

*Emergency Feeding for  
Big Game*

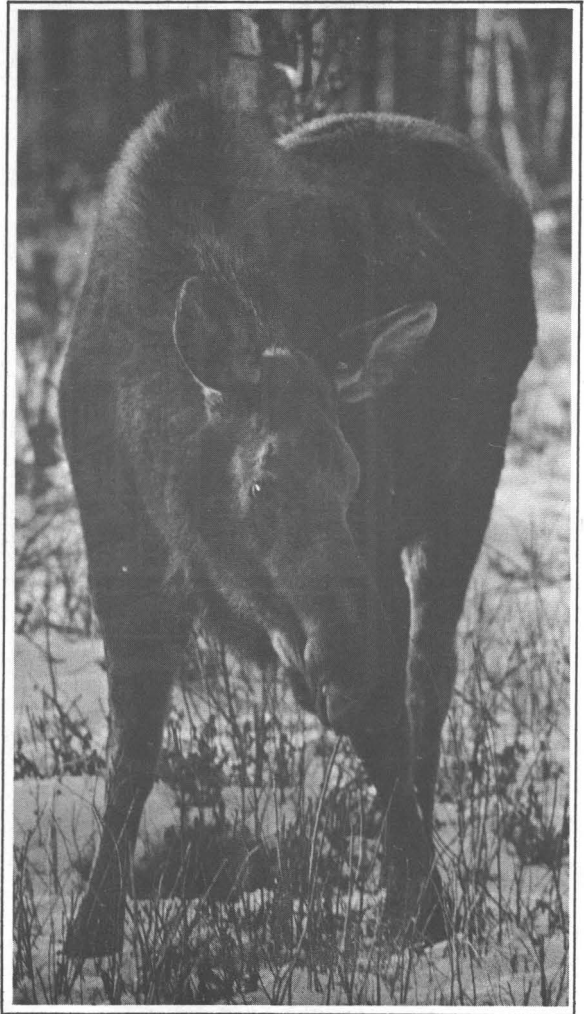


Photo by E.G. Klinkhart

Alaska Department of Fish & Game  
Division of Game

## Emergency Feeding for Big Game

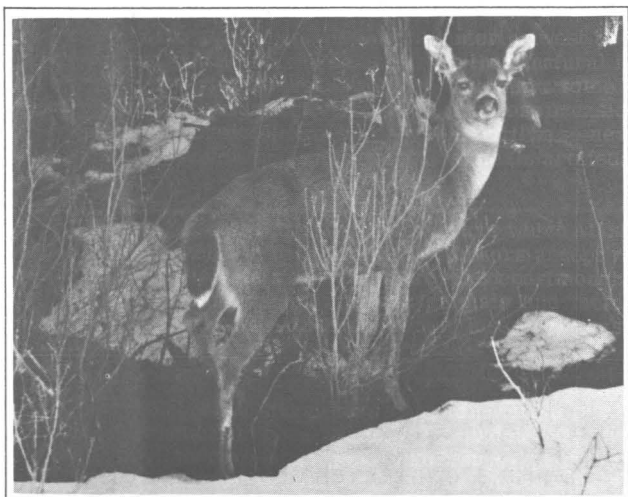
The wildlife manager's job is to keep game populations in balance with their habitat. Managing wildlife in the sub-Arctic is more concerned with the nature of the winter season than any other factor of the environment. The carrying capacity of a particular piece of wildlife habitat depends upon the severity of the winters in the locality.

Because of this, the conclusion may be drawn that game should be harvested so that winter loss is held to a minimum. This means that game should be managed on the basis of average, or "normal" winter conditions.

However, unusually hard winters occur every 10 to 15 years. Five or six mild winters generally result in an increase in the wintering population of game. For moose, this increase may run from 20 to 30 per cent per year. Following several "good" winters, there usually is more game in the fall for hunting.

Nature regulates herself and sooner or later a hard winter comes along. When this happens, there usually is not enough food and cover to supply the game population which has been building up. Soon, animals begin to die off.

