

KEEP YOUR MULE DEER



Due to the severe drought conditions in many parts of Wyoming, the Wyoming Game and Fish Department is warning people that regardless of winter conditions, there may be significant losses to wildlife this year. Mule deer and pronghorn are already in poor condition going into fall and there is simply not much for them to eat on their winter ranges. "This is one of the worst droughts in history and according to some individuals who have lived here their entire lives it is the worst they can remember," says Jason Hunter, Lander Region Wildlife Supervisor.

Virtually all wild animal populations experience significant and dramatic fluctuations. Some people commonly make the mistake of thinking that feeding mule deer is just as beneficial as feeding other wildlife. Individuals who advocate feeding of mule deer are well intentioned, but feeding mule deer can cause problems for the animals and their habitat.

Primary considerations include:

Feeding mule deer is not effective in increasing their chances of survival.

Mule deer are a highly selective forager, due at least in part to their specialized digestive system. Specific types of bacteria in their rumen are required to aid digestion of their naturally occurring foods. Often because their digestive system can't adapt quickly enough, supplementally fed mule deer die with stomachs full of undigested feed. Supplemental feeding programs have been successful for other species like elk, which have less specialized digestive systems and are more adaptable to different kinds of forage.

Feeding mule deer may disrupt migration to natural wintering areas and alter important learned behaviors.

As mule deer learn locations of feeding stations, they continue to visit these sites, sharing this information with each successive year's offspring. Learned behaviors such as migration timing and corridors can be lost if mule deer are conditioned to remain near feeding sites and not move from winter to summer range. Over the long-term this alteration of learned behaviors and habitat use will compromise the sustainability of that population and may result in lasting population decline. In addition, fear of humans is a learned behavior important for mule deer. Mule deer on feeding sites tend to lose their wariness of people, and this can negatively affect their survival. It has been shown that while mule deer seem to lose their wariness of people, their bodies still react negatively (i.e., increased heart rate and release of hormones typical to the "flight" response). So seemingly adapted mule deer in proximity to people providing feed are actually quite stressed physiologically and more susceptible to starvation and diseases.

Supplemental feeding can reduce the winter range's carrying capacity.

If mule deer numbers remain artificially high through supplemental feeding, it can result in habitat degradation where feeding occurs. This creates a situation where these degraded habitats support less wildlife.

Supplemental feeding may increase predation.

Winter-feeding programs generate artificially high animal densities at feeding sites. Concentrated mule deer maintain limited options for escape trails as they usually bed near feeding sites. Winter-feeding in areas highly populated by humans may create significant liability issues in terms of attracting predatory animals such as mountain lions and even domestic dogs.

Secondary considerations include:**Feeding may increase mule deer/vehicle collisions.**

Mule deer will change movement patterns to reach supplemental feeding sites. They may cross highways more often, and loss to vehicle collisions may equal or exceed natural losses.

Concentrating mule deer at feeding sites may increase disease transmission and parasite loads.

High densities of animals at feeding sites provides ideal opportunities for the transmission of diseases and parasites. Disease/parasite outbreaks can affect a large number of mule deer and when severe enough cause dramatic population declines in far excess of the number of deer lost to a bad winter.

Supplemental feeding is expensive.

Due to a very complex digestive system, mule deer require specially formulated supplemental feed. To provide feed for 1000 mule deer for two weeks, costs including feed, labor, and delivery may be between \$15,000 and \$20,000. The cost in concert with proven poor results makes supplemental feeding a very inefficient and ineffective use of resources. Money spent on a supplemental feeding program would be better spent improving mule deer habitat.

Feeding in urban areas will increase browsing on landscape plants and gardens.

Even when provided with supplemental feed, mule deer will continue to browse on shrubbery, tree buds, and gardens. On many feeding sites mule deer may occur at densities three to five times higher than normal. At these densities mule deer can literally kill vegetation within the vicinity of one to several hundred acres from feeding sites.

Competition increases between mule deer on feeding sites.

Mule deer compete fiercely for food when it is limited. Consequently, the biggest, strongest, healthiest mule deer, such as dominant does, exclude the truly “needy” individuals (usually fawns) from the food. By placing a resource in a localized area, competition increases and some mule deer get no food, while others gorge themselves and get too much. Even those that get enough are unlikely to survive through spring to summer.

Both proponents and opponents of winter-feeding have the mule deer’s best interest in mind. However, even well designed and executed winter feeding programs do not significantly increase mule deer survival. It’s necessary to consider the biological impact to the habitat, to other species, and to mule deer in the long-term. We must focus on the sustainability of the mule deer population for generations to come – not just one winter.