

**MOUNTAIN LION MANAGEMENT GUIDELINES
FOR
LION DAU L-6
GAME MANAGEMENT UNITS
15, 25, 26, 34, 35, & 36**

Prepared for:
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West Region

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DESCRIPTION OF MANAGEMENT AREA, HABITAT, AND PAST MANAGEMENT

This lion unit is located in the lower Colorado River drainage in west central Colorado. It is composed of six Game Management Units (GMU) that include GMUs 15, 25, 26, 34, 35, & 36. The CDOW designation of this lion area is L-6.

The unit is considered to be good mountain lion habitat. Some of the topography is considered to be excellent terrain for mountain lion in that it is bisected by numerous canyons and rugged terrain that meets year around lion requirements for food and cover. The better mountain lion habitat in the DAUs includes all of the lower elevations in GMU 35 (Castle Peak), the lower canyons and side drainages of the Colorado River from Canyon Creek to Gore Canyon, and the lower elevations along the Piney River and the lower drainages below Red and White Mountain.

Mountain lion are primarily associated with the lower elevation habitats with lots of rocky, steep canyons. The vegetation in these areas varies in relation to elevation and aspect, but is typical of high desert vegetative communities. Pinyon-juniper woodlands dominate the landscape. At higher elevations, the vegetation becomes more diverse as annual precipitation increases. Mountain shrubland and aspen woodlands are intermixed with sagebrush communities and are found in the medium elevations in the DAU.

Historically, this area supported a large mule deer population. Elk populations have been steadily increasing since the turn of the century. Since the mid-1960's, deer numbers have declined but have had a cyclic behavior. This area still supports good populations of mule deer compared to other areas of the state.

With the exception of the Interstate 70 corridor area in GMUs 35 and 36, the area has not experienced the tremendous growth in land development compared to other areas in the mountains. There are no major towns in the DAU, only a few small towns and communities that include Burns, Wolcott, McCoy, State Bridge, Toponas, Yampa, and Radium. The large resorts of Vail, Avon, and Steamboat border the DAU and do encroach into this DAU. Human conflicts with mountain lion in the DAU have been rare but random

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observations of mountain lion are on the increase along with road kills, game damage harvest, and animal damage control harvest. Also, all of the GMUs in this DAU are showing an increase in the number of licenses and the sport harvest. While the CDOW does not conduct any lion density surveys in this DAU, these increases are believed to be indicative of an increasing trend of mountain lion in this area. Domestic sheep graze some of the National Forest land in GMU 15, 34, 35, & 36, and lion depredation can be a problem. Each year, approximately 1-2 lions are killed by woolgrowers to protect their domestic sheep.

ISSUES: There are four main issues regarding this lion population. These include (1) livestock damage (predator losses) to domestic sheep populations, (2) impacts or perceived impacts to mule deer populations, (3) the maintenance of a secure population of mountain lions and (4) an apparent increase in the lion population.

1. Claims paid for domestic sheep losses to mountain lion have averaged about \$3,160 over the last three years. Since 1987, there have been claims submitted to CDOW for reimbursement that total \$15,429. The average for these 11 years is \$1,402. The highest losses were in 1996 when claims totaled \$8,723. No claims were submitted in 7 of the last 12 years (1987-88 through 1998-99).
2. Mule deer populations have shown a general decline in this lion DAU, but the magnitude of the impact to the deer herd by lion are unknown. Lion could be a factor in this decline. Elk can be negatively impacted by lion depredation but are currently at or above the population objective.
3. The CDOW is concerned about maintaining a viable lion population that is generally in balance with habitat, prey base, and societal values. Heavy harvest of adult males may influence territorial relationships and may cause an increase in lion populations above levels that would be found in naturally regulated or unhunted populations. It may be possible that by increasing the harvest on adult males, more kittens survive. This could be the underlying cause of the increase in the lion population in this area.

MANAGEMENT RECOMMENDATIONS: Lion license quotas will be regulated in an effort to achieve the unit objective. Presently, the harvest quota is divided into 4 units in the DAU: GMUs 15; 25, 26 & 34; 35; and 36. The CDOW plans to continue with this harvest management system. The average harvest for mountain lions in the DAU for the last three years (1995-97) has been 18 animals. The harvest has increased in the last 10 years, in 1989 the harvest was 4 lion and by 1998 the harvested increased to 25 (14 males and 11 females). The license quota has increased every year since 1993. In 1989-92 the quota was 9. In 1999 the quota was 30, and was raised to 35 in 2000. Hunter success rates have also increased. In 1989 the success rate was 44%; in 1997 the success rate was 61% - four more lions were killed than the allowed quota. This was probably a result of administration and notification errors. The sex ratio of the harvest has varied somewhat, but has not changed greatly over the years, about 2 males: 1 female. The preferred management recommendation is to maintain license quotas at the present level.