

NEVADA

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Introduction

Records indicate that the mountain lion was apparently an uncommon denizen of the Great Basin before 1920. Hall (1946) found ample data to indicate that the lion was widely distributed by 1936 but did not find much evidence of high densities or for that matter many accounts of the animal in Nevada prior to his studies. Livestock grazing, including sheep grazing was wide spread in the State. However, the "California lion" was intermittently included and then removed from the noxious animal list from 1873 through the 1930's. The lion was given the same status as the bobcat and the coyote on bounty lists but the counties seldom had to pay for harvested lions.

The mountain lion populations appeared to rise in concert with the mule deer populations that increased dramatically in the 1930's and 1940's. By the 1950's the lion harvest by ADC had increased from 46 animals harvested from 1917 to 1931 to an average of 90 lions per year in the 1950's.

In 1965 the mountain lion was given the status of a game animal. During the mid to late 60's this status did not afford a great deal of protection to the lion but, regulatory mechanisms were in place for more restrictions if they were warranted. In 1968 tags were required to harvest a lion and in 1970 a limit of one lion per hunter per year was established. Also, in 1970 we began to require a mandatory checkout of harvested lions.

The first biological data collected by Nevada on lions began in 1970 in the form of carcass checkout and field surveys. The objectives of the field surveys were to determine the populations of lions in various mountain ranges in the State (Figure 1). Although the



Figure 1. Generalized Mountain Lion Distribution in Nevada. (27,811 mi²)

methodology of the field reconnaissance changed with the use of radio telemetry, helicopters, and blood workups, the basic mission of population status in various mountain ranges was maintained throughout the decade.

Mountain lion populations have increased in the historical period of white man's occupation of the Basin. Populations probably peaked in the early 1950's before the heavy ADC-Sportsmen harvest took place. Populations probably declined into the early 1970's when the Department put severe restrictions on the harvest of lions. Lion populations have increased since the mid 1970's with the exception of some localized sheep depredation areas.

Nevada has several publics that have maintained an interest in the mountain lion. The historical lion controversy, and persistently the loudest component, is the livestock industry. Lion hunters, or more directly lion hunting guides, have maintained considerable interest in the management of the lion for the past 20 years. Lion preservationists have been on the scene in increasing numbers and influence for 10-15 years. The last discernible group could be considered the deer management through lion control group. This last group has probably been concerned about lions in the past, but has only recently voiced an opinion about lion management. Although all of these groups claim large and significant followings, we do not have a good handle on the general public's sentiment on the lion and lion management.

Harvest Information

Nevada employed a total quota hunt concept on mountain lion hunting in 1976, allowing hunters to apply for a tag in a specific area during that year. The tag quotas were determined after a harvest objective was established and expected hunter success levels calculated. This system lead to some of the lowest harvest experienced to date and the concept was modified in 1980 to allow unlimited hunters into a management area until the harvest objective is met. Hunters are only required to have a valid hunting permit, license and tag in their possession to legally hunt.

Table 1 delineates the past five-year harvest, and season summary. The highest sport harvest under the total quota concept was 47 lions, and the highest sport harvest under the harvest objective concept is 78 lions.

Table 1. Five-year harvest and season summary.

Year	Harvest			Season		
	Total	Sport	Depredation	Length	Opening Date	Limit
1979	71	47	24	210	Oct. 1	1
1980	61	38	23	210	Oct. 1	1
1981	82	60	22	210	Oct. 1	1
1982	98	61	37	365	July 1	1
1983	99	78	21	210	Oct. 1	1
Total	411	284	127			

Little data are available on illegal kills using the system that we are working under. In general, it is difficult to be in the field with lion dogs illegally hunting lions and not have a hunting permit in your possession. Trapping lions is illegal, but we frequently get harvest lions that were reported to be observed in the field and shot, but also appear to have been in a trap.

Most LE problems seem to be centered around the lion guides; however, the problem does not seem to be quantified and the effect on the resource is not thought to be significant.

Management Programs

The Department has recently completed both a write up on the Lion study begun in 1970 and the Wildlife Policy plan. The major lion policy statements are:

1. Depredating lion will be removed when necessary to protect private property, human life and wildlife. The Department will cooperate fully with the U.S. Fish and Wildlife Service-Animal Damage Control Division to address mountain lion depredation problems;
2. Mountain lion populations will be managed to maintain balance in predator-prey relationships;
3. Although mountain lion harvest strategies allow the taking of either sex, the taking of females with kittens is discouraged;
4. Mountain lion hunting seasons will begin on the first day of October.

Harvest objectives are determined by estimating the lion population in a mountain range and setting a 25% - 30% harvest rate. Lion populations are largely determined by fieldman analysis of habitat based upon the lion study in the State. Lion population estimates generally only include resident animals.

Major management problems currently involve population estimation refinement, lion depredation analysis and research, and population monitoring.

Research Programs

The Department currently has no plans for lion research during the next biennium.

Recent Literature

Ashman, D.L., G.C. Christensen, M.L. Hess, G.K. Tsukamoto and M.S. Wickersham. 1983. The Mountain Lion in Nevada. Nevada Department of Wildlife. W-48-15, Study S & I, Job 5 and R-V, Job 1.