

BIGHORN SHEEP RESOURCE MANAGEMENT IN THE WHISKEY MOUNTAIN AREA
OF WYOMING

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The Whiskey Mountain bighorn sheep herd is a population which holds great promise and which is fairly well known by people throughout the country. This sheep herd has provided hunting by sportsmen for many years and has provided stock for the reintroduction of sheep into other areas of Wyoming as well as some of our surrounding western states. The popularity of this herd is attested to by the large number of residents and nonresidents who visit the area each winter to observe and photograph the sheep on their natural winter range.

In the 1950's the estimated population was between 400 and 500 sheep. Since then it has reached its present size of between 850 and 900 animals. The management of this herd has been almost entirely directed toward trophy hunting under a permit system. During 1965 and 1966 either sex seasons were held. During these 2 years a total of 120 permits were issued and 76 sheep were harvested including 59 rams and 17 ewes. In 1967 and 1968 the regulations were changed to 1/2 curl rams or larger and then back to the 3/4 curl ram regulation in 1969 where it has remained. The harvest throughout this period averaged approximately 43 sheep per year and totaled over 425 sheep during the last 10 years. Hunter success has been between 60 and 70 percent. The demand for sheep permits in this area has increased from 502 applications in 1965 to 1,049 in 1974 even with the 3/4 curl ram regulation.

Since the trophy-type hunting seasons have not begun to take off the yearly increase, we have trapped and transplanted sheep to other areas within Wyoming and neighboring states in order to control the population. Nevada, New Mexico, Utah, and South Dakota have received sheep from this herd over the years in an effort to reestablish sheep populations. Since 1949, 875 sheep have been trapped and transplanted from this area. In other words, as many sheep have been removed through transplanting as are presently in the entire population. In spite of the removal of sheep by transplanting and hunting, the herd continued to increase and we soon realized that the remaining sheep numbers were great enough to cause a serious range problem. Sheep, however, were not the only animals contributing to the range problem since elk and livestock also utilized the area.

The Wyoming Game and Fish Department recently acquired additional land in the area for sheep winter range and through the efforts of the U. S. Forest Service, which has reduced livestock numbers on adjacent lands, and the Bureau of Land Management, which has set aside land for sheep, we feel that range conditions should begin to improve. The Wyoming Game and Fish

Department has reduced the elk population through liberal hunting seasons, thus saving forage for sheep. To relieve the most critical areas from heavy sheep use, 113 sheep were trapped and transplanted off of the area during the winter of 1975-76. It was felt that the high sheep density could potentially result in a die-off situation and that only an immediate reduction in the population could ward off this threat.

Lamb survival has averaged 42 lambs per 100 ewes over the years but in 1972-73 and again in 1973-74 the lamb crop dropped to 11 lambs per 100 ewes. A research program was initiated to attempt to determine the causes of the poor lamb survival. The Department initiated a trapping, marking, and release program on the winter range. Marked sheep were followed during the spring, summer, and fall months to determine survival rate. In conjunction, other information such as location of lambing and nursery areas, summer range, movement patterns, effects of predation, and the effects of human activity (back packers) was gathered. This study has now entered into the second year of the scheduled 3 years and will be concluded in the fall of 1977. Hopefully, this study will provide the necessary information needed to better manage this sheep herd. At the present time our lamb crop survival has returned to 35 lambs per 100 ewes.

At the present time, we feel that the best use for this herd is to furnish transplant stock for other habitat areas in our state. In a few years it is possible that we will run out of places to reestablish herds and will have to consider the removal of excess animals by harvesting ewes.

The story of this herd has been one of success, and we in the state of Wyoming feel confident that we are managing this herd to provide a maximum benefit to the people of Wyoming and the Nation.