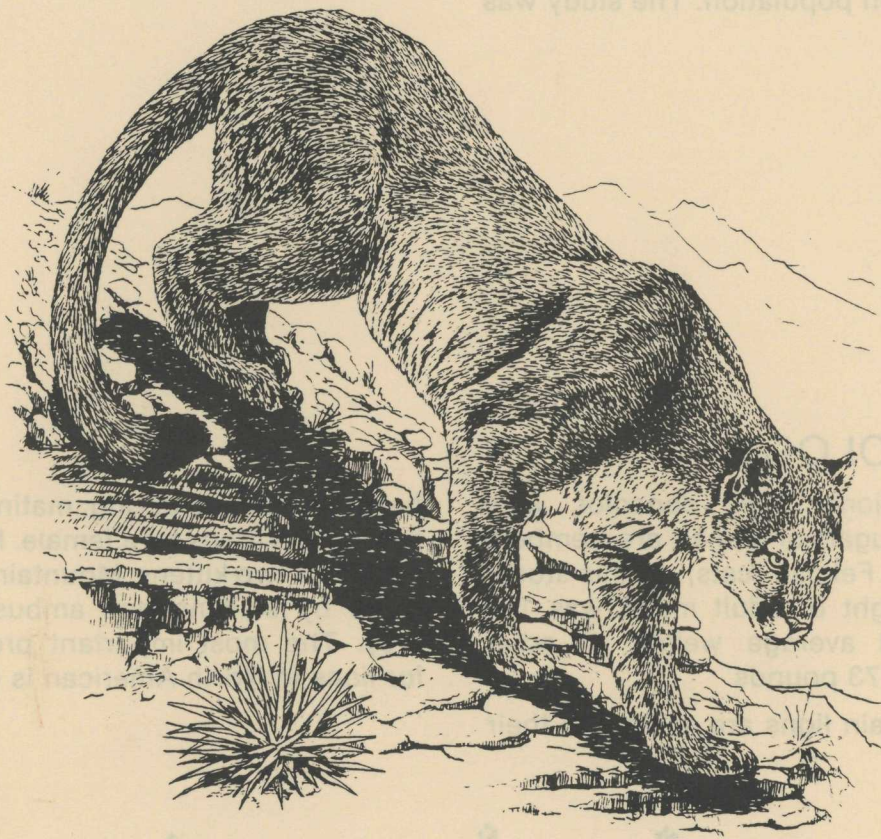


# Guadalupe Mountains

## MOUNTAIN LIONS





## INTRODUCTION

From 1983 through 1986 a study of mountain lions was conducted in Guadalupe Mountains National Park, Texas, Carlsbad Caverns National Park, and in sections of Lincoln National Forest, New Mexico. The primary objective of the study was to provide basic information on the regional mountain lion population. The study was

developed in response to complaints of local ranchers concerning livestock depredation losses, and because accurate and current information was needed by the National Park Service for the development of a comprehensive mountain lion management plan.

## LION BIOLOGY

Mountain Lions, *Felis concolor*, also known as cougars or pumas, are members of the family Felidae (cats). In this study, average weight of adult males was 124 pounds and average weight of adult females was 73 pounds.

Adult mountain lions are solitary in their

behavior except during mating and the rearing of kittens by a female. Most litters consist of two kittens. Mountain lions hunt alone by stalking and ambushing their prey. The most important prey species for lions in North American is deer.

## STUDY SUMMARY

A total of 22 mountain lions were captured, fitted with radiotelemetry collars and monitored during the course of the study. Home ranges, social activities, dispersal, reproduction, movement, sex, age classes and food habits of the lions were studied. By the end of the study, six radio collared lions remained alive. Most of the others were trapped outside the parks.

An estimated annual population of 58 lions (average 24 adults, 12 yearlings and 22 kittens) occupied the 400 square mile study area during the course of the three year research project.

The average home range for adult male lions was 80 square miles. Females averaged 23 square miles. Generally, adult males travelled further than adult females, and females with 5-12 month old kittens travelled least. Adult male lion home ranges did not overlap with other males, but usually overlapped with 2-5 adult females. Some adult female lion home ranges, however, overlapped spatially with other female home ranges. Home ranges

of adult females with kittens increased as kittens got older.

Most mountain lion movement was during the night, early morning and early evening. Mountain lions were usually stationary during the day, although not necessarily sleeping. Most lion movement began about sunset. By morning lions selected a bedding site.

Deer were the principle prey species of lions, and occurred in 82% of all scats (feces) collected. A total of 11 different prey species were found in scat samples.

During the study period 65 lions (including 11 radio collared) were killed in the vicinity of the study area, but outside the park boundaries. Some of these lions were adults known to range in and around the parks, others were young lions produced in the parks and yet others were from outside the study area. Six of the eleven radio collared lions were believed to have killed sheep.

## CONCLUSION



in the unlikely event of a lion attack, protect your head and neck with your arms. Remember that most lions will avoid a confrontation if they can.

\* Give a surprised lion ample escape opportunity.

\* Do not turn your back on a lion, crouch, or run from it.



## CONCLUSION

Despite the number of mountain lions killed bordering the parks, mountain lion numbers in the study area did not change during the 3 year study. This suggests that reproduction and immigration from other areas replaced the lions that were killed. Thus, viable mountain lion populations in

the parks may be maintained even with predator control efforts that occur in areas outside park boundaries. Because mountain lions regulate their population numbers by territoriality, a certain area will support a limited number of lions.

## RECOMMENDATIONS

As recommended in the final Mountain Lion Management Plan and Environmental Assessment; ungulate (deer and elk) herds in the two national parks are being monitored for population size and

density. Additionally, monitoring continues of the remaining radio collared lions and protection continues of all mountain lions within the boundaries of the national parks.

## SAFETY

Because mountain lions are primarily nocturnal and secretive, chances of seeing a lion in the wild are slight. If a lion is sighted, there are several things to remember:

- Give a surprised lion ample escape opportunity
- Do not turn your back on a lion, crouch, or run from it

- Do not approach a lion, especially one that is feeding
- Mountain lions may perceive direct eye contact as a threat

In the unlikely event of a lion attack, protect your head and neck with your arms. Remember that most lions will avoid a confrontation if they can.