MOUNTAIN LION MANAGEMENT GUIDELINES FOR

LION DAU L-7

GAME MANAGEMENT UNITS 10, 11, 211, 12, 13, 131, 231, 21, 22, 23, & 24

> Prepared for: Colorado Division of Wildlife West Region

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DESCRIPTION OF MANAGEMENT AREA AND HABITAT

The area of DAU L-7 is most commonly known as the White River drainage. The DAU corresponds roughly to the White River, Blue Mountain, and north portion of the Roan Plateau deer herds. The topography and vegetation range from mountainous, high alpine areas in the east to deep sandstone canyon country in the far, western portion of the DAU.

No formal estimate of the lion population has been made in the DAU. Many people believe the population has increased over the last 10 years. This may be, in part; driven by the higher removal rate of mature males, thus losing the natural population control influence they exert.

TOTAL LION HARVEST OBJECTIVE: Harvest has increased steadily from 12 in 1988 to 86 in 1998. The harvest quota increased from 24 in 1988 to 133 in 1998. The quota was raised to 137 in 2000. Much of this increase is attributable to recommendations from the Colorado Department of Agriculture. Past quotas have been reached in some units but the overall quota has not been reached. A breakdown by individual big game management units is given below:

<u>Unit 10</u> - This unit is dominated by sandstone canyon country along the Yampa River in Dinosaur National Park. This area is closed to any hunting by National Park Service regulation and so serves as a large refuge for lion. The current quota is 14, which is up from 5 just 5 years ago. Because of the rough terrain in the open, occupied portions of the unit, harvest is usually 1 or 2 lions.

<u>Unit 11</u> - The quota in 2000 is 16.

<u>Unit 211</u> - The quota in 2000 is 17.

<u>Unit 12</u> - The quota was raised to 18 in 1999, which is up from 4 in 1994. The quota has been filled in most years to date. The DWM is concerned that most lions are being taken in a small part of the unit (winter access

difficulty) and that lion taken are increasingly yearlings and females (70% in 1998). The increasing quota has not reduced damage to date.

<u>Unit 13 (West of the Hayden Divide Road)</u> - The quota in 2000 is 12.

<u>Unit 13 (East of the Hayden Divide Road) & 131</u> – The quota in 2000 is 5.

<u>Unit 21</u> -The quota in this unit has doubled in the last 5 years, rising to 16. This is a unit of good access and continuous lion habitat. The quota does not fill at the higher level.

<u>Unit 22</u> - This unit has been the mainstay of the DAU in terms of numbers and harvest over the years. Access across the unit is very good and the year round population of lions is relatively high. The quota has gone from 5 to 26 in the last 10 years. The quota was not filled until the end of March in 1998, and not filled in 1999. The female portion of the harvest has risen to 55%.

<u>Unit 23</u> - Unit 23 was split from unit 22 in 1993 and given a separate quota, which has increased to 10. The quota has not been filled in the last few years.

<u>Unit 24</u> - This is a high country unit with few, if any, lion remaining during the season. The quota is 3 lion and none are usually taken.

<u>Unit 131 & 231</u> - High country units with few lions. There has not been a quota in 231. Unit 131 was added to Unit 13 with a combined quota of 5.

Overall, the DAU has supplied an abundance of lion hunting opportunities for many years and that should continue. There is concern that the increased quotas have de-stabilized the population, actually increasing numbers of young lions, which are more prone to cause problems. Considering the recent large increases in quotas and the lack of those quotas being met, no changes in quotas are anticipated in the near.

TOTAL LION DAMAGE OBJECTIVE: DAU L-7 has some of the highest domestic sheep numbers in the state so the level of lion damage to sheep is a major concern. Damage costs have been between \$3,000 and \$102,000 with the highest cost in the last few years. The damage harvest has varied from 1 to 19 with an average of 6 per year.

Quotas have been increased greatly in this DAU over the last ten years. This has been in large part, in response to concerns of levels of game-damage. There is also increasing sportsman concern over the effect of lion on the deer population. To date the increases in quotas have not reduced the amount of damage.

An investigator has been used in the DAU to identify lion damage kills and verify numbers and this should be continued. Lions causing damage should be targeted directly by Wildlife Services personnel. These actions will be used to keep the 3-year average below a maximum of \$60,000.

NUISANCE LION COMPLAINTS: There are no reports of lion-human conflicts in last few years. Tolerance of aggressive or acclimated lions in this area is low and problem lions are quickly removed from the population.

There have been increases in sightings and sign in most areas, so the potential for problems have grown, especially in areas of growing rural development. Education\information in newly developing areas and removal of nuisance\dangerous lions will be used to keep the number of complaints below 10 annually.

LION PREDATION ON OTHER WILDLIFE: In July, 1999, the Colorado Wildlife Commission approved a Mammalian Predator Policy which calls for predator control actions when it is determined that the predator species is inhibiting the ability of the Division to attain management objectives for other wildlife populations. Currently, studies related to deer fawn summer mortality and both fawn and adult winter mortality indicate that mountain lions are not a major factor in deer population regulation. The 1980-1990 fawn survival studies noted a very low predation rate on deer. Elk populations are currently well above objectives in these DAUs with elk survival rates extremely high. Antelope populations are also at or above objective.

Sport hunting is the primary method of lion population control and will continue to be used to harvest lion at a level that will allow maximum hunter opportunity and maintain a lion population. Individual animals that cause excessive damage to livestock, damage to personal property, or pose a threat to human health and welfare will be removed as necessary. No control action, other than sport harvest, is anticipated to benefit deer, elk, or antelope. However, it should be noted that the significant increase in quotas and harvest from 1990-2000 did not appear to reduce lion / livestock conflicts. Further study is needed to clarify the relationship between damage and harvest.