

Yellowstone National Park  
Yellowstone Park, Wyoming

November 1960

MANAGEMENT STATUS OF NORTHERN ELK HERD  
YELLOWSTONE NATIONAL PARK

The management plan for the northern Yellowstone elk herd which has been in effect since 1949 is now beginning to show definite beneficial results. Some of the range is improving--most noticeably in a number of roadside aspen groves between Mammoth and the Northeast Entrance where young reproduction is in evidence. Such encouraging signs must not lead to overoptimism, but it does give cause for some satisfaction and encouragement that a serious situation is showing possibility of solution.

This year, as in years past, the Park is adhering to the long-range management plan, a copy of which is attached. Under this program it is probable that the herd may be brought to around the desired number of 5,000 the first heavy snow winter. Until then we hope to take the annual increment as a minimum. When a balance of animals and winter range capacity has been reached, annual reductions of the normal herd increase by any one or all three methods, e.g., hunter harvest, including driving animals from the Park if possible, live trapping, or minimal direct reduction, should be sufficient to keep the herd in harmony with the range.

With protection afforded since the Park was established, elk wintering in the Yellowstone River drainage increased from a few hundred in 1872 to a high estimated in the scores of thousands. Reported winter losses of perhaps as many as 5,000 animals in a year before 1900 indicate that winter forage was grossly inadequate for the elk herd over 60 years ago.

The Act which established the National Park Service in 1916 specifies that the fundamental purpose of parks is "...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." It empowers the Director of the National Park Service to "...provide in his discretion for the removal of such animals and of such plant life as may be detrimental to the use of any of said parks, monuments, or reservations."

It is of interest here that in 1914 the great Conservationist Theodore Roosevelt wrote to Acting Superintendent Colonel L. H. Brett that in his opinion with wildlife protection in Yellowstone he could foresee the day that it would be necessary for the Federal Government to slaughter elk and dispose of the meat commercially. Almost this exact pattern is being followed today.

While elk are definitely a part of the wildlife picture, it includes all other animals also, such as big horn, antelope, moose, bison, and mule deer.

Estimated Number in Park

Big horn	.....	120
Antelope	.....	400
Bison	.....	300
Moose	.....	400
Mule deer	.....	700

In controlling the number of elk utilizing Yellowstone's northern winter range lands, the principle objective is to continue and to increase the opportunity for the Park visitor to see and enjoy all parts of the great variety of wildlife originally here. This includes elk, deer, bison, moose, beaver and water birds. Protecting important watersheds and the many varieties of plant life is another important objective which comes with the first one.

The history of attempts to bring the herd down to a level--estimated at around 5,000 head--which would permit range recovery and rebuilding of the complex faunal picture has led to formulation of the present program for control of the herd. Hunter harvest of elk which migrate into Montana, or winter kill, have been the chief means for herd reduction through the years. However, the number of elk that can be taken by hunters depends on severe weather to force the animals to lower elevations outside the Park, and only during occasional severe winters have significant numbers been harvested this way.

So far, hazing of elk to get them to leave the Park has proven unsatisfactory. However, as more advanced methods are known, the Park will try any method that appears to have merit. Another attempt to drive elk by helicopter will be made this year.

Live trapping of elk for shipment from the Park is also dependent on weather, but seems to offer little chance of removing the total annual increase. This will be tried again this year, however.

When all of the above means fail, then shooting of elk by rangers in the Park, where the bulk of the herd usually spends the winter, becomes the only means to assure positive control. Animals killed for this purpose are then utilized according to Federal laws. By law, elk carcasses from reduction programs in the Park are released to Federal agencies or Indian tribes who pay the Park Service for reduction costs by a transfer of government funds or payment with tribal money. Requests for such carcasses from Indian agencies and tribes are now being received.

While much progress has been made since 1949, a continued positive management program is required for this northern Yellowstone herd. Based upon a fixed-wing plane census of March 1959, and considering last year's reduction figures plus normal herd increase there are an estimated 7,600 elk using the northern Yellowstone range this winter. Hunting and trapping will accomplish a material reduction only if weather is severe; consequently, the National Park Service may schedule the removal of the annual increase of elk by shooting by park rangers. Such shooting will be on a supplementary basis, that is, as a necessary last resort only when other more desirable methods are inadequate, and will be limited to the estimated increase only, awaiting a year when weather is favorable to reduce the herd to the goal of 5,000 animals.

The liberal hunting season provided by the Montana State Fish and Game Commission in prolonging hunting in the area just north of the Park, may give hunters an opportunity for a good elk harvest if proper weather conditions prevail. At present we have requests for 152 live elk. However, there probably will be additional requests before the trapping program gets underway.

An important feature of the long-range plan is the provision that future shooting within the Park will be used to hold the herd at around the 5,000 level only when hunting in Montana and live trapping in the Park during the previous year fail to achieve the removal needed.