The problem, then, is to bring big game populations out of these occasional rough winters in good condition. A question frequently asked is, "Why not give nature a helping hand and put out artificial feed?"



A.D.F. & G. Photo

This question has been studied by wildlife biologists and sportsmen for many years. Feed lot studies have been conducted, food and nutrient requirements have been investigated and many states have experimented with feeding programs. Every possible solution has been considered since the late 1930's, when, as a result of fires, land clearing and other human activity, big game started to exceed the capacity of winter ranges all across the country.

No one likes to see wildlife starve. However, most of the experimental feeding programs resulted in an evil worse than the original problem: the more extensive the winter feeding program, the more animals there were to suffer and starve during the next hard winter. By trying to be helpful, man was upsetting the ecological balance of nature.

On the surface, winter feeding seems to be the easy way out. It has been some of the most common advice offered to wildlife specialists. The only problem is that it doesn't work.

Wildlife managers certainly wish that game animals could be fed successfully. It would be a popular action program, and it would look good. The Department of Fish and Game would be commended by a lot of people- until they realized that it wasn't working.

Here are some of the reasons game managers feel it unwise to artificially feed big game animals:

1. Feeding is nearly impossible from a logistics standpoint. Only a relatively small number of animals can be fed, because big game winter ranges, though comprising a small amount of the total year-round range, are usually quite extensive. To feed any segment of a herd other than that directly adjacent to highways would be a tremendous task. This is especially true for moose, which consume many pounds of food per day.
2. Artificial feeding doesn't work because it tends to concentrate animals unnaturally and this causes long-term damage to the range. Animals eat natural food in addition to artificial feed, and such concentration destroys the ability of the range to recover and produce sufficient natural feed during succeeding years.
3. Probably the most important point against winter feeding is that members of the deer family usually have difficulty in digesting artificial feed. Moose, deer, elk and sheep are ruminants and have four "stomachs" which contain special types of bacteria needed to break down and use feed. These animals normally feed on woody shrubs such as willow and birch, and when suddenly placed on an artificial diet, the bacteria may be unable to adapt to the new material. Several moose which starved near Fairbanks during the severe winter of 1970-71 had stomachs full of hay material which they were unable to use.



Photo by R.A. Rausch

If gradually placed on an artificial diet such as hay, the animals might adjust before winter. However, the problem of animal distribution arises. When the weather is mild, moose and deer cannot be enticed to give up their natural, preferred browse for artificial feeds such as hay. Therefore, they will remain scattered. Most of the animals do not arrive on the feeding grounds until conditions become critical.

A big game herd which has access to an adequate supply of natural food is highly productive. A well fed, productive herd can produce more game for the hunter, photographer and sightseer than can a larger herd of less productive animals.

A program of annual hunter harvest to keep game populations in balance with their natural food supply during average winters will allow some "cushion" to absorb greater use during those occasional severe winters. However, there will still be some loss during such winters, even if the animals are fed.

These are hard facts—facts which Alaska Department of Fish and Game workers accept reluctantly. Biologists and officials of the department have a close relationship with wild animals and facing up to the prospect of a heavy winter loss is not easy.

Still, starvation is one of nature's most important means of keeping animal populations in balance with their habitat. Man can help by providing harvests where needed so that surplus animals are used, rather than wasted.

Man can also help by recognizing the long-range needs of a moose or deer herd, rather than by attempting to provide temporary relief which aggravates, rather than alleviates the problem.



### *Remember:*

Observe fishing and hunting regulations. They are designed to provide fish and game now and in the future.

Always obtain permission before crossing private property.

Keep a clean camp; leave a clean camp.

Be careful with fires. Build campfires only in safe places where they can be extinguished completely.

Operate vehicles only where they are allowed. It is illegal to use a motorized vehicle to drive, herd, or molest game animals.

Alaska's wildlife resources belong to you, be sure you use them wisely.