COLORADO LYNX REINTRODUCTION AND AUGMENTATION PROGRAM
December 2002

The Canada lynx is a medium sized cat that inhabits boreal forests of northern North America. Colorado represents the southern-most historical distribution of lynx, where the species occupied the higher elevation montane forests of the state. It appears lynx were found in most high elevation forested areas of Colorado in the late 1800's, however, by 1930 they were considered rare. By the mid-1970's the lynx population in Colorado was extirpated or reduced to a few animals. The lynx has been listed as a state endangered species since 1976 and was federally listed as a threatened species in 2000. Since the late 1970's the Colorado Division of Wildlife (CDOW) and other entities have conducted 11 investigations to try and determine the status of lynx in the state. These studies have been unable to conclusively demonstrate that lynx still exist in viable numbers. In addition, given the isolation of Colorado from the nearest populations, the CDOW and other experts determined that reintroduction was the only practical option for recovering the species in Colorado.

As a result, the CDOW began a reintroduction program in 1999 using lynx from Alaska and Canadian provinces for release in the "core reintroduction area" of southwest Colorado. A total of 96 lynx were released in 1999 and 2000 in the area near Creede and north of Durango. As of December 2002, the CDOW was monitoring 34 lynx still alive in the recovery area, 9 of which have been living in Colorado for over 30 months in the wild. A total of 43 lynx have died from a variety of causes including 9 from starvation, 6 by collisions with vehicles, and 10 that were shot (either accidentally or intentionally). Mortality rates declined dramatically from the 1999 release to the 2000 release as handling protocols were improved and more lynx stayed closer to the release sites and did not move long distances.

The CDOW has completed four of the seven criteria for establishing a viable population of lynx in Colorado. These include (1) developing successful release protocols, (2) having lynx survive for extended periods in the wild, (3) having lynx develop fidelity to a specific area, and (4) the onset of breeding behavior. To date there has been no documented reproduction. Even if there has been some reproduction that we have not been able to detect, it would not be enough for recruitment to exceed annual mortality. The final three criteria (reproduction, recruitment, and recruitment exceeding mortality) are essential to establishment of a self-sustaining viable population.

One hypothesis as to why reproduction and recruitment have not yet occurred is the low density of lynx within the core recovery area. To remedy this situation the CDOW asked the Colorado Wildlife Commission for authority to augment the existing population of lynx with an additional 150-180 lynx over the next five to six years. This level of augmentation, coupled with existing mortality rates, will replicate lynx densities in Canada where lynx are known to maintain viable populations. It is hoped that the increased densities will allow for more animals to develop pair bonds leading to

successful breeding and recruitment of young into the population. The long-term goal, *if* recruitment is successful, is to have a viable population of lynx that can sustain itself without further augmentation in the core recovery area in 10 to 15 years. In November 2002 the Wildlife Commission approved the augmentation plan of the CDOW.

Coupled with the augmentation are plans to minimize the impacts lynx might have on existing activities particularly on National Forest land where lynx spend the majority of their time. The CDOW, Colorado Department of Natural Resources (DNR) and Fish and Wildlife Service have developed a plan to reduce accidental take of lynx by hunters and livestock producers. The CDOW and DNR are also working with the U.S. Forest Service, Bureau of Land Management and private entities such as the ski industry and agricultural interests to try and bring the information gained from monitoring Colorado lynx to bear on assessing impacts of certain activities on land use in Colorado. CDOW and DNR are committed to using the best science to resolve land use issues. To date, there have been very few situations where the presence of lynx has resulted in land use changes, however the potential exists.

The lynx reintroduction program is expensive. The initial reintroductions in 1999/2000 were paid for by donations by Vail Associates and the Turner Foundation along with CDOW funding. The augmentation program will cost about $350,000/year in direct cost of lynx, handling facilities and monitoring. Additional costs for certain personnel are not included in these figures. The CDOW is actively seeking partners to assist in this ambitious effort.

Why reintroduce lynx? These types of programs are expensive and have no guarantee of success. Even if the CDOW did not reintroduce lynx into Colorado, the species would continue to be listed under the Endangered Species Act and the restrictions that come with listing would have to be dealt with by Colorado residents. The reintroduction provides valuable information on how lynx use the landscape in Colorado and at present, provides the only option for possibly delisting lynx in Colorado. The CDOW is also legislatively mandated to manage nongame species for the benefits of all Coloradoans. Even if someone never sees a lynx in Colorado, there is a benefit to trying to restore as much of Colorado's wildlife legacy as possible.