0	0	0	0	0	0	0	0	0	0
PLUMAS	0	0	0	0	0	0	0	0	0	0	0	0
RIVERSIDE	0	0	0	0	0	0	0	0	0	0	0	0
SACRAMENTO	0	0	0	0	0	0	0	0	0	0	0	0
SAN BERNITO	0	0	0	0	0	0	0	0	0	0	0	0
SAN BERNARDINO	0	33	367	0	0	0	0	0	0	0	0	0
SAN DIEGO	0	0	0	0	0	0	0	0	0	0	100	367
SAN FRANCISCO	0	0	0	0	0	0	0	0	0	0	0	0
SAN JOAQUIN	0	67	33	67	0	0	0	0	0	0	0	0
SAN LUIS OBISPO	0	0	0	0	0	0	0	0	0	0	33	1667
SAN MATEO	0	0	0	0	0	0	0	0	0	0	0	0
SANTA BARBARA	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CLARA	0	0	0	0	0	0	0	0	0	0	0	0
SANTA CRUZ	0	0	0	0	0	0	0	0	0	0	0	0
SHASTA	0	200	33	400	0	0	0	0	0	0	133	167
SIERRA	0	0	0	0	0	0	0	0	0	0	0	0
SISKIYOU	0	33	33	467	0	0	0	2067	67	300	33	467
SOLANO	0	0	0	0	0	0	0	0	0	0	0	0
SONOMA	0	100	33	300	0	0	0	0	0	0	0	0
STANISLAUS	0	133	67	333	0	0	0	0	0	0	0	0
SUTTER	0	534	33	1000	0	0	0	0	0	0	0	0
TEHAMA	0	33	33	33	0	0	0	0	0	0	0	0
TRINITY	0	167	100	934	0	0	0	0	0	0	167	333
TULARE	0	200	67	367	0	0	0	267	33	67	33	534
TUOLUMNE	0	0	0	0	0	0	0	0	0	0	0	0
VENTURA	267	33	33	67	0	0	0	0	0	0	0	0
YOLO	0	0	0	0	0	0	0	0	0	0	0	0
YUBA	0	0	0	0	0	0	0	0	0	0	0	0
UNKNOWN	0	200	33	200	0	0	0	0	0	0	0	0
TOTAL	366	165	734	5400	1230	16104	3834	801	233	3267	631	15072
Total Number of Respondents=9275; Total Number of Hunters=39275; Extrapolation Rate= .03												