

BLACK BEAR

Western Region

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Harvest

The black bear is classified as a game animal in Nevada; however, the state does not currently support a hunting season for this species.

Bear Management in Western Nevada

This status report contains information for the calendar year 2008. This work is focused principally within Management Area 19 along the Carson Front. In 1998 the Department created a program and procedure that addressed the handling of all human/bear conflicts. This document essentially discontinued the relocation of nuisance bears. Under this program and procedure document NDOW personnel have responded to bear complaints in the same manner over the last decade. Consistent with conflict policies in other western states NDOW does not usually set traps unless the human-caused attractant has been removed or exclusionary precautions have been taken. Specific data on all captured black bears was first recorded in 1997 with a sample size of 5 individuals. Subsequent yearly samples are depicted as follows in Table 1. The figures are comprised of all bears handled including recaptures and mortalities.

Table 1. Bears handled in the Western Region since 1997.

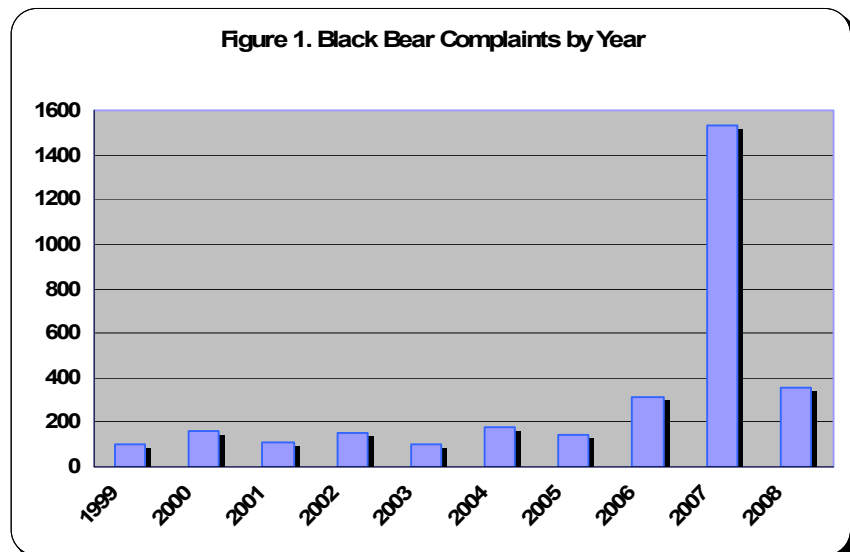
1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
5	17	28	22	35	44	43	69	77	89	157	68	654

The data includes recaptured bears previously handled and marked in the same or preceding years.

Conflicts

Bear complaints decreased in 2008 in comparison to 2007 (Figure 1) which was the highest recorded number of bear complaints in Nevada. NDOW personnel handled approximately 357 complaints and reports of bears in 2008. Wildlife dispatch received about 307 of the 357 total complaints. Approximately 50 calls went directly to either the bear biologist or the seasonal biologist, bypassing the dispatch center. The winter of 2007/2008 was modest in regards to snowpack but western Nevada was the beneficiary of a very wet spring when it received about a week of steady rainfall in late May 2008. This spring moisture provided bears with the growth of grasses, flowers and berry producing shrubs that they need during the summer months, and this is viewed as the reason for the lower number of complaints.

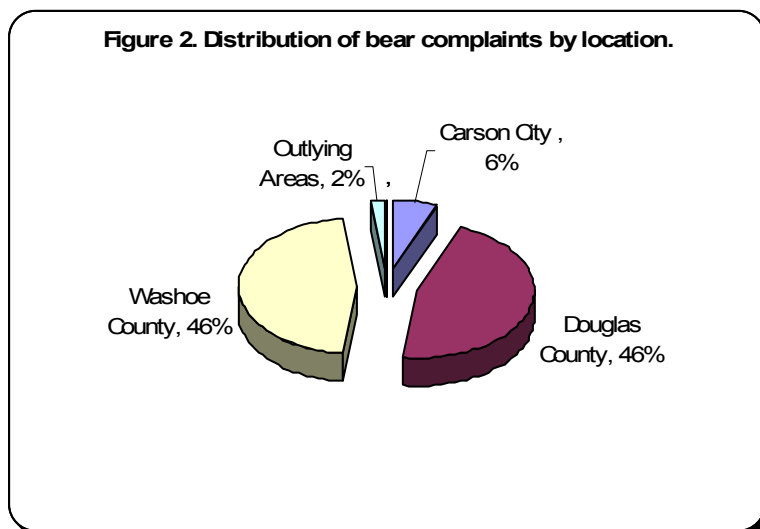
Wildlife dispatch dealt with about 21% of all complaints by giving advice over the phone without having to forward the call to a biologist. Roughly 76% of the total calls were handled by the two bear biologists. A combination of law enforcement personnel handled the remaining 3%. This is



BLACK BEAR

reflective of a slower year where complaints were not overwhelming for the two game biologists and hence law enforcement personnel assistance was not required to the extent as in 2007. Game personnel were summoned on after hour call-outs numerous times on bear complaint issues ranging from bears in homes to retrieving road kills.

Following the *Black Bear Program and Procedure*, the usual course of action in these instances is to offer advice on reducing bear conflicts, including proper storage and disposal of garbage. In most cases offering advice by referring to the NDOW web site was the only action taken. Other common complaints were bears breaking into garbage enclosures or sheds, damage to fruit trees, bears breaking into homes and vehicles and bears frequenting an area. All of these are directly related to the garbage situation, which historically accounts for >95% of the total number of calls received.