Present plans call for the direct reduction in the Park to begin in January on interior herds if hazing or driving fails and if by that late date the elk show no signs of moving into hunting territory or within range of live traps.

Meanwhile, the progress made indicates the validity of the program and every effort will be made to hold and extend the gains made to date.

Yellowstone National Park  
Yellowstone Park, Wyoming

December 1960

LONG-RANGE MANAGEMENT PLAN FOR THE NORTHERN YELLOWSTONE ELK HERD

Objective:

"The elk population in Yellowstone National Park should be reduced to and maintained at a point compatible with a rejuvenation of the vegetative cover on the northern range, so that there will be a restoration of many decimated plant forms, especially deciduous shrubs and trees. The degree of restoration of plant cover is to be based on the available evidence of the fauna and flora that prevailed on the winter range prior to the adverse influence of too many elk utilizing the vegetation."

The objective as stated is designed to attain an optimum relationship between plants and animals for the mutual benefit of both so that a maximum variety can exist without detriment to the whole complex community of plants and animals. This optimum situation will provide the Park visitor with a varied opportunity to see and enjoy the Yellowstone wildlife resource under conditions which will reflect healthy animals in an appealing environmental setting.

Program:

1. Reduce northern Yellowstone elk herd to 5,000 head as soon as possible; hold at this level for a period sufficient to determine the response of vegetation and animals to reduced number of elk.
11. Evaluate response of plants and animals to determine the allowable future size of elk herd.
111. Continue to recognize hunter harvest north of Park as most desirable means of controlling elk numbers and facilitate elk migration by hazing or driving whenever possible. Trapping for removal of elk from Park is next best, but there is full realization that large scale shooting by rangers in the Park will be done if necessary to expedite initial reduction of the herd to trial size.

Continue study to develop alternative procedures for herd management.

III. Remove by shooting on the open range the number of animals equal to the annual increase in this herd, a minimum of 1,500. Early shooting to be confined to the high range to avoid interference with and to encourage migration outside the Park where animals would be available to hunters. Carcasses to be disposed of on a reimbursement-of-cost basis as follows:

- a. Indian agencies and tribes.
- b. Other Federal agencies.

## 1960-61 REDUCTION PLAN FOR NORTHERN YELLOWSTONE ELK HERD

Objective: To harvest annual increment as a minimum until winter weather makes possible goal of a herd of only 5,000 elk.

### Present Situation:

- I. Herd is estimated to contain 7,600 elk.
- II. Observations indicate an improving, but still troublesome, situation for grass, other forage plants, quaking aspen and willow, on range available in late winter throughout the northern Yellowstone winter range.
- III. Montana hunting regulations for area near north boundary of Park provide for hunting during 1960-61 from October 16 through November 20, and a later hunting season in a limited area north of the Park will likely be opened.
- IV. Requests are on hand for 152 live elk delivered at traps in the Park. These requests may increase as neighboring states and other organizations survey their needs.
- V. Requests have been received from Indian tribes and agencies for 1,042 elk carcasses.

### Program Alternatives:

- I. Continue to work with Montana Fish and Game Commission to accomplish greatest possible reduction by hunters and to transplant elk caught in traps.
  - a. Efforts to haze or drive elk from the Park by helicopter will be renewed using the new Hiller H-12 type. Cooperation of the Montana Fish and Game Commission and the United States Forest Service is essential. If completely successful, up to 2,500 animals could be moved.
  - b. If winter weather conditions are such that the elk will move out of the Park, we will encourage the State of Montana to lengthen the hunting season along our northern boundary to allow the hunters to harvest 2,500 elk.
- II. Develop and fill all possible outlets for live elk trapped in the Park in the following order:
  - a. Range stocking for Federal and State agencies.
  - b. Exhibition purposes at public zoos.
  - c. Stocking private farms and zoos.
  - d. Release in areas for public hunting.

- IV. Control of the herd after its reduction to 5,000 animals by further large scale shooting in the Park will be required only when removal by hunting in Montana and trapping in the Park in the previous year has failed. Removal by shooting of small bands of elk which display no interest in moving out of the Park and which habitually damage vegetation in key areas may be required, even when the herd numbers approximately 5,000 animals.
- V. Manipulate control methods applied in Park where possible to encourage migratory habits of elk consistent with the programs of U. S. Forest Service and Montana Fish and Game Commission, considering interests of landowners in upper Yellowstone valley.
- VI. Work with Federal and State agencies and private groups to develop best program to preserve all resources of the northern Yellowstone range.
- VII. Hold antelope and bison herds on the northern Yellowstone range each at about 100 to 125 head to enhance opportunity for range recovery.
- VIII. Carry on active program to inform public of need for elk control.