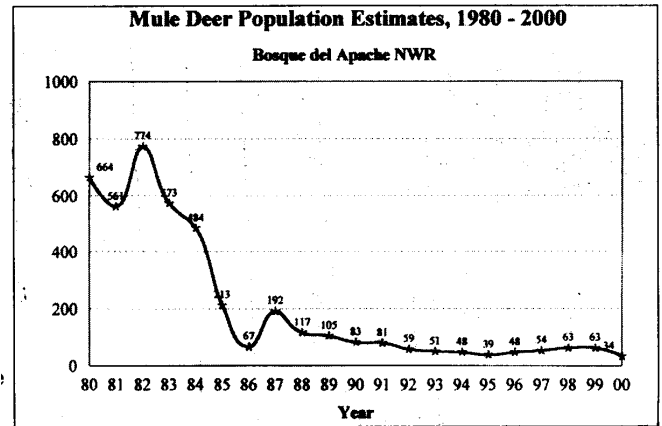


## Mule Deer Update on Bosque del Apache

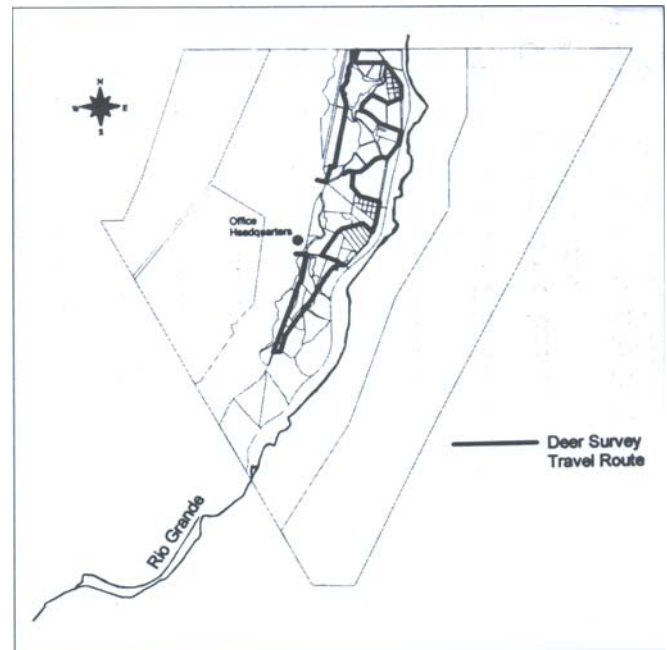
Mike Oldham, U.S. Fish and Wildlife Service, Bosque del Apache NWR

Everyone expects to see the large numbers of birds at the Bosque, but what about the mule deer on the refuge? It may seem hard to believe, but deer numbers in the early 1980's were estimated to have reached around 600 to 700 deer. The population estimate for the year 2000 is 34, 1999 was 63 and 1998 was 63. Apparently the refuge was very well known for its spectacular deer herd between 15 and 20 years ago.

It seems apparent that deer populations early in the 1980's were at high enough numbers to cause damage to corn fields and compromise the health of the Bosque herds. Due to the high population numbers, scabies mites were easily transmitted between individuals, and the infestations made the deer susceptible to secondary diseases and predation. Surveys show an estimated population of around 774 in 1982. Predation, hunting and secondary diseases such as blue tongue are all factors that led to the sharp decrease in the Bosque deer herd. As the following chart illustrates, the deer population has quickly declined to a point where the population is just maintaining itself.



An interesting point is brought up at this moment. How do we know the number of deer on the refuge from year to year? The survey method chosen was developed specifically for the refuge given the type of habitat and amount of land chosen for the survey area. The survey is based on a 1980 Lincoln Index which utilizes eight surveys conducted during the month of November and results in the observation of about one third of the total population. The area included in the survey is a mixture of wetlands that encompass the tour loop, grasslands and forests, and farm areas that make up most of the closed portion of the refuge. Those familiar enough with the refuge and all of its interconnecting roads can pick out on the map how the survey route fits within the tour loop as well as the closed area.



Mule deer populations throughout the western United States has been in a state of decline for the last 15 years, and our small population was no exception. One concern for the refuge at this time should be how and when to help manage the slowly declining herd.