Although the overall number of bear nuisance complaints was down, the time of year when complaints were received was consistent with past years. Calls predominantly occurred in the late summer - 55%. Early spring and autumn were equally busy and consisted of 24% and 21% of the calls respectively. Calls were recorded by county this year rather than the general area and Figure 2 depicts these locations of origin for bear complaints. With the improved habitat conditions seen this year it was not surprising that there were much fewer calls in the valley portions of all counties. Instead, most of the conflicts arose from the Lake Tahoe

Basin, mainly Incline and Stateline. Reported damage this year again reached several thousand dollars, mostly attributed to bears breaking into homes, although damage to vehicles and hot tubs was also reported. Actual damage is likely much higher given that many people do not report these incidences.

Table 2. Number sampled, age cohort and sex of all new bears for past 10 years / with average age for adults.

Age cohort	Sex	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Cubs ≤ 12mo.	♂	3	3	2	2	4	8	7	9	12	5
	♀	2	1	2	5	4	8	3	4	17	2
Sub- adults 1 – 3 yrs	♂	6	7	8	4	4	7	9	8	25	12
	♀	1	2	2	3	5	1	5	6	11	4
Adults 4+ yrs / Avg. Age	♂	5 @ 6.0	12 @ 9.2	5 @ 6.4	6 @ 8.2	3 @ 7.0	2 @ 7.5	2 @ 6.5	17 @ 6.2	21 @ 7.6 yrs	5 @ 5.2 yrs
	♀	7 @ 10.0	5 @ 7.8	5 @ 7.8	8 @ 9.4	2 @ 7.5	6 @ 6.5	2 @ 11.0	5 @ 7.8	23 @ 8.9 yrs	1 @ 6yrs

58 individual bears, including recaptures, were handled a total of approximately 68 times. These included five adult males and one adult female. Of the 58, 30 were new bears (those not previously captured or handled) and 28 were recaptures from this and previous years. Of the 30 new bears 21 were tagged and

BLACK BEAR

released while 9 were mortalities on the initial incident (unknown bears hit by vehicles, etc). There was one bear of undetermined sex or age. An account of age cohorts for all new bears handled is summarized above in Table 2. Most bears were either caught in culvert traps or by free-ranging capture techniques. The free-range captures were usually in response to requests for assistance from local law enforcement agencies.

Mortalities

There were 32 documented mortalities recorded this year (Table 3) and 23 of these were known bears (recaptures). Six were killed as a result of collisions with vehicles. NDOW had to kill 17 bears, including five unknown bears, in deference to public safety as all were breaking and entering homes and/or vehicles. Anthropogenic reasons, other than legal hunting, are the leading cause of documented bear mortalities in Nevada.

Table 3. Documented Mortalities 1999-2008

Mortality Type	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Hit by Car	5	8	6	13	4	9	14	22	36	6
Public Safety	0	5	1	6	2	3	1	4	10	17
Depredation	2	1	1	1	0	0	2	5	5	1
Illegal	0		2	0	0	0	0	0	3	0
3 - Strikes	NA	NA	NA	NA	NA	NA	NA	NA	1	6
Other	4	6	0	1	4	1	0	1	8	2
Total	11	20	10	21	10	13	17	32	63	32
Cumulative Total (since 1997)	28	48	58	79	89	102	119	151	214	246

Marked Nevada bears killed in other states are not recorded in Table 1. There have been 12 such cases since 2001)

Research

The urban bear study is continuing, now in its' 12th year and analysis of the recovered GPS collars is being completed. Five new GPS collars were purchased with funds from a Heritage Project funded in 2008. These collars should be deployed during the 2009 field season.

Expenditures

Expenditures for the time period covered by this report include monies spent on drugs and medical supplies, bear trap maintenance, equipment and research supplies and the *Bear Aware*-public education program. Monies spent on controlled substances and capture supplies totaled \$367.85. An additional \$428.72 was committed to bear trap maintenance and repair. No monies were spent on the *Bear Aware* program. \$17,500 was spent for new GPS collars from funds received through the Heritage Project. A new bear trap was purchased for \$7,500. For all operating accounts (Category 58) a total of \$8861.87 was expended in calendar year 2008 for bear management related activities. An additional amount in emergency funding was spent to hire a temporary biologist to assist during the period August-October.

Summary

The 2008 field season was relatively mild for bear/human conflicts, due in large part to the spring moisture received. Douglas County revised their trash ordinance which is now effective for the entire county. This probably accounted for some of the decrease in calls in Carson Valley and in Stateline. Washoe County has not passed any county-wide ordinances as of yet but the Incline Village General Improvement District continues to enforce their trash ordinance. This has had very favorable affects in the Lake Tahoe Basin part of Washoe County.

BLACK BEAR

Based on data collected from captured bears, and from empirical data by NDOW biologists, Nevada's bear population appears to be at healthy and stable numbers. Habitat fragmentation, loss of travel corridors and the resulting potential loss of genetic diversity are concerns for Nevada's black bear population. This is exacerbated by the increased mortality rates in urban areas. Unfortunately, the higher densities of bears continue to be in those areas in or adjacent to urban settings. These areas, with the highest concentration of available food, also contain the highest level of anthropogenic related bear mortalities. Further studies are needed in the historic use areas to determine bear population densities and the age and sex framework. It is believed that once this information is acquired it will be determined that Nevada's bear population could support a small annual recreational harvest